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# Foreword

History is likely to judge the progress in the 21st century by one major yardstick: is there a growing equality of opportunity between people and among nations? This is the issue that has begun to dominate the development debate in the final decade of the 20th century. That is entirely appropriate, since the pace of development—robust as it was in the past five decades—has been accompanied by rising disparities *within* nations and *between* nations.

The most persistent of these has been gender disparity, despite a relentless struggle to equalize opportunities between women and men. The unfinished agenda for change is still considerable. Women still constitute 70% of the world's poor and two-thirds of the world's illiterates. They occupy only 14% of managerial and administrative jobs, 10% of parliamentary seats and 6% of cabinet positions. In many legal systems, they are still unequal. They often work longer hours than men, but much of their work remains unvalued, unrecognized and unappreciated. And the threat of violence stalks their lives from cradle to grave.

*Human Development Report 1995* documents many of these gender disparities. Its detailed tables and analysis are a major indictment of the continuing discrimination against women in most societies.

The central message of the Report is clear: human development must be engendered. If development is meant to widen opportunities for all people, then continuing exclusion of women from many opportunities of life totally warps the process of development.

There is no rationale for such continuing exclusion. Women are essential agents of political and economic change. As the Report points out: "Investing in women's

capabilities and empowering them to exercise their choices is not only valuable in itself but is also the surest way to contribute to economic growth and overall development."

It appears that the human race is poised for a quantum leap in the next few decades. There has been considerable investment in the education and health of women in the past two decades. But the doors to economic and political opportunities have been opening more slowly and reluctantly. It is this next step that must receive greater attention now.

The international conferences on women and development have contributed greatly to raising the awareness of the global community about issues of gender disparity. The Fourth World Conference on Women, scheduled to be held in Beijing in September 1995, must be another milestone in this continuing struggle for equality. The member governments of the United Nations will get together to chart out a concrete plan of action for the future. It is our hope that they will find the analysis and information provided in *Human Development Report 1995* of some assistance in their worthy endeavour.

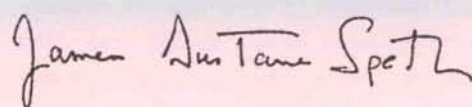
We in UNDP fully recognize that the empowerment of women must be an integral part of the sustainable human development paradigm. For this reason, the advancement of women has recently been adopted as one of our four thematic goals.

The views expressed in the 1995 Report have emerged, as always, from the professional analysis of an independent team of eminent consultants working under the guidance of my Special Adviser and the Report's chief architect, Mahbub ul Haq. These views do not necessarily reflect the

views of UNDP, its Executive Board or member governments of UNDP. The real contribution of this and future *Human Development Reports* lies in their intellectual independence and professional integrity. I am confident that the analysis in this Report will make a valuable contribution to the global dialogue on the issue of gender equality.

For six years, the annual *Human Development Report* has informed, energized and influenced international discussions of development policy. Few publications have done as much. Mr. Haq

and Inge Kaul, who served as Director of the Human Development Report Office during this period, deserve our most profound admiration and appreciation. They certainly have mine. As they are both moving now to new responsibilities, this foreword is an appropriate moment to pause and say, simply, thank you. Our commitment to them and to all those who have helped to produce the first six *Human Development Reports* must be to ensure that future reports are equally insightful and independent.



New York  
May 22, 1995

James Gustave Speth

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The authors also wish to acknowledge their great debt to James Gustave Speth, UNDP Administrator. His deep commitment to sustainable human development has inspired all of us.

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

## ABBREVIATIONS

CEDAW	Convention on the Elimination of All Forms of Discrimination Against Women
CIS	Commonwealth of Independent States
DAC	Development Assistance Committee
FAO	Food and Agriculture Organization
ILO	International Labour Organisation
IMF	International Monetary Fund
INSTRAW	United Nations International Research and Training Institute for the Advancement of Women
ODA	Official development assistance
OECD	Organisation for Economic Co-operation and Development
SNA	System of National Accounts
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNIFEM	United Nations Development Fund for Women
WHO	World Health Organization

# Contents

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## OVERVIEW

**The revolution for gender equality** 1

---

## CHAPTER ONE

**The state of human development** 11

Concept and measurement revisited 11

State of human progress 13

Four conclusions 14

The human development index: methodology and 1995 results 15

*The Human Development Report* 23

---

## CHAPTER TWO

**Still an unequal world** 29

Progress in building human capabilities 29

Persistent deprivation and inequality 34

Unequal rights—unequal protection 42

**Annex Progress in gender equality** 47

---

## CHAPTER THREE

**Measuring gender inequality** 72

GDI and GEM indices 72

Gender-related development index 74

Gender empowerment measure 82

---

## CHAPTER FOUR

**Valuing women's work** 87

The evidence of time use 88

Time use in developing countries 91

Time use in industrial countries 93

Time use in Eastern Europe and the CIS 95

Explaining variations in time use 96

The valuation of non-SNA output in industrial countries 96

The invisible contribution 97

Policy implications 98

---

## **CHAPTER FIVE**

### **Towards equality 99**

- A broad-based movement for gender equality 100
  - Towards an engendered development paradigm 101
  - A five-point strategy 103
  - A vision for the 21st century 115
- 

## **CHAPTER SIX**

### **The human development debate 117**

- Human development and the debate 117
  - Controversies and misconceptions 122
  - The way forward—future priorities 124
- 

### **Technical notes 125**

### **References 136**

---

## **HUMAN DEVELOPMENT INDICATORS 145**

---

### **BOXES**

- 1.1 Four essential components of the human development paradigm 12
  - 1.2 Balance sheet of human development—developing countries 16
  - 1.3 Balance sheet of human development—industrial countries 17
  - 2.1 Women hold up half the sky—China 32
  - 2.2 Revolution within the revolution—Cuba 33
  - 2.3 Not many Nobel prizes for women 37
  - 2.4 Women's employment and pay under structural adjustment 40
  - 2.5 A leader in gender-balanced politics—Norway 41
  - 2.6 Women political leaders currently in office 42
  - 2.7 Addressing legal inequalities in a post-industrial society—Japan 44
  - 2.8 Key initiatives for gender-sensitive legislation—Tunisia 45
  - 3.1 The HDI, the GDI and the GEM 73
  - 3.2 Penalty for gender inequality 74
  - 4.1 Women and girls are Kenya's breadwinners 92
  - 4.2 Women do 56% of the work in Venezuela 93
  - 4.3 Leisure time rises in Sweden 95
  - 6.1 National human development reports in transition economies 118
  - 6.2 The Social Deal in Colombia 119
  - 6.3 District-level profiles in India 120
  - 6.4 Human development in global conferences 121
- 

### **ANNEX BOXES**

- A1.1 Balance sheet of human development—Arab States 24
- A1.2 Balance sheet of human development—East Asia and South-East Asia and the Pacific 25



A1.3	Balance sheet of human development—Latin America and the Caribbean	26
A1.4	Balance sheet of human development—South Asia	27
A1.5	Balance sheet of human development—Sub-Saharan Africa	28

---

## TABLES

1.1	HDI ranking for industrial countries, 1992	18
1.2	HDI ranking for developing countries, 1992	20
1.3	HDI values by region, 1992	22
2.1	High GNP does not necessarily mean high female literacy	32
2.2	Women's health security	33
2.3	Women close the enrolment gap	34
2.4	More girls than boys die at a young age	35
2.5	Lower average wage for women	36
2.6	Women's share of administrative and managerial jobs	37
2.7	Women professionals in the UN system	38
2.8	Leading countries in women's political representation	42
2.9	Convention on the Elimination of All Forms of Discrimination Against Women	43
3.1	Gender-related development index (GDI)	76
3.2	Change in average GDI values, 1970–92	78
3.3	Comparison of HDI and GDI ranks, 1992	78
3.4	GDI over time—ranks and values, 1970–92	80
3.5	Gender empowerment measure (GEM)	84
4.1	Burden of work by gender, selected developing countries	91
4.2	Time allocation by women and men, selected developing countries	91
4.3	Burden of work by gender, selected industrial countries	94
4.4	Time allocation by women and men, selected industrial countries	94

---

## ANNEX TABLES

A2.1	Women and educational opportunity	51
A2.2	Women and health security	54
A2.3	Women and economic opportunities	57
A2.4	Women and political participation	60
A2.5	Women in a changing society	63
A2.6	Closing female-male gaps	66
A2.7	Status of women	69

---

## FIGURES

1	Expanding capabilities, limited opportunities	5
1.1	The rising tide of human development	19
1.2	Despite low incomes, many developing countries attain the human development levels of industrial countries	21

1.3	Diverse incomes, similar human development	22
2.1	Women close the enrolment gap...	30
2.2	...climb the literacy ladder...	30
2.3	...and prepare for career opportunities	30
2.4	In most respects, it is still an unequal world	31
2.5	Women's average wages languish below men's	31
2.6	Women's political participation is low	31
2.7	Women's share of the labour force is far less than men's	31
2.8	Family planning does not depend on income	34
3.1	Rises and falls in GDI ranks	81
4.1	Women work more hours than men	88
4.2	Most of women's work remains unpaid, unrecognized and undervalued	89
4.3	Women's share of economic time varies by sector and region	90
4.4	Allocation of economic activity in rural Kenya	92
4.5	Burden of work in developing countries	93
4.6	Work time in Bulgaria and Finland	95

---

### **SPECIAL CONTRIBUTIONS BY FEMALE HEADS OF STATE OR GOVERNMENT**

Bangladesh: 10% of top civil service jobs reserved for women,  
*by Khaleda Zia* 104

Ireland: annual reporting mechanisms for implementation of equal opportunity initiatives, *by Mary Robinson* 106

Nicaragua: women benefiting directly from titles to agrarian land,  
*by Violeta Barrios de Chamorro* 108

Norway: securing equality through quota systems and equal opportunity legislation, *by Gro Harlem Brundtland* 110

Pakistan: women judges appointed to the superior courts for the first time,  
*by Benazir Bhutto* 112

Sri Lanka: peace is a prerequisite for all progress, including women's,  
*by Chandrika Bandaranaike Kumaratunga* 114

Turkey: legal measures for eliminating violence against women,  
*by Tansu Ciller* 115

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# The revolution for gender equality

One of the defining movements of the 20th century has been the relentless struggle for gender equality, led mostly by women, but supported by growing numbers of men. When this struggle finally succeeds—as it must—it will mark a great milestone in human progress. And along the way it will change most of today's premises for social, economic and political life.

The *Human Development Report* has consistently defined the basic objective of development as enlarging people's choices. At the heart of this concept are three essential components:

- Equality of opportunity for all people in society.
- Sustainability of such opportunities from one generation to the next.
- Empowerment of people so that they participate in—and benefit from—development processes.

Equal enjoyment of human rights by women and men is a universally accepted principle, reaffirmed by the Vienna declaration, adopted by 171 states at the World Conference on Human Rights in June 1993. It has many dimensions:

- Equal access to basic social services, including education and health.
- Equal opportunities for participation in political and economic decision-making.
- Equal reward for equal work.
- Equal protection under the law.
- Elimination of discrimination by gender and violence against women.
- Equal rights of citizens in all areas of life, both public—such as the workplace—and private—such as the home.

The recognition of equal rights for women along with men, and the determination to combat discrimination on the basis of gender, are achievements equal in

importance to the abolition of slavery, the elimination of colonialism and the establishment of equal rights for racial and ethnic minorities.

A full analysis of the historical and political movement for gender equality extends far beyond what can be covered in this Report. No numbers, no indices, no policy packages can capture the true essence of that movement. But they can help propel that movement by providing the background of professional analysis.

---

## **Human development, if not engendered, is endangered. That is the simple but far-reaching message of this Report**

Human development is a process of enlarging the choices for all people, not just for one part of society. Such a process becomes unjust and discriminatory if most women are excluded from its benefits. And the continuing exclusion of women from many economic and political opportunities is a continuing indictment of modern progress.

For too long, it was assumed that development was a process that lifts all boats, that its benefits trickled down to all income classes—and that it was gender-neutral in its impact. Experience teaches otherwise. Wide income disparities and gender gaps stare us in the face in all societies.

Moving towards gender equality is not a technocratic goal—it is a political process. It requires a new way of thinking—in which the stereotyping of women and men gives way to a new philosophy that regards all people, irrespective of gender, as essential agents of change.

*The relentless struggle for gender equality will change most of today's premises for social, economic and political life*

*The human development paradigm must be fully engendered*

The human development paradigm, which puts people at the centre of its concerns, must thus be fully engendered. Any such attempt would embrace at least the following three principles:

■ Equality of rights between women and men must be enshrined as a fundamental principle. Legal, economic, political or cultural barriers that prevent the exercise of equal rights should be identified and removed through comprehensive policy reforms and strong affirmative action.

■ Women must be regarded as agents and beneficiaries of change. Investing in women's capabilities and empowering them to exercise their choices is not only valuable in itself but is also the surest way to contribute to economic growth and overall development.

■ The engendered development model, though aiming to widen choices for both women and men, should not predetermine how different cultures and different societies exercise these choices. What is important is that equal opportunities to make a choice exist for both women and men.

---

**In no society do women enjoy the same opportunities as men**

An innovation of this year's Report, the gender-related development index (GDI), reflects gender disparities in basic human capabilities—and ranks 130 countries on a global scale. The four top countries are in the Nordic belt—Sweden, Finland, Norway and Denmark, in that order. This is hardly surprising. These countries, much concerned with ending the relative deprivation of women, have adopted gender equality and women's empowerment as conscious national policies. In these countries, adult literacy rates are similar for women and men, and combined enrolment is higher for females. Life expectancy is, on average, about seven years higher for women (compared with an estimated global biological edge of five years). And women's earned income is around three-fourths of men's income.

Several developing countries and areas also do quite well in the GDI rankings:

Barbados (rank 11), Hong Kong (17), the Bahamas (26), Singapore (28), Uruguay (32) and Thailand (33). These countries have succeeded in building the basic human capabilities of both women and men, without substantial gender disparity.

But it is clear from the GDI estimates that in no society do women enjoy the same opportunities as men. The top rank is enjoyed by Sweden, with a GDI value of 0.92—compared with a maximum possible value of 1.00 (maximum achievement with perfect equality). After the top 32 countries, the GDI value drops below 0.80—showing how far women still have to travel towards gender equality even in countries that seem to be doing better on this score. More disturbing is that as many as 45 countries in the sample analysis are below a GDI value of 0.5, showing that women suffer the double deprivation of gender disparity and low achievement.

Another interesting comparison is between the overall HDI rank of a country and its gender-adjusted rank for the GDI—since this shows how equitably basic human capabilities are distributed between men and women. The countries showing GDI ranks markedly higher than their HDI ranks are fairly diverse. They include Denmark, Sweden, Norway and Finland—and the Czech Republic, Slovakia, Hungary, and Poland—and Barbados, Thailand, Sri Lanka, Malaysia, Jamaica and Cuba.

The countries with GDI ranks markedly below their HDI ranks include Argentina, Chile, Costa Rica and several Arab states. Arab countries face a formidable agenda for equalizing gender opportunities—though they have made the fastest progress in the past two decades in several gender-related indicators, particularly in female education.

Among the countries with sharply lower GDI ranks are four industrial countries—Canada (a drop from HDI rank of 1 to GDI rank of 9), Luxembourg (–12), the Netherlands (–16) and Spain (–26 ranks). The real difference is in women's share of earned income compared with men's share—a reflection of the much lower participation of women in the labour force and their lower average wage.

---

## Removing gender inequality has nothing to do with national income

Income is not the decisive factor. Several of the world's poor nations have been able to raise female literacy rates. With limited resources but a strong political commitment, China, Sri Lanka and Zimbabwe raised adult women's literacy to 70% or more. By contrast, several richer countries lag behind.

The decision to invest in the education and health of people, irrespective of gender, seems to cut across income levels, political ideologies, cultures and stages of development. In many cases, a strong political commitment has driven efforts to improve women's human development despite a shortage of resources. Countries applying socialist models, for example, used social and political mobilization to achieve rapid—and equal—progress in education and health for men and women and to engineer social transformations to expand opportunities for women.

Comparing GDI ranks with the income levels of countries confirms that removing gender inequalities is not dependent on having a high income. China is ten GDI ranks above Saudi Arabia, even though its real per capita income is a fifth as high. Thailand outranks Spain in the GDI, even though Thailand's real per capita income is less than half of Spain's. Poland's GDI rank is 50 places higher than Syria's, even though the two countries have about the same real income. So, gender equality can be pursued—and it has been—at all levels of income. What it requires is a firm political commitment, not enormous financial wealth.

---

## Every country has made progress in developing women's capabilities, but women and men still live in an unequal world

Gender gaps in education and health have narrowed rapidly in the past two decades, although the pace of this progress has been uneven between regions and countries:

- Female life expectancy has increased

20% faster than male life expectancy over the past two decades.

■ High fertility rates, which severely restrict the freedom of choice for women, have fallen by a third—from 4.7 live births per woman in 1970–75 to 3.0 in 1990–95. Life choices are expanding as women are progressively liberated from the burden of frequent child-bearing and from the risk of dying in childbirth. Maternal mortality rates have been nearly halved in the past two decades.

■ More than half the married women of reproductive age in the developing world, or their partners, used modern contraceptives in 1990, compared with less than a quarter in 1980. This planned parenthood has brought women much greater control over their lives.

In adult literacy and school enrolment, the gaps between women and men were halved between 1970 and 1990 in developing countries. Women's literacy increased from 54% of the male rate in 1970 to 74% in 1990—and combined female primary and secondary enrolment increased from 67% of the male rate to 86%. Female rates of adult literacy and combined school enrolment in the developing world increased twice as fast as male rates between 1970 and 1990.

The Arab States have led the advance in women's education, more than doubling female literacy rates. Indeed, the fastest improvement in women's literacy rates—68 percentage points between 1970 and 1990—took place in the United Arab Emirates.

Overall, female primary enrolment in developing countries increased 1.7% a year during 1970–90, compared with 1.2% for male enrolment. Girls' combined primary and secondary enrolment in the developing world jumped dramatically, from 38% in 1970 to 68% in 1992. East Asia (83%) and Latin America (87%) are already approaching the high levels in industrial countries (97%).

Also remarkable is the rapid closing of the gap in higher education. In developing countries, female enrolment at the tertiary level was less than half the male rate in 1970, but by 1990 it had reached 70%. In

*It is still an unequal world*

*The doors to economic and political opportunities are barely ajar*

32 countries, more women than men are now enrolled at the tertiary level.

But it is still an unequal world. Among the developing world's 900 million illiterate people, women outnumber men two to one. And girls constitute 60% of the 130 million children without access to primary school. Because population has grown faster than women's education has expanded in some developing regions, the number of women who are illiterate has increased.

During the 20 years from 1970 to 1990, only half the educational gap between men and women was closed. Another 20 years is too long to wait to close the remaining half.

Women's special health needs also suffer considerable neglect. Many developing countries do not provide qualified birth attendants, good prenatal or postnatal care or emergency care during deliveries. In most poor countries, pregnancy complications are the largest single cause of death among women in their reproductive years. Nearly half a million maternal deaths occur each year in developing countries. Too often, the miracle of life becomes a nightmare of death.

---

**While doors to education and health opportunities have opened rapidly for women, the doors to economic and political opportunities are barely ajar**

Major forces in closing the gender gaps over the past two decades are higher female enrolments at all levels in developing countries—and rising women's paid employment in industrial countries. But the opportunities open to women have remained limited. The Report marshals detailed evidence of the unequal access to opportunities. Some telling examples:

■ Poverty has a woman's face—of 1.3 billion people in poverty, 70% are women. The increasing poverty among women has been linked to their unequal situation in the labour market, their treatment under social welfare systems and their status and power in the family.

■ Women's labour force participation has risen by only four percentage points in 20 years—from 36% in 1970 to 40% in

1990. Compare that with a two-thirds increase in female adult literacy and school enrolment.

■ Women receive a disproportionately small share of credit from formal banking institutions. They are assumed to have no collateral to offer—despite working much harder than men. For example, in Latin America and the Caribbean, women constitute only 7–11% of the beneficiaries of credit programmes.

■ Women normally receive a much lower average wage than men, because they hold low-paying jobs or work in the informal sector and because they are sometimes paid less than men for equal work. The average female wage is only three-fourths of the male wage in the non-agricultural sector in 55 countries that have comparable data.

■ All regions record a higher rate of unemployment among women than men.

■ In developing countries, women still constitute less than a seventh of administrators and managers.

■ Women still occupy only 10% of the parliamentary seats and only 6% of the cabinet positions.

■ In 55 countries, there are either no women in parliament or fewer than 5%. These countries range from very poor (Bhutan and Ethiopia) to reasonably affluent (Greece, Kuwait, the Republic of Korea and Singapore).

Despite considerable progress in developing women's capabilities, their participation in economic and political decision-making remains very limited.

Another innovation of this year's Report, the gender empowerment measure (GEM), looks at women's representation in parliaments, women's share of positions classified as managerial and professional, women's participation in the active labour force and their share of national income. It ranks 116 countries with comparable data.

Once again, the Nordic countries lead the world, with Sweden and Norway on top. These countries are not only good at strengthening female capabilities but have also opened many opportunities in economic and political fields. The Nordic countries have crossed the critical 30%

FIGURE 1

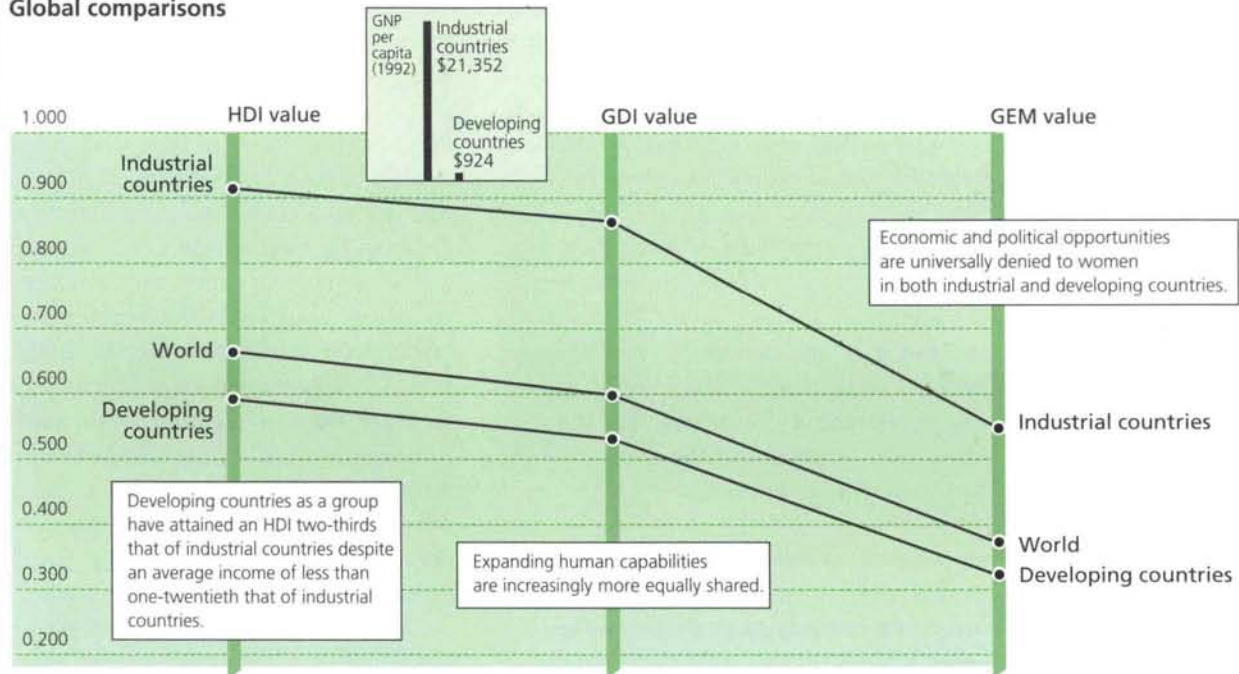
## Expanding capabilities, limited opportunities

The human development index (HDI) measures the average achievement of a country in basic human capabilities. The HDI indicates whether people lead a long and healthy life, are educated and knowledgeable and enjoy a decent standard of living.

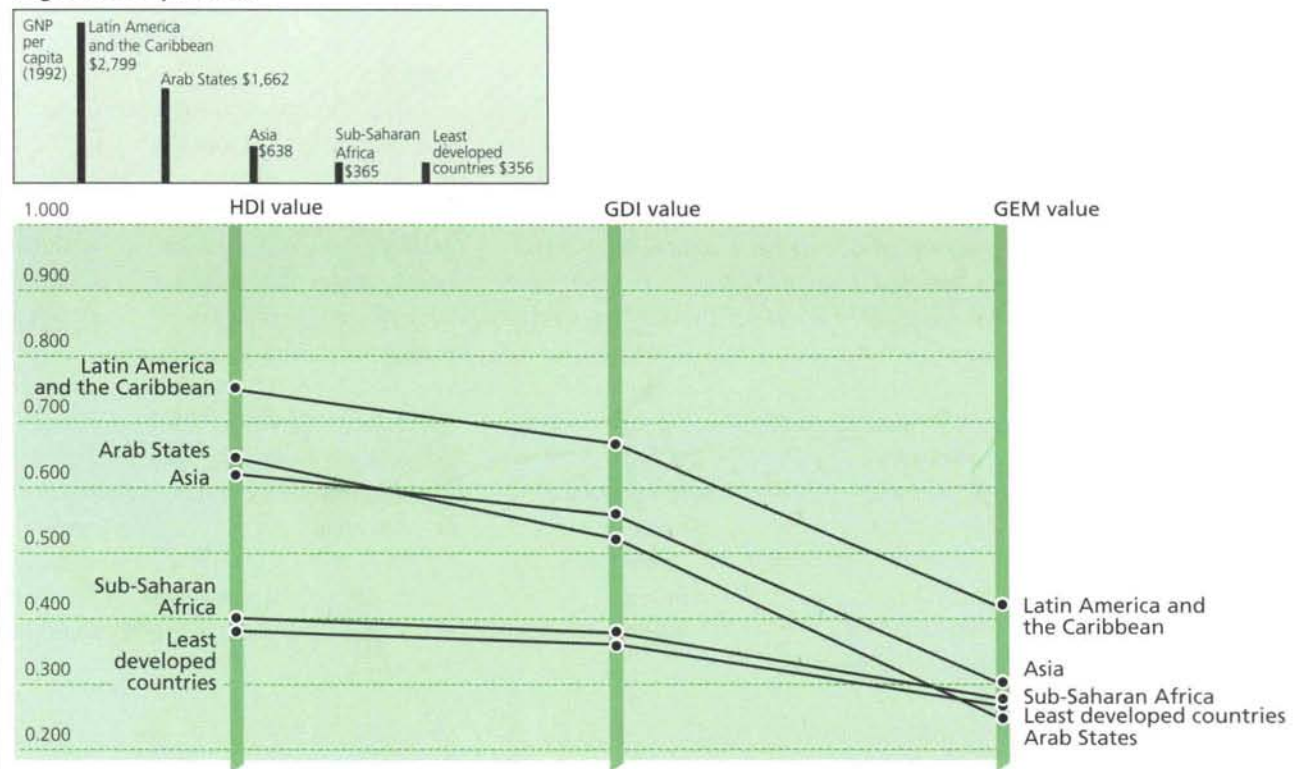
The gender-related development index (GDI) measures achievement in the same basic capabilities as the HDI does, but takes note of inequality in achievement between women and men.

The gender empowerment measure (GEM) examines whether women and men are able to actively participate in economic and political life and take part in decision-making.

### Global comparisons



### Regional comparisons



Note: All figures are calculated for the 104 countries for which estimates of HDI, GDI and GEM are available. The graphs include 27 countries in Africa, 11 Arab States, 17 countries in Asia, 25 countries in Latin America and the Caribbean and 28 of the least developed countries.

*The non-monetized, invisible contribution of women is \$11 trillion a year*

threshold for women's participation in these spheres of life.

Only nine countries have GEM values above 0.6, compared with 66 countries with a GDI value above 0.6. On the other hand, 39 countries have a GEM value below 0.3, compared with only 13 countries with a GDI value below 0.3. Since the GDI measures gender equality in basic human capabilities and the GEM gender equality in economic and political opportunities, this comparison makes it clear that many countries have a longer distance to travel in extending broad economic and political opportunities to women than they have already traveled in building basic female capabilities.

But it is precisely the participation of women at the highest decision-making levels in political and economic life that can drive the change for greater equality between men and women.

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**A major index of neglect is that many of women's economic contributions are grossly undervalued or not valued at all—on the order of \$11 trillion a year**

The undervaluation of women is reflected in the undervaluation of their work and in the absence of recognition of the contribution that they make. The debate therefore must cover equality of rewards as well as equality of opportunity. Data on time use by women and men for a sample of 31 countries tell a dramatic story:

- Women work longer hours than men in nearly every country. Of the total burden of work, women carry on average 53% in developing countries and 51% in industrial countries.
- On average, about half of this total work time of both men and women is spent in economic activities in the market or in the subsistence sector. The other half is normally devoted to unpaid household or community activities.
- Of men's total work time in industrial countries, roughly two-thirds is spent in paid activities and one-third in unpaid activities. For women, the situation is the reverse. In developing countries, more than

three-quarters of men's work is in market activities. So, men receive the lion's share of income and recognition for their economic contribution—while most of women's work remains unpaid, unrecognized and undervalued.

With no economic value given to these activities, the contribution of women is seriously underestimated, and there is no adequate reward or recognition for the burden of work that women carry. In fact, the failure to value most of their work reduces women to virtual non-entities in most economic transactions—such as property ownership or offering collateral for bank loans.

Since status in contemporary society is so often equated with income-earning power, women suffer a major undervaluation of their economic status. But they carry a higher share of the total work burden. And men's work in the market-place is often the result of "joint production", not a solo effort, since much of it might not be possible if women did not stay at home looking after the children and household.

If women's unpaid work were properly valued, it is quite possible that women would emerge in most societies as the major breadwinners—or at least equal breadwinners—since they put in longer hours of work than men.

The monetization of the non-market work of women is more than a question of justice. It concerns the economic status of women in society. If more human activities were seen as market transactions at the prevailing wages, they would yield gigantically large monetary valuations. A rough order of magnitude comes to a staggering \$16 trillion—or about 70% more than the officially estimated \$23 trillion of global output. This estimate includes the value of the *unpaid* work performed by women and men as well as the value of the *underpayment* of women's work in the market at prevailing wages. Of this \$16 trillion, \$11 trillion is the non-monetized, invisible contribution of women.

Such a revaluation of women's work will thoroughly challenge the present conventions. For husbands to share income with their wives will become an act of entitlement rather than benevolence. The basis of



property rights, divorce settlements, collateral for bank credit—to name only a few areas—will have to change completely. Men will also have to share more of the burden of household and community work.

If national statistics fully reflect the “invisible” contribution of women, it will become impossible for policy-makers to ignore them in national decisions. Nor will women continue to be regarded as economic non-entities in market transactions.

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**Another major element of discrimination is the unacceptably low status of women in society, with continuing legal discrimination and violence against women**

The starkest reflection of the low status accorded to women is the discrimination against them in the law. In many countries, women still are not treated as equal to men—whether in property rights, rights of inheritance, laws related to marriage and divorce, or the rights to acquire nationality, manage property or seek employment.

In 1979, the United Nations approved the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), a path-breaking charter of the legal and human rights of women. But 41 UN member states still have not signed the convention, 6 have signed without ratification, and 43 have ratified the convention with reservations about some of its provisions. In other words, 90 countries have not yet accepted all the tenets of legal equality for women and men. Even in some countries ratifying CEDAW, the implementation of the convention has remained half-hearted and incomplete. So, even under law, the equality of women is not yet assured in many societies—let alone in practice.

The most painful devaluation of women is the physical and psychological violence that stalks them from cradle to grave. For too many women, life is shadowed by a threat of violence.

■ *The devaluation begins even before life begins.* In some countries, testing is used to determine the sex of the fetus, which may be aborted if it is female.

■ *It scars early life.* A third of the women in Barbados, Canada, the Netherlands, New Zealand, Norway and the United States report sexual abuse during childhood or adolescence. An estimated one million children, mostly girls in Asia, are forced into prostitution annually. And an estimated 100 million girls suffer genital mutilation.

■ *It becomes a part of marriage.* Studies in Chile, Mexico, Papua New Guinea and the Republic of Korea indicate that two-thirds or more of married women have experienced domestic violence. In Germany, it is estimated that up to four million women a year suffer from domestic violence.

■ *It is sometimes manifested in rape.* Studies from Canada, New Zealand, the United Kingdom and the United States suggest that about one woman in six is raped in her lifetime.

■ *It may end in murder.* More than half of all murders of women in Bangladesh, Brazil, Kenya, Papua New Guinea and Thailand are committed by present or former partners.

■ *Or in suicide.* Cross-cultural evidence from Africa, South America, several Melanesian islands and the United States established marital violence as a leading cause of female suicide.

Although violence stalks women’s lives, laws can do little unless present cultural and social values change.

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**The revolution towards gender equality must be propelled by a concrete strategy for accelerating progress**

Engendering the development paradigm involves radical change in the long-standing premises for social, economic and political life. And the free workings of economic and political processes are unlikely to deliver equality of opportunity, because of the prevailing inequities in power structures. When such structural barriers exist, government intervention is necessary—both through comprehensive policy reforms and through a series of affirmative actions.

Each nation will need to adopt its own agenda for overcoming obstacles to equal

*The free workings of economic and political processes are unlikely to deliver equality of opportunity*

*Government intervention is necessary—through policy reforms and affirmative actions*

rights. This Report identifies a five-point strategy for accelerating progress.

1. *National and international efforts must be mobilized to win legal equality within a defined period—say, the next ten years.* To achieve this objective, the international community will need to move on several fronts:

■ A campaign should be launched for unconditional ratification of CEDAW by the 90 UN member states that have not yet signed or ratified it or that have entered reservations. Public pressure should be mobilized for this purpose.

■ The monitoring of CEDAW's implementation should be strengthened within the UN system, and regular, candid reports should be published on legal discrimination in countries.

■ An international non-governmental organization—World Women's Watch—should be set up to prepare country-by-country reports on key aspects of legal discrimination and on progress towards gender-related targets fixed by national governments and international forums. It could base its reports on information from national NGOs and mobilize pressure groups and political lobbies in alliances for change.

■ Pools of legal professionals should be organized to offer legal advice for winning equality before the law.

■ Legal literacy campaigns could be organized to make women aware of their legal rights and to encourage more women to study law through the generous provision of scholarships.

■ To facilitate women's access to legal systems, it may be desirable to set up legal ombudswomen at national and global levels.

■ Violence against women as a weapon of war should be declared a war crime, punishable by an international tribunal.

2. *Many economic and institutional arrangements may need revamping to extend more choices to women and men in the workplace.* For example:

ENCOURAGING MEN TO PARTICIPATE IN FAMILY CARE. In the 1980s, in most industrial coun-

tries, maternity leave was changed from protecting mothers' health after birth to providing parents with legal rights for parental care. The concept of paternity leave supplemented maternity leave. Japan introduced parental leave in 1992—for both mother and father. The United States in 1994 endorsed limited parental leave, but without pay.

The Nordic countries have perhaps traveled furthest. In Finland starting in 1990, parents could choose between two alternatives: after a 12-month maternity leave, either parent can stay at home until the child is three years old, with monetary compensation and job guarantees. Or the community must arrange for child care while parents work outside the home. Some Nordic countries have legislation that allows parents to reduce their daily working hours to take care of family commitments: since 1976, Finland has allowed parents of children under age four—and Sweden parents of children under age ten—the right to shorten their workday by two hours.

FLEXIBLE WORK SCHEDULES. If workers were to have the opportunity to stagger their working hours, they would be in a better position to combine paid work with other responsibilities, such as child care. Sweden already allows interim part-time work, with the option to return to full-time hours, so that women and men can combine a career with family commitments. Germany and Japan have devised "flexitime" practices to enable their workers to combine their family needs with production schedules. And increasingly, employers are allowing workers to work out of the home or to bring their home to work (by providing child care at the workplace).

EXPANDING THE CONCEPT OF PUBLIC SERVICES. Some countries have expanded public services beyond education and health to child care, including public day-care centres and school lunches. The private sector could also provide such services, helping women and men to pursue careers.

CHANGING TAX AND SOCIAL SECURITY INCENTIVES. Some countries have revised their tax and social security systems to accommodate family structures different from the one-breadwinner, two-adult fam-

ily norm. Sweden has separate taxation for part-time and full-time work to increase after-tax earnings for part-time work. In Zambia, an income tax amendment was introduced in 1987 allowing women to claim child allowances and deductions on their insurance contributions—and removing some tax discrimination against women.

CHANGING LAWS ON PROPERTY, INHERITANCE AND DIVORCE. Once women are recognized as the main or equal “breadwinners” in most families, a convincing basis exists for a more equitable sharing of rights in property, inheritance and divorce. The distribution of land during agrarian reform would require joint landholding, with women having equal access to assets. Current restrictions on women’s collateral for bank loans would no longer hold.

These changes cannot all originate from the state. Many will start from movements in civil society. And some must come from changes in the business community.

3. *A critical 30% threshold should be regarded as a minimum share of decision-making positions held by women at the national level.* Few countries have reached or even approached this target, recommended in 1990 by the UN Commission on the Status of Women. In parliamentary or cabinet representation, only Denmark, Finland, the Netherlands, Norway, Seychelles and Sweden have crossed the 30% threshold. Progress is somewhat better in administrative and managerial positions (15 countries have crossed the 30% threshold) and in municipalities (8 countries). But most countries are still far from this 30% threshold in many of the key decision-making fields.

The Report recommends that each nation identify a firm timetable for crossing the 30% threshold in some key areas of decision-making. The 30% threshold should be regarded as a minimum target, not as the ultimate goal. But achieving this threshold would build considerable momentum for attaining complete equality.

4. *Key programmes should embrace universal female education, improved reproductive health and more credit for women.* These programmes can make a decisive

difference in enabling women to gain more equitable access to economic and political opportunities.

Analysis of experience shows that in three critical areas—access to education, reproductive health and credit resources—women face barriers that can be overcome only through determined policy action. As long as these barriers persist, women will not have equal access to opportunities and to the benefits of development.

The returns from educating girls have few parallels in any other type of social investment. There are measurable benefits for women, for their families and for the community. If universal girls’ enrolment is to be ensured at primary and secondary levels over the next 15 years, an additional investment of \$5–6 billion a year is required.

The International Conference on Population and Development in Cairo in September 1994 underlined the principle “that advancing gender equality and equity and the empowerment of women, and the elimination of all kinds of violence against women, and ensuring women’s ability to control their own fertility, are cornerstones of population and development-related programmes”.

Choice in the spacing and number of children has enabled women to control their life choices. It has meant control over how their time is spent, released them from continuous child-bearing and child-rearing and enabled them to participate more freely in public life. But half a million women die every year from pregnancy-related causes, and millions more are disabled. The Cairo conference estimated that attaining comprehensive coverage of family planning over the next decade would require an additional investment of \$5–6 billion a year. A similar amount would be required for reproductive health services. The policy challenge is not only providing services, but ensuring that these policies and services enable women to make free choices on their own.

Access to productive resources is critical to enhancing women’s economic choices. For low-income women—the vast majority of women in the world—lack of access to bank credit is a persistent barrier to attain-

*Access to productive resources is critical to enhancing women’s choices*

*The new world order must put people—both women and men—at the centre of all development processes*

ing economic independence and widening choices. Experience in many countries demonstrates that poor women invest money wisely and make sound decisions to maximize returns. The policy challenge is to support effective grass-roots credit schemes and intermediaries and to ensure that low-income women have assured credit from the formal financial system.

*5. National and international efforts should target programmes that enable people, particularly women, to gain greater access to economic and political opportunities. Some elements in such a package:*

**BASIC SOCIAL SERVICES FOR ALL.** As endorsed by the Social Summit in Copenhagen, interested developing countries should move progressively towards earmarking at least 20% of their budgets—and interested donor nations 20% of their aid budgets—to human priority concerns, including basic education, primary health care, safe drinking water, family planning services and nutrition programmes for the most deprived people.

**REPRODUCTIVE HEALTH CARE.** Although primary health care and essential family planning services are already included in the 20:20 compact, they need to be supplemented by another \$5–10 billion to ensure reproductive health care services. These additional sums should be priority items in the enlarged effort.

**CREDIT FOR POOR PEOPLE.** As argued above, access to credit is one of the key elements in empowering people and in enabling them to participate in market opportunities. Since formal credit institutions rarely lend to the poor, special institutional arrangements may become necessary to extend credit to those who have no collateral to offer but their enterprise.

**SUSTAINABLE LIVELIHOOD FOR ALL.** Remunerative employment opportunities are the key to the attack on poverty. But not all of them need to be in the formal, organized sectors of the economy. What is essential is

to encourage self-employment schemes, microenterprises and opportunities for the poor to enter the market.

**TARGETED PROGRAMMES FOR POVERTY REDUCTION.** Poverty reduction requires an overall national strategy on many fronts. But it also demands some targeted programmes and affirmative action for the poorest groups—among them landless peasants, urban slum dwellers, deprived ethnic minorities, economically disenfranchised women.

**CAPACITY BUILDING AND EMPOWERMENT.** Considerable decentralized capacity will have to be built in each country—in the public sector, in the private sector and among grass-roots organizations—so that disenfranchised groups can participate in designing and implementing the new projects and programmes.

• • •

What vision should inspire gender relations in the 21st century? A new world order that would embrace full equality of opportunity between women and men as a basic concept. It would also eliminate the prevailing disparities between men and women and create an enabling environment for the full flowering of the productive and creative potential of both the sexes.

This new world order would promote more sharing of work and experience between women and men in the workplace as well as in the household. It would respect women as essential agents of change and development and open many more doors to women to participate more equally in economic and political opportunities. And it would value the work and contribution of women in all fields on par with those of men, solely on merit, without making any distinction.

The new world order would thus put people—both women and men—clearly at the centre of all development processes. Only then can human development become fully engendered.



# The state of human development

The real wealth of a nation is its people—both women and men. And the purpose of development is to create an enabling environment for people to enjoy long, healthy and creative lives. This simple but powerful truth is too often forgotten in the pursuit of material and financial wealth.

The publication of the first *Human Development Report* in 1990 helped put people back at the centre of development. The Report was not the first to propose human well-being as the end of development—or to draw attention to concerns of equity and poverty. But it did fill a vacuum. And the concept of human development went beyond earlier approaches in addressing the link between people and development. The *Human Development Report* has provided a global assessment of human progress and of the different country strategies followed to achieve human well-being.

In that tradition, this chapter revisits the concept of human development and its elaboration since the first Report. The methodological issues of capturing the critical elements of a simple composite index—the human development index (HDI)—are discussed, and the annual updating of the HDI provides a snapshot of the level of human development in 174 countries ranked on a global scale. The chapter concludes by highlighting the main strands of progress and deprivation in the world.

An innovation of this year's Report is its presentation of balance sheets of human development for five developing regions.

## Concept and measurement revisited

Human development is a process of enlarging people's choices. In principle, these choices can be infinite and can change over

time. But at all levels of development, the three essential ones are for people to lead a long and healthy life, to acquire knowledge and to have access to the resources needed for a decent standard of living. If these essential choices are not available, many other opportunities remain inaccessible.

But human development does not end there. Additional choices, highly valued by many people, range from political, economic and social freedom to opportunities for being creative and productive and enjoying personal self-respect and guaranteed human rights.

Human development thus has two sides. One is the formation of human capabilities—such as improved health, knowledge and skills. The other is the use people make of their acquired capabilities—for productive purposes, for leisure or for being active in cultural, social and political affairs. If the scales of human development do not finely balance the two sides, much human frustration can result.

According to the concept of human development, income clearly is only one option that people would like to have, though certainly an important one. But it is not the sum-total of their lives. The purpose of development is to enlarge all human choices, not just income.

The concept of human development is much broader than the conventional theories of economic development. Economic growth models deal with expanding GNP rather than enhancing the quality of human lives. Human resource development treats human beings primarily as an input in the production process—a means rather than an end. Welfare approaches look at human beings as beneficiaries and not as agents of change in the development

*The purpose of development is to enlarge all human choices, not just income*

*Sustainable human development addresses both equity within generations and equity among generations*

process. The basic needs approach focuses on providing material goods and services to deprived population groups rather than on enlarging human choices in all fields.

Human development, by contrast, brings together the production and distribution of commodities and the expansion and use of human capabilities. Encompassing these earlier concerns, human development goes beyond them. It analyses all issues in society—whether economic growth, trade, employment, political freedom or cultural values—from the perspective of people. It thus focuses on enlarging human choices—and it applies equally to developing and industrial countries.

Human development also encompasses elements that constitute the critical issues of gender and development. There are four major elements in the concept of human development—productivity, equity, sustainability and empowerment (box 1.1). Through enhanced capabilities, the creativity and productivity of people must be increased so that they become effective agents of growth. Economic growth must be combined with equitable distribution of its benefits. Equitable opportunities must be available both to present and to future generations. And all people, women and men, must be empowered to participate in the design and implementation of key decisions that shape their lives.

Human development is impossible without gender equality. As long as women

are excluded from the development process, development will remain weak and lopsided. Sustainable human development implies engendering the development paradigm.

The human development index was constructed to reflect the most important dimensions of human development. A composite index, the HDI contains three indicators: life expectancy, representing a long and healthy life; educational attainment, representing knowledge; and real GDP (in purchasing power parity dollars), representing a decent standard of living.

The HDI shows how far a country has to travel to provide these essential choices to all its people. It is not a measure of well-being. Nor is it a measure of happiness. Instead, it is a measure of empowerment. It indicates that if people have these three basic choices, they may be able to gain access to other opportunities as well. The HDI, imperfect though it may be, is thus a viable alternative to GNP per capita, and it is increasingly being used to monitor the progress of nations and of global society.

The HDI gives only a snapshot of the status of human development in selected areas and thus is not a comprehensive measure of human development. To give a more complete picture of human development in any country, the HDI must be supplemented with other important human development indicators. Over the years, the HDI has undergone refinements, both in methodology and in data. It is now possible to construct comparable HDIs over time to monitor progress, and to disaggregate the HDI by geographical region, ethnic group, income level and gender.

The concept of human development has gone beyond its basic premises to emphasize the sustainability of the development process. It not only puts people at the centre of development. It also advocates protecting the life opportunities of future generations as well as present generations and respecting the natural systems on which all life depends.

Sustainable human development addresses both equity within generations and equity among generations—enabling all generations, present and future, to make the

BOX 1.1

**Four essential components of the human development paradigm**

The human development paradigm contains four main components:

- *Productivity.* People must be enabled to increase their productivity and to participate fully in the process of income generation and remunerative employment. Economic growth is, therefore, a subset of human development models.
- *Equity.* People must have access to equal opportunities. All barriers to economic and political opportunities must be eliminated so that people can partic-

ipate in, and benefit from, these opportunities.

- *Sustainability.* Access to opportunities must be ensured not only for the present generations but for future generations as well. All forms of capital—physical, human, environmental—should be replenished.

- *Empowerment.* Development must be *by* people, not only *for* them. People must participate fully in the decisions and processes that shape their lives.

best use of their capabilities. It brings the development process within the carrying capacity of nature, giving the highest priority to environmental regeneration—to protect the opportunities of future generations.

This issue of sustainability has many dimensions: capacity, environment and institutions. If the development process does not create institutions fully supportive of people's rights, it cannot be sustainable in the long run. Human development thus emphasizes strengthening the institutions of both government and civil society so that the entire development process becomes internally sustainable.

### State of human progress

The *Human Development Report* has continually analysed human development during the past three decades, and much research has gone into this subject for each Report. In addition, the human development index and the extensive statistical tables in these Reports have helped place human progress and human deprivation in concrete perspective.

An objective review of the state of human affairs reveals that humanity has advanced on several critical fronts in the past 50 years:

- Most states are now independent.
- With the end of the cold war, the world has been made increasingly safe from the threat of nuclear holocaust. And with the reduction of global military spending, there is a potential peace dividend that can be mobilized for human development.
- The speed of human development has been unprecedented, with developing countries setting a pace three times faster than that of the industrial countries a century ago.
- Human ingenuity has led to many technological breakthroughs, particularly in information, communication, medicine and space exploration.
- An irrepressible wave of human freedom is sweeping across many lands—and the human spirit, long suppressed, is beginning to find its voice.

Despite this progress, a long agenda of human deprivation still awaits:

- We still live in a world characterized by hunger, poverty and increasing disparities.
- We also live in a world of disturbing contrasts—with hunger in some lands and waste of food in others, and with the disparity between rich and poor nations widening constantly.
- Poor nations as well as rich are afflicted by growing human distress—in the form of a weakening social fabric, threats to personal security and a spreading sense of individual isolation.
- The threats to human security are no longer personal or local or national. They are global—with drugs, HIV/AIDS, terrorism and pollution roaming the world.
- There are now more conflicts within nations than between nations, and the social and political fabric of several nations is beginning to disintegrate.
- The basic question of human survival on an environmentally fragile planet has gained urgency.

What is the nature of the world we live in? What are the broader trends in the political, social and economic arenas? A better understanding of these issues can help put the trends of human progress and human deprivation in a clearer perspective.

### *Political and social change*

- Today, between two-thirds and three-quarters of the world's people live under relatively pluralistic and democratic regimes. In 1993 alone, elections were held in 43 countries—in some for the first time.
- The end of apartheid and the emergence of a free independent South Africa in the 1990s mark a turning point for humanity. More than half of the African states are now undertaking democratic reforms and renewing civil society.
- While the democratic transition has raised human hopes in many lands, there has also been a disturbing revival of ethnic conflicts. These conflicts are mainly internal, among people, rather than external, among countries—and more than 90% of the casualties are civilians.
- Today, one in 200 people in the world is a refugee or a displaced person. Between 1970 and 1994, the number of refugees in

*We live in a world of disturbing contrasts*

*More than three-fourths of the world's people live in developing countries, but they enjoy only 16% of the world's income*

the world increased ninefold, from 3 million to 27 million.

#### *Globalization of economies*

- The world has become a global financial village. During 1965–90, world merchandise trade tripled, and trade in services increased more than fourteenfold.
- But the poorest 20% of the world's people have benefited little from the increased globalization of economies. In world trade, their share is only 1%—and in world commercial lending, a scant 0.2%.
- Private investment flows to developing countries increased from \$5 billion to nearly \$160 billion during 1970–93. But three-fourths of these flows went to ten countries, mostly in East Asia and Latin America. At the same time, the external debt of developing countries in 1993 amounted to more than \$1.8 trillion, and their debt service rose to 22% of export earnings.

#### *Economic growth and structure*

- The world today is richer than it was in 1950. During 1950–92, world income increased from \$4 trillion to \$23 trillion, and in per capita terms it more than tripled, with important implications for the environment and sustainability.
- More than three-fourths of the world's people live in developing countries, but they enjoy only 16% of the world's income—while the richest 20% have 85% of global income.
- The structure of global production has changed significantly. The contribution of agriculture to GDP in both low-income and middle-income countries has fallen by a third in the past three decades—while the share of industry in GDP increased by nearly a third in low-income countries.

#### *Labour force and employment*

- More than one-fourth of the labour force in developing countries and more than two-thirds of that in industrial countries are now in services. But in developing countries, nearly 60% of the labour force is still in agriculture.

- During the past three decades, employment has consistently lagged behind economic growth in some regions. And today, the world is facing a large shortage of jobs—with about 35 million job-seekers in industrial countries and a need for one billion new jobs in developing countries during the next decade.

- In developing countries, the informal sector is growing almost everywhere. In Latin America, more than 30% of all non-agricultural workers were in the informal sector at the end of the 1980s. In 1990, the informal sector in Sub-Saharan Africa employed more than 60% of the urban workforce—more than twice the share of the modern sector.

#### *Technological progress*

- Rapid technological progress has revolutionized people's lives. Today, a network of 19 satellites provides public service channels in 180 countries.
- Computer technology has gone through more than four phases in the span of one person's lifetime. In 1993, world sales of computer terminals exceeded 12 million units.
- Basic immunization saves the lives of three million children every year in developing countries.

#### *Environment*

- Environmental degradation poses a major threat to human security. As many as 70,000 square kilometres of farmland are abandoned each year as a result of degradation, and about 4 million hectares of rain-fed cropland are lost annually to soil erosion.
- In Europe, 475,000 square kilometres of forest area, an area larger than Germany, have been damaged by air pollution. The resulting economic loss is about \$35 billion a year, equal to Hungary's GDP.

#### **Four conclusions**

An arresting picture of hope and fear, of unprecedented human progress and unspeakable human misery—that is what



emerges from two simple balance sheets of human progress and deprivation over the past three decades for developing and industrial countries (boxes 1.2 and 1.3).

With human advances on some fronts and retreats on several others, the following conclusions can be drawn from a complex maze of data:

1. *The developing world has witnessed unprecedented improvement in human development in the past 30 years.* It has covered as much distance during those 30 years as the industrial world did in a century. Life expectancy is now 17 years longer than it was in 1960. Infant mortality has been more than halved. The combined enrolment in primary and secondary school is nearly 1.5 times higher. The human development disparities between the North and the South have diminished sharply. Even though the South has a per capita GNP that is a mere 6% of the North's, it now has a life expectancy that is 85%, and nutritional levels and adult literacy that are 81%, of those in the North.

2. *Despite this progress, considerable human deprivation remains in both the developing and the industrial world.* In developing countries, one person in three lives in poverty. Even basic social services—primary health care, basic education, safe drinking water and adequate nutrition—are not available to more than one billion people. About 90% of the 17 million people infected with HIV are in developing countries. In the industrial world, about 100 million people are still below the official poverty line, though social safety nets help protect them. And many people are insecure—with threats coming from drugs, homelessness, unemployment, pollution, AIDS and crime.

3. *Rapid human progress is possible, development cooperation works, and much more can be done by focusing national and international energy on essential targets.* That is what the experience of the past 30 years shows. It also shows that a lack of resources is often an excuse for a lack of proper priorities. Sufficient resources can be gener-

ated for the essential human agenda by cutting excessive military spending, privatizing inefficient public enterprises and realigning development priorities.

4. *The key human development challenges for the next century will require global compacts.* These challenges include reducing population growth, providing basic social services to all deprived people, accelerating job-led growth, creating an external environment conducive to growth, particularly by dismantling trade and investment barriers, and making global compacts for alleviating poverty and improving the physical environment.

The foregoing themes have been elaborated in several previous Reports. This year, regional balance sheets of human development offer added perspective, because human development differs from one region to another (annex boxes A1.1–A1.5). The only region missing from these balance sheets is that comprising Eastern Europe and the CIS countries. Because these countries are in an economic, social and political transition, it is difficult to draw up a balance sheet of human development for them (see box 6.1 for a description of these countries' initiatives to produce national human development reports).

The regional balance sheets are snapshots of human development and cannot provide a comprehensive regional picture. They attempt only to synthesize and quantify some of the major trends of human progress and human deprivation in each region. But the picture they give is supplemented by the human development index, which provides overall results and disaggregations, making it an important tool for comparisons between and within countries.

### **The human development index: methodology and 1995 results**

The concept of human development is much deeper and richer than any composite index—or even a detailed set of statistical indicators—can capture. It nevertheless is useful for simplifying a complex reality, which is what the HDI sets out to do. The HDI's basic message should be supple-

*Life expectancy is now 17 years longer than it was in 1960. Infant mortality has been more than halved*

## Balance sheet of human development—developing countries

### PROGRESS

### DEPRIVATION

#### HEALTH

- During 1960–92, average life expectancy increased by more than a third. By now, 30 countries have achieved a life expectancy of more than 70 years.
- Over the past three decades, the population with access to safe water almost doubled, from 36% to 70%.

- About 17 million people die every year from infectious and parasitic diseases, such as diarrhoea, malaria and tuberculosis.
- More than 90% of the 17 million HIV-infected people live in developing countries.

#### EDUCATION

- Net enrolment at the primary level increased by nearly two-thirds during the past 30 years, from 48% in 1960 to 77% in 1991.

- About 130 million children at the primary level and more than 275 million at the secondary level are out of school.

#### FOOD AND NUTRITION

- Despite rapid population growth, per capita food production rose by more than 20% during the past decade.

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

#### INCOME AND POVERTY

- During the past decade, both agriculture and industry expanded at an annual rate of more than 3% in developing countries.

- Almost a third of the population, about 1.3 billion people, live below the poverty line.

#### WOMEN

- The combined primary and secondary enrolment of girls increased from 38% to 68% during the past two decades.
- During the past two decades, fertility rates declined by more than a third.

- Maternal mortality in developing countries, at 350 per 100,000 live births, is about nine times higher than that in OECD countries.
- Women hold about 10% of parliamentary seats.

#### CHILDREN

- In 1960–92, the infant mortality rate was more than halved, from 149 per thousand live births to 70.
- During the past two decades, the lives of about three million children were saved every year through the extension of basic immunization.

- More than a third of children are malnourished and underweight.
- The under-five mortality rate, at 100 per thousand live births, is still nearly seven times higher than that in industrial countries.

#### ENVIRONMENT

- Developing countries' contribution to global emissions is less than a fourth that of industrial countries, even though their population is 3.5 times larger.

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

#### POLITICS AND CONFLICTS

- More than two-thirds of the population in developing countries live under relatively pluralistic and democratic regimes.

- At the end of 1993, there were more than 13 million refugees in the developing world.

Source: See bibliographic note on page 136.

## Balance sheet of human development—industrial countries

### PROGRESS

### DEPRIVATION

#### HEALTH

- By 1992, 24 industrial countries had achieved a life expectancy of more than 75 years.

- More than 1.5 million people are infected with HIV.

#### EDUCATION

- The tertiary enrolment ratio more than doubled between 1960 and 1991, from 15% to 40%.

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

#### INCOME AND EMPLOYMENT

- Between 1972 and 1992, real per capita GNP grew by 46%.
- The annual rate of inflation is now less than 4%.

- The total unemployment rate is more than 8%, and the rate among youths nearly 15%. More than 35 million people are seeking jobs.
- The poorest 40% of households get only 18% of total income.

#### WOMEN

- In science and technology at the tertiary level, the number of girls per 100 boys has more than doubled, from 25 in 1970 to 67 in 1990.
- Women now make up more than 40% of the labour force and hold about 28% of administrative and managerial positions.

- Women's non-agricultural wage rate is still only three-fourths of men's.
- Women hold only 12% of parliamentary seats.

#### SOCIAL SECURITY

- Social security expenditures account for about 16% of GDP.

- About 100 million people live below the poverty line.
- More than five million people 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 in three people reads a newspaper.

- More than a third of marriages end in divorce, and about 7% of households are headed by a single female parent.
- Nearly 130,000 rapes are reported annually in the age group 15–59.

#### ENVIRONMENT

- Between 1965 and 1991, energy use per \$100 of GDP was cut dramatically, from 168 kilograms of oil equivalent to 25 kilograms, through aggressive conservation measures and more appropriate pricing policies.

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

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 136.

*Since the introduction of the HDI in 1990, there has been a lively debate on this new measure of development*

mented by analyses to capture other important dimensions—many of which cannot be easily quantified—such as political freedom, environmental sustainability and intergenerational equity.

The basis for the selection of critical dimensions, and the indicators that make up the human development index, is identifying basic capabilities that people must

have to participate in and contribute to society. These include the ability to lead a long and healthy life, the ability to be knowledgeable and the ability to have access to the resources needed for a decent standard of living.

The HDI has three components: life expectancy at birth; educational attainment, comprising adult literacy, with two-thirds weight, and a combined primary, secondary and tertiary enrolment ratio, with one-third weight; and income.

The HDI value for each country indicates how far that country has to go to attain certain defined goals: an average life span of 85 years, access to education for all and a decent level of income. The closer a country's HDI is to 1, the less the remaining distance that country has to travel.

The treatment of the income component is rather complex. The HDI adjusts real income (in purchasing power parity, or PPP, dollars) for the diminishing utility of higher levels of income to human development. The premise is that people do not need an infinite income for a decent standard of living. So, the HDI defines a threshold for income regarded as adequate for a reasonable standard of living. This threshold is the average global real GDP per capita in PPP dollars in 1992, a little more than \$5,000. The HDI treats income up to this level at full value, but income beyond it as having a sharply diminishing utility—for which a specific formula is used.

The HDI reduces all three basic indicators to a common measuring rod by measuring achievement in each indicator as the relative distance from a desirable goal. The maximum and minimum values for each variable are reduced to a scale between 0 and 1, with each country at some point on this scale.

The HDI is constructed by (1) defining a country's measure of relative achievement in each of the three basic variables and (2) taking a simple average of the three indicators. The detailed method for constructing the HDI is explained in technical note 3.

Since the introduction of the HDI in 1990, there has been a lively debate on this new measure of development. A survey of

TABLE 1.1  
HDI ranking for industrial countries,  
1992

Country	HDI	HDI rank	Real GDP per capita (PPP\$) rank	Real GDP per capita (PPP\$) rank minus HDI rank <sup>a</sup>
Canada	0.950	1	8	7
USA	0.938	2	1	-1
Japan	0.937	3	8	5
Netherlands	0.936	4	20	16
Finland	0.934	5	24	19
Iceland	0.933	6	21	15
Norway	0.933	7	15	8
France	0.931	8	11	3
Spain	0.930	9	29	20
Sweden	0.929	10	17	7
Australia	0.927	11	18	7
Belgium	0.926	12	14	2
Switzerland	0.925	13	2	-11
Austria	0.925	14	13	-1
Germany	0.921	15	6	-9
Denmark	0.920	16	12	-4
New Zealand	0.919	17	26	9
United Kingdom	0.916	18	23	5
Ireland	0.916	19	30	11
Italy	0.912	20	19	-1
Israel	0.907	21	27	6
Greece	0.907	22	43	21
Luxembourg	0.893	27	5	-22
Malta	0.880	34	44	10
Portugal	0.874	36	34	-2
Czech Rep.	0.872	38	46	8
Slovakia	0.872	40	48	8
Belarus	0.866	42	51	9
Estonia	0.862	43	48	5
Latvia	0.857	48	54	6
Hungary	0.856	50	50	0
Poland	0.855	51	71	20
Russian Federation	0.849	52	52	0
Ukraine	0.842	54	68	14
Kazakhstan	0.798	64	74	10
Bulgaria	0.796	65	76	11
Lithuania	0.769	71	82	11
Moldova, Rep. of	0.757	81	83	2
Albania	0.739	82	86	4
Turkmenistan	0.739	86	89	3
Kyrgyzstan	0.717	89	102	13
Armenia	0.715	90	111	21
Georgia	0.709	92	117	25
Uzbekistan	0.706	94	106	12
Romania	0.703	98	104	6
Azerbaijan	0.696	99	108	9
Tajikistan	0.643	103	129	26

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

the critiques of the HDI is presented in *Human Development Report 1993* (technical note 2, pp. 104–12). The debate has led to continued refinement of the methodology. A major refinement was introduced in 1994, when goal posts were fixed for each indicator to allow analysis over time.

The HDI exercise has been conducted this year using the same methods as last year, with one change. For educational attainment, the estimate of mean years of schooling has been replaced by the combined enrolment ratio at primary, secondary and tertiary levels. The formula for calculating mean years of schooling is complex and has enormous data requirements. Furthermore, the data on mean years of schooling are not provided by any UN agency. The combined enrolment ratio, provided by UNESCO, shows the stock of literacy for those under 24. This variable has been given a weight of one-third, and, as before, adult literacy a weight of two-thirds.

All underlying data for the HDI have been thoroughly rechecked in consultation with our primary data sources: the UN Population Division for life expectancy, UNESCO for educational attainment and the World Bank for income. Some of the changes in values and ranking are due to new series of data provided by these sources, based primarily on the results of the 1990 census and survey rounds. These differences are further explained in the note on statistics in this Report (see page 147). The note also explains the sources of data.

This exercise of improving the database and making it more transparent will be continued in future Reports. Because of the replacement of mean years of schooling with the combined enrolment ratio and the adoption of new series of data in constructing the HDI this year, values in the 1995 Report are not strictly comparable with those in the 1994 Report.

#### *What the 1995 HDI reveals*

The ranking of countries by their HDI value (tables 1.1 and 1.2) leads to the following observations, summarizing some of the highlights of this year's HDI exercise:

- Of the 174 countries for which the HDI was calculated, 63 are in the high human development category, 64 in the medium category and 47 in the low category.
- In 1992, nearly 30% of the world's people were living in countries in the high human development category, 39% in countries in the medium category and 31% in countries in the low category. The corresponding figures for 1960 are 16%, 11% and 73%. Thus, the share of the population living in the high human development category almost doubled between 1960 and 1992 (figure 1.1).
- Canada, the United States and Japan lead the HDI rankings.
- Among developing countries and areas, Cyprus, Hong Kong and Barbados lead the HDI rankings.
- The regional HDIs, calculated for the first time, provide revealing insights into the level of human development in different regions of the world (figure 1.2 and table 1.3). First, the HDI of industrial countries (0.916) is only 1.6 times higher than that of developing countries (0.570), even though their real GDP per capita (PPP\$) is 6 times higher. Second, among developing regions, the HDI of Sub-Saharan Africa (0.389) is

*The share of the world's population living in the high human development category almost doubled between 1960 and 1992*

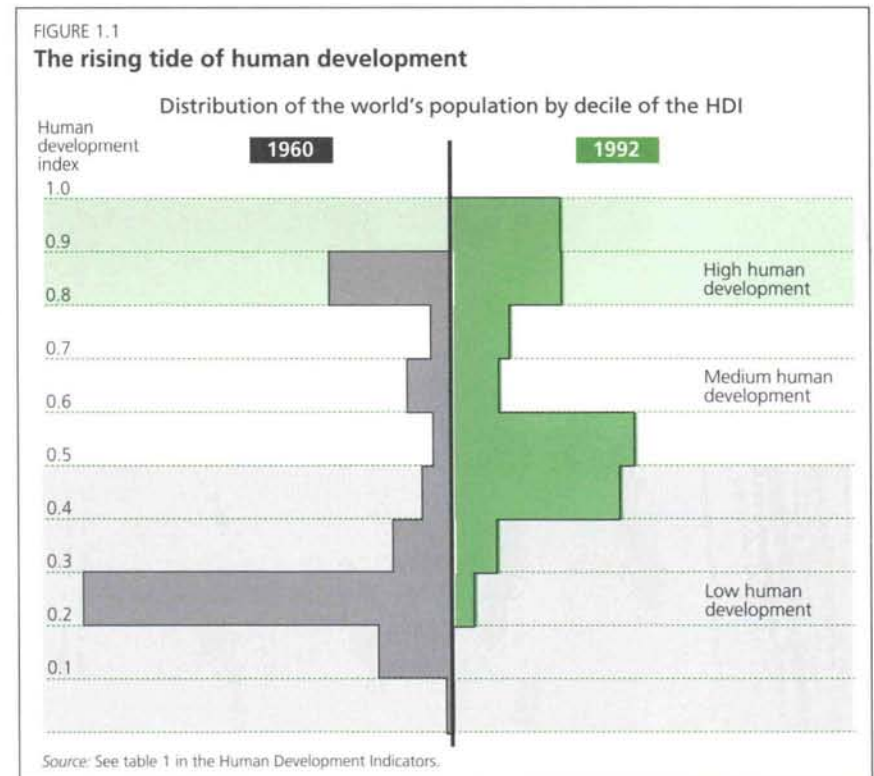


TABLE 1.2  
HDI ranking for developing countries, 1992

Country	HDI	HDI rank	Real GDP per capita (PPP\$) rank	Real GDP per capita (PPP\$) rank minus HDI rank <sup>a</sup>	Country	HDI	HDI rank	Real GDP per capita (PPP\$) rank	Real GDP per capita (PPP\$) rank minus HDI rank <sup>a</sup>
Cyprus	0.906	23	25	2	China	0.594	111	123	12
Hong Kong	0.905	24	10	-14	Guatemala	0.591	112	92	-20
Barbados	0.900	25	37	12	Bolivia	0.588	113	112	-1
Bahamas	0.894	26	22	-4	Gabon	0.579	114	78	-36
Costa Rica	0.884	28	60	32	El Salvador	0.579	115	118	3
Belize	0.884	29	57	28	Honduras	0.578	116	120	4
Argentina	0.883	30	39	9	Morocco	0.554	117	91	-26
Korea, Rep. of	0.882	31	38	7	Maldives	0.554	118	145	27
Uruguay	0.881	32	53	21	Vanuatu	0.541	119	122	3
Chile	0.880	33	41	8	Viet Nam	0.539	120	151	31
Singapore	0.878	35	16	-19	Zimbabwe	0.539	121	121	0
Saint Kitts and Nevis	0.873	37	56	19	Congo	0.538	122	101	-21
Trinidad and Tobago	0.872	39	36	-3	Cape Verde	0.537	123	127	4
Brunei Darussalam	0.868	41	7	-34	Swaziland	0.522	124	131	7
Bahrain	0.862	44	28	-16	Solomon Islands	0.511	125	107	-18
United Arab Emirates	0.861	45	4	-41	Papua New Guinea	0.508	126	112	-14
Fiji	0.860	46	63	17	Cameroon	0.503	127	115	-12
Venezuela	0.859	47	40	-7	Pakistan	0.483	128	100	-28
Panama	0.856	49	59	10	Ghana	0.482	129	119	-10
Mexico	0.842	53	47	-6	Kenya	0.481	130	137	7
Antigua and Barbuda	0.840	55	72	17	Lesotho	0.473	131	112	17
Qatar	0.838	56	3	-53	Myanmar	0.457	132	161	29
Colombia	0.836	57	60	3	São Tomé and Príncipe	0.451	133	169	36
Thailand	0.828	58	55	-3	India	0.439	134	141	7
Malaysia	0.822	59	45	-14	Madagascar	0.432	135	165	30
Mauritius	0.821	60	32	-28	Zambia	0.425	136	142	6
Kuwait	0.821	61	42	-19	Yemen	0.424	137	113	-24
Seychelles	0.810	62	57	-5	Lao People's Dem. Rep.	0.421	138	126	-12
Brazil	0.804	63	64	1	Comoros	0.415	139	138	-1
Turkey	0.792	66	65	-1	Togo	0.409	140	144	4
Grenada	0.786	67	79	12	Nigeria	0.406	141	135	-6
Ecuador	0.784	68	73	5	Equatorial Guinea	0.399	142	167	25
Dominica	0.776	69	85	16	Zaire	0.384	143	172	29
Iran, Islamic Rep. of	0.770	70	62	-8	Sudan	0.379	144	134	-10
Cuba	0.769	72	88	16	Côte d'Ivoire	0.369	145	130	-15
Libyan Arab Jamahiriya	0.768	73	35	-38	Bangladesh	0.364	146	141	-5
Botswana	0.763	74	67	-7	Tanzania, U. Rep. of	0.364	147	168	21
Tunisia	0.763	75	66	-9	Haiti	0.362	148	149	1
Saudi Arabia	0.762	76	33	-43	Central African Rep.	0.361	149	147	-2
Suriname	0.762	77	81	4	Mauritania	0.359	150	132	-18
Syrian Arab Rep.	0.761	78	69	-9	Nepal	0.343	151	146	-5
Saint Vincent	0.761	79	93	14	Senegal	0.340	152	127	-25
Jordan	0.758	80	74	-6	Cambodia	0.337	153	140	-13
Korea, Dem. People's Rep. of	0.733	83	97	14	Djibouti	0.336	154	136	-18
Saint Lucia	0.732	84	97	-13	Benin	0.332	155	133	-22
Algeria	0.732	85	70	-15	Rwanda	0.332	156	165	9
Paraguay	0.723	87	90	3	Malawi	0.330	157	155	-2
Jamaica	0.721	88	96	8	Uganda	0.329	158	154	-4
Oman	0.715	91	31	-60	Liberia	0.325	159	150	-9
Peru	0.709	93	94	1	Bhutan	0.305	160	147	3
South Africa	0.705	95	80	-15	Gambia	0.299	161	126	-22
Dominican Rep.	0.705	96	95	-1	Chad	0.296	162	143	-2
Sri Lanka	0.704	97	102	5	Guinea-Bissau	0.293	163	155	-8
Philippines	0.677	100	108	8	Angola	0.291	164	161	-3
Lebanon	0.675	101	110	9	Burundi	0.286	165	164	-1
Samoa (Western)	0.651	102	124	22	Somalia	0.246	166	152	-14
Indonesia	0.637	104	99	-5	Mozambique	0.246	167	173	6
Guyana	0.622	105	125	20	Guinea	0.237	168	170	2
Iraq	0.617	106	87	-19	Burkina Faso	0.228	169	159	-10
Egypt	0.613	107	84	23	Afghanistan	0.228	170	158	-12
Namibia	0.611	108	77	-31	Ethiopia	0.227	171	174	3
Nicaragua	0.611	109	105	-4	Mali	0.222	172	171	-1
Mongolia	0.604	110	116	6	Sierra Leone	0.221	173	153	-20
					Niger	0.207	174	156	-18

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

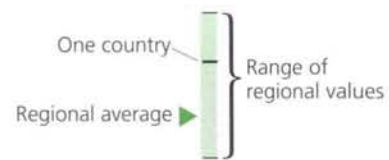
less than half that of Latin America and the Caribbean (0.823). The HDI of South Asia (0.453) is slightly higher than that of Sub-Saharan Africa. Third, the HDI of East Asia goes up significantly when China is excluded, from 0.621 to 0.874. That is primarily because excluding China from the regional calculation increases the regional income per capita nearly fourfold, from PPP\$2,034 to PPP\$8,009. In fact, the HDIs of East Asia (excluding China) and Latin America and the Caribbean are now approaching the average HDI of industrial countries.

The HDI ranking of countries differs significantly from the ranking by real GDP per capita (see the last column of tables 1.1 and 1.2). In contrast to earlier Reports, this Report uses rankings by real GDP per capita (PPP\$) rather than GNP per capita in the comparisons with HDI rankings, to minimize distortions in income rankings due to exchange rate fluctuations. Not only does real GDP per capita capture only one dimension of people's lives—the economic dimension—but different countries have translated their economic capacity into very different levels of well-being or achieved

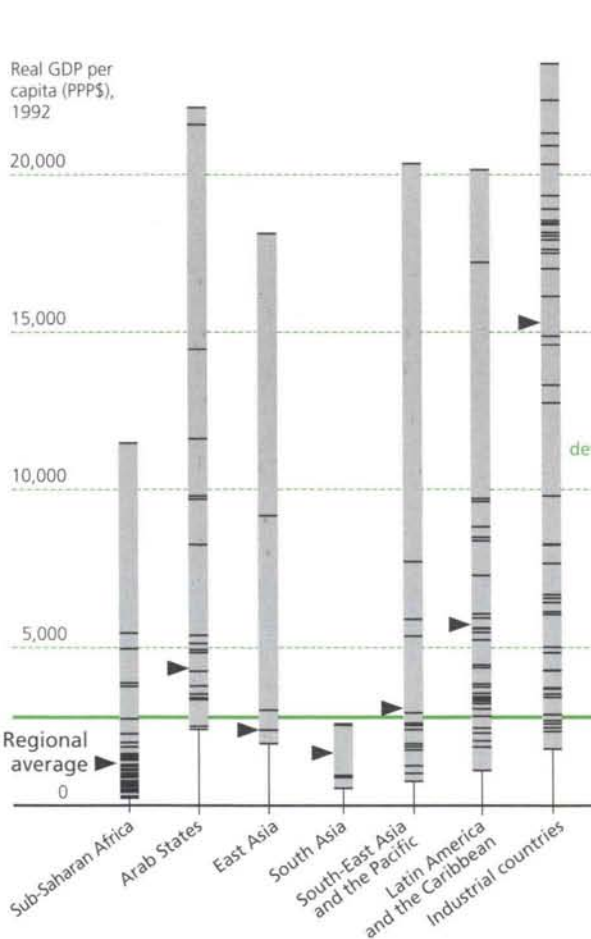
FIGURE 1.2

**Despite low incomes, many developing countries attain the human development levels of industrial countries**

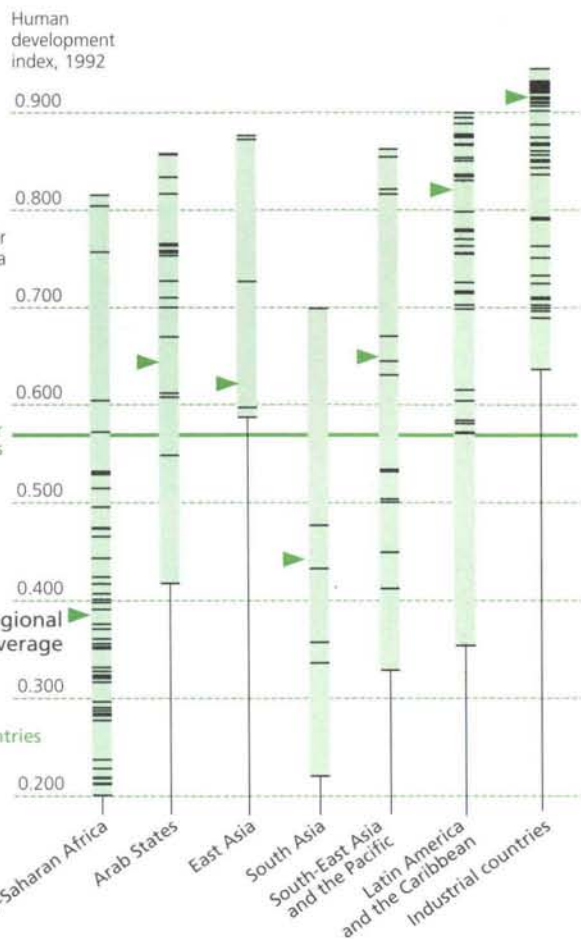
The gray and green bars in the graphs below show 174 countries grouped by region. Bars show the range of national values in each region, and black lines show values for each country. Triangular pointers show the regional averages.



**INCOME**



**HUMAN DEVELOPMENT**



Source: See table 1 in the Human Development Indicators.

*Calculating the HDI for different groups of a population holds a mirror up to society, revealing its strengths and weaknesses*

the same level of human development with diverse incomes (figure 1.3). A look at the highest positive and negative differences between HDI and real GDP per capita ranks shows clearly that such countries as Costa Rica and Madagascar used their economic growth to enhance the lives of their people. And even though most countries in the Middle East made significant progress in human development over the past 30 years, they still have considerable scope for distributing the benefits of economic growth more equitably.

In these and other countries, the national averages mask wide disparities. Constructing a disaggregated HDI for different population groups within countries reveals how unevenly human development may be shared within a country.

*Disaggregating the HDI*

Calculating the HDI for different groups of a population holds a mirror up to society, revealing its strengths and weaknesses. Many countries have already undertaken exercises to disaggregate their HDI by geographic region, by gender, by ethnic group and by income class. These disaggregated values reveal serious disparities requiring policy attention:

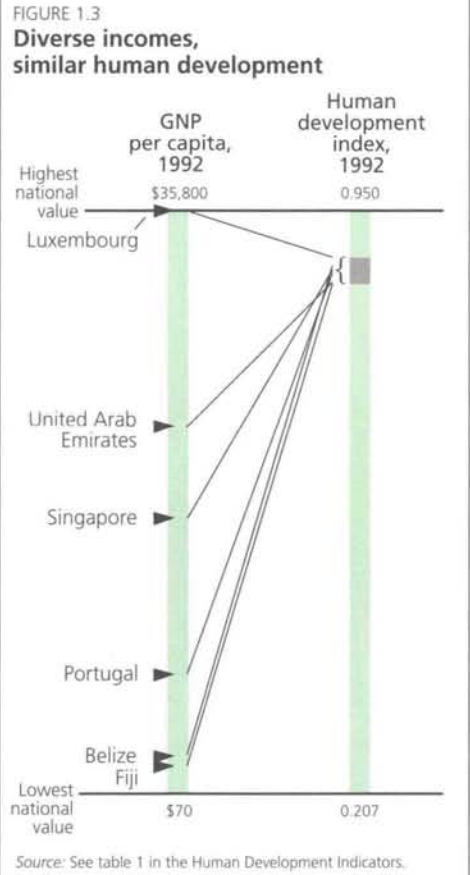
- Regional disparities in Nigeria are among the widest in the world. Ranking the 19 states of Nigeria by their HDIs puts the state of Bendel ahead of such countries as Botswana, Tunisia and Saudi Arabia, while the state of Borno ranks lower than every country in the world.
- Even though the disparity between the

South and the North-East of Brazil has been halved since 1970, the HDI value of the second is only two-thirds that of the first. South Brazil would rank alongside Luxembourg (number 27 in the global rankings), while North-East Brazil would rank between Bolivia (113) and Gabon (114).

- If white South Africa were a separate country, it would be among the highest-ranking countries in the world. Black South Africa would rank number 128 (just after Cameroon). Not just two different communities, but two different worlds.
- In the United States, with the HDIs of white, black and hispanic populations separated, whites would rank number 1 in the world (ahead of Canada), blacks would rank number 27 (next to Luxembourg) and hispanics would rank number 32 (next to Uruguay). So, full equality still is a distant prospect in the United States, despite affirmative action policies and market opportunities.

TABLE 1.3  
HDI values by region, 1992

Region	HDI
East Asia excluding China	0.874
Latin America and the Caribbean	0.823
South-East Asia and the Pacific	0.651
Arab States	0.644
East Asia including China	0.621
South Asia	0.453
Sub-Saharan Africa	0.389
All developing countries	0.570
Industrial countries	0.916
World	0.759





## The Human Development Report

The first *Human Development Report* (1990) developed the concept of human development and its measurement. It also explored the relationship between economic growth and human development. It showed that:

- The link between economic growth and human progress is not automatic. Fairly respectable levels of human development are possible even at fairly modest levels of income. And high GDP growth in several countries has failed to benefit their people.
- An external environment favourable to growth is vital to support human development strategies in the 1990s.

Successive Reports focused on specific issues of human development in the larger perspective set forth in the first one. The 1991 Report tried to answer this basic question: is it possible to restructure the present expenditure pattern of developing countries and aid allocations to finance the basic human priorities in these countries? The conclusion was that it is often the absence of political will, and not always the lack of financial resources, that is responsible for human neglect.

The 1992 Report examined the international perspective and the external environment for national human development efforts. It concluded that trade and financial opportunities in international markets

are needed even more than aid to enhance human development initiatives in developing countries.

The basic theme of the 1993 Report was people's participation: it assessed how much people participated in the decisions and processes that shaped their lives. It also made concrete suggestions for a new people-centred world order.

The 1994 Report introduced a new concept of human security—the security of people in their homes, in their jobs, in their communities and in their environments. It identified the profound policy changes in national and global management required by this new concept of human security.

A critical shortfall of development in the past few decades has been the persistent neglect of the creativity and productivity of half of humanity. The same is true of human development debates and dialogues. In most cases, they have touched gender issues—but not really focused on them.

The four critical elements of the human development concept—productivity, equity, sustainability and empowerment—demand that gender issues be addressed as development issues and as human rights concerns. The compelling reason: development, if not engendered, is endangered. Only when the potential of all human beings is fully realized can we talk of true human development. The 1995 Report thus focuses on gender and development.

*Development, if not engendered, is endangered*

## 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.

- Less than three-fifths of the rural population have access to safe water, and only half have access to basic sanitation facilities.

#### EDUCATION

- During the past two decades, the adult literacy rate nearly doubled, rising from 30% in 1970 to 54% in 1992.
- The combined primary and secondary enrolment increased nearly sixfold, from 8 million to 46 million, between 1960 and 1991.

- About 80 million people are illiterate.
- Nine million children are out of primary school, and 15 million are out of secondary school.

#### INCOME AND POVERTY

- Between 1974 and 1992, real GDP grew by nearly 40%.
- The agricultural growth rate of 4.7% a year during the past decade was the highest in the developing regions.

- About 73 million people still lived below the poverty line in 1990, and more than 10 million people were underfed.
- Defence spending increased from 5% of GDP in 1960 to 12% of GDP in 1989.

#### WOMEN

- Between 1970 and 1991, the gender gap in enrolment at the secondary level was reduced from 54% to 32%, and that at the tertiary level from 65% to 35%—the fastest closing of such gaps in the developing world.
- About 30% of the women enrolled at the tertiary level are in natural and applied sciences.

- Only 17% of Arab women participate in the formal labour force.
- Women hold only 4% of parliamentary seats, well below the 10% average in the developing world.

#### CHILDREN

- Between 1960 and 1992, the infant mortality rate declined by more than three-fifths, from 165 per thousand live births to 64.
- More than three-fourths of one-year-olds are immunized.

- At 83 per thousand live births, the under-five mortality rate is still more than five times higher than 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 kilograms.

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

#### POLITICS AND CONFLICTS

- Since 1990, three countries (Jordan, Lebanon and Morocco) have undertaken political reforms to strengthen their multiparty systems.

- At the end of 1993, more than one million people were refugees.

Source: See bibliographic note on page 136.

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

### PROGRESS

### DEPRIVATION

#### HEALTH

- By 1992, life expectancy in East Asia and South-East Asia and the Pacific was nearly 85% that in industrial countries. At 71 years, life expectancy in East Asia (excluding China) is only five years less than that in the industrial world.

- More than two million people have been infected with HIV.
- In South-East Asia and the Pacific, rural access to safe water at 47%, and that to basic sanitation at 38%, are only two-thirds of urban access.

#### EDUCATION

- During 1960–91, the tertiary enrolment ratio in South-East Asia and the Pacific quadrupled—from 4% in 1960 to 16.1% in 1991.

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

#### INCOME AND POVERTY

- During the 1980s, the per capita real GDP in East Asia increased more than 6% a year—a growth rate nearly three times higher than that in industrial countries.

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

#### WOMEN

- At 43%, the share of women in the labour force in East Asia is higher than that in industrial countries.
- The 19% female representation in parliaments in East Asia is 1.6 times the representation in the industrial world.

- Female enrolment at the tertiary level in East and South-East Asia is still three-fourths the male enrolment ratio.
- The maternal mortality rate in South-East Asia and the Pacific, at 295 per 100,000 live births, is more than three times higher than that in East Asia, at 92 per 100,000 live births.

#### CHILDREN

- Infant mortality in East Asia declined by 70% in 1960–92, from 146 per thousand live births to 42.

- More than a third of the children under five are malnourished in South-East Asia and the Pacific.

#### POPULATION AND URBANIZATION

- Between 1960 and 1992, fertility rates declined more in East and South-East Asia and the Pacific than in industrial countries.

- In East Asia (excluding China), the urban population is expected to grow to 79% of the total population in the year 2000—more than double the 36% share in 1960—leading to mounting pressure on physical facilities.

#### ENVIRONMENT

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

- During 1981–90, more than 3 million hectares of tropical forest were lost in South-East Asia and the Pacific.
- Air pollution is a major problem in the region. In Bangkok alone, 800 motor vehicles are added each day.

#### POLITICS AND CONFLICTS

- Since 1980, more than 30 general elections have been held at the national level.

- At the end of 1993, more than half a million people in these regions were refugees.

Note: Regional aggregates are for developing countries of East Asia and South-East Asia and the Pacific.

Source: See bibliographic note on page 136.

## Balance sheet of human development—Latin America and the Caribbean

### PROGRESS

### DEPRIVATION

#### HEALTH

- By 1992, life expectancy had reached an average of 68 years, about 90% of the life expectancy achieved in the industrial world.

- Only 56% of the rural population have access to safe water, compared with 90% of the urban population.
- Two million people in the region have been infected with HIV.

#### EDUCATION

- Total enrolment at the secondary and tertiary levels increased nearly eightfold, from 4 million to 31 million, between 1960 and 1991.
- At the tertiary level, the net enrolment ratio increased more than fourfold, from 6% to 27%, during the past three decades.

- Less than half of grade 1 entrants reach grade 5.
- At the secondary level, nearly 20 million boys and girls—and at the tertiary level, 27 million men and women—are out of school.

#### INCOME AND POVERTY

- During the past two decades, real GDP increased by more than 80%.
- During 1989–93, of the cumulative \$412 billion in private resource flows to developing countries, 30% went to Latin America.
- Merchandise exports grew 3% a year during 1980–92.

- About 110 million people were below the poverty line in 1990.
- The Gini coefficient of land distribution is higher than 0.75.
- The income share of the richest 20% of the population is 15 times the share of the poorest 20% in many countries.

#### WOMEN

- Women make up nearly 30% of the formal labour force.
- For every 100 boys, there are 97 girls enrolled at the secondary level and 100 at the tertiary level.

- Women occupy only 10% of seats in parliaments.
- More than half of those out of school at the secondary level are girls.

#### CHILDREN

- Between 1960 and 1992, the infant mortality rate was more than halved, from 105 per thousand live births to 45.

- In some Latin American metropolises, more than 100,000 children live on the streets.

#### ENVIRONMENT

- The deforestation rate has fallen in many countries, including Brazil.
- Countries participating in the Summit of the Americas in 1993 expressed a commitment to sustainable development.

- Pesticide consumption per thousand people is the highest among developing regions, with adverse implications for the environment.

#### POLITICS AND CONFLICTS

- During 1974–93, 130 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.

- At the end of 1993, nearly 150,000 people were refugees.

Source: See bibliographic note on page 136.

## Balance sheet of human development—South Asia

### PROGRESS

### DEPRIVATION

#### HEALTH

- During the past three decades, life expectancy increased by 16 years, from 44 in 1960 to 60 in 1992.
- Public expenditure on health as a percentage of GDP has nearly tripled—from 0.5% in 1960 to 1.4% in 1990.

- South Asia is the only region in the world in which, in such countries as Bangladesh, Maldives and Nepal, female life expectancy is shorter than male life expectancy.
- Nearly 60 million women are "missing"; there are fewer women per 100 men than in any other region, defying the natural sex ratio.
- About 280 million people lack access to safe water, and more than 800 million people have no access to even basic sanitation.

#### EDUCATION

- The net enrolment ratio increased from 48% in 1960 to 79% in 1991 at the primary level and from 19% to 44% at the secondary level.

- About 380 million people are still illiterate. South Asia's adult literacy rate is lower than that of any other region.
- Only half of grade 1 entrants reach grade 5.

#### FOOD AND NUTRITION

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

- About 300 million people do not have enough to eat.

#### INCOME AND POVERTY

- GNP grew at an average annual rate of 5.4% during 1980–92, and per capita income at 3.0%.
- During 1980–92, merchandise exports grew at an annual rate of nearly 7%.

- South Asia is home to more than 560 million poor people, nearly half the world's poor population.
- During 1960–90, defence spending as a percentage of GDP increased by more than 40%—from 2.8% to 4% of GDP.

#### WOMEN

- Of the world's ten female heads of state or government, four are in this region.
- During the past two decades, female illiteracy rates were reduced from 81% to 67%.

- About two-thirds of adult women are illiterate.
- 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 85 between 1960 and 1992.
- 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

- The fertility rate has declined from more than six live births per woman in the 1960s to four in 1990.
- South Asia contributes less to global emissions than any other region.

- Every year, about 4 million hectares of land are deforested.
- For 1992–2000, the annual population growth rate has been estimated at more than 2%. That rate will result in a population of 1.5 billion in the year 2000—nearly a fourth of the world's total population.

#### POLITICS AND CONFLICTS

- Since 1980, more than 20 general parliamentary elections have been held in South Asia.

- At the end of 1993, nearly five million people were refugees.

Source: See bibliographic note on page 136.

## Balance sheet of human development—Sub-Saharan Africa

### PROGRESS

### DEPRIVATION

#### HEALTH

- Life expectancy at birth increased from 40 to 51 years between 1960 and 1992.
- During the past decade, the share of the population with access to safe water nearly doubled, from 25% to 45%.

- There is only one doctor for every 18,000 people, compared with one per 7,000 in the developing world and one per 390 in industrial countries.
- More than ten million people have been infected by HIV. Sub-Saharan Africa presently accounts for two-thirds of those infected worldwide.

#### EDUCATION

- During the past two decades, adult literacy doubled, increasing from 27% to 54%.
- The net enrolment ratio at the primary level doubled, rising from 25% to 50%, and the secondary enrolment ratio almost tripled, growing from 13% to 38%, between 1960 and 1991.

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

#### INCOME AND POVERTY

- During 1980–92, five Sub-Saharan countries—Botswana, Cape Verde, Lesotho, Mauritius and Swaziland—generated 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 1980–92, the annual average growth rate of per capita GDP was –0.8%.
- Defence spending rose from 0.7% of GDP in 1960 to 3.0% in 1991, and during the past two decades, the debt service ratio increased from 5% to 25%.

#### WOMEN

- The female enrolment ratio at the secondary level increased fourfold during the past three decades—from 8% in 1960 to 32% in 1991.

- Sub-Saharan Africa has the world's highest maternal mortality rate, at 600 per 100,000 live births (compared with 10 in the industrial countries).
- There are six HIV-infected women for every four infected men.

#### CHILDREN

- The infant mortality rate dropped from 165 per thousand live births to 97 during the past three decades.

- About 26 million children in the region are malnourished, and more than 15% of babies are underweight.

#### POPULATION AND ENVIRONMENT

- Per capita emissions of carbon dioxide, at 1.04 metric tons, are the lowest in the world.
- The pesticide consumption per thousand people is about half the average consumption in the developing world.

- During the past 50 years, on average, 1.3 million hectares of productive land have turned into desert every year.
- For 1992–2000, the annual population growth rate has been estimated at 3%—the highest in the world.

#### POLITICS AND CONFLICTS

- The emergence of a free South Africa in 1994 is a milestone in the history of humankind.
- Since 1990, 27 multiparty presidential elections have been held—21 for the first time.
- In 31 countries, opposition parties have been legalized.

- In 1994, there were 16 governments representing a single-party system or a military regime.
- At the end of 1993, more than six million people, or more than 1% of the population, were refugees.

Source: See bibliographic note on page 136.



## Still an unequal world

In no society today do women enjoy the same opportunities as men. This unequal status leaves considerable disparities between how much women contribute to human development and how little they share in its benefits.

It is true that, after centuries of neglect, the past two decades have seen unprecedented human development efforts—contributing greatly to rapid progress in building women’s capabilities and in closing gender gaps in those capabilities.

Despite this progress, a widespread pattern of inequality between women and men persists—in their access to education, health and nutrition, and even more in their participation in the economic and political spheres. Women now share much more in the benefits of social services, both public and private—but continue to be denied equal opportunities for political and economic participation. Nor do women enjoy the same protection and rights as men in the laws of many countries.

### Progress in building human capabilities

Two durable impressions of the past two decades: first, women have made considerable progress in a short time in building human capabilities; and second, women have gone a considerable distance towards gender equality in education and health. These impressions are cause for hope, not pessimism, for the future.

#### *Great advances in two short decades*

Between 1970 and 1990, women’s life expectancy in developing countries increased by nine years—20% more than the increase in men’s life expectancy. Fertility

rates fell by a third. Female adult literacy and school enrolment increased by almost two-thirds (see the figures on pages 30–31).

This progress is the result of considerable investment in social services and strong political commitment to advancing human development. Educational opportunities, for example, opened as a result of the adoption of universal primary education as a fundamental goal in most countries—and the sevenfold increase in education budgets in the developing world and fourfold increase in industrial countries.

The Arab States have made the fastest progress in women’s education, more than doubling women’s literacy rate during 1970–90. South-East Asia and the Pacific and Latin America have also made considerable progress. The first reduced female illiteracy from 45% in 1970 to 19% in 1990, and the second from about 30% to 17%. South Asia reduced the female illiteracy rate from 81% to 67% in the same period.

More current as a measure of educational progress is the growth in the combined female enrolment in primary and secondary education, reflecting recent efforts to raise female literacy that will show up in adult literacy data only when today’s students become adults. Combined female primary and secondary enrolment in the developing world jumped dramatically, from 38% in 1970 to 68% in 1992. East Asia (83%) and Latin America and the Caribbean (87%) are approaching the high levels in industrial countries (97%). The Arab States nearly doubled female primary and secondary enrolment combined, from 32% in 1970 to 60% in 1992. Along with Sub-Saharan Africa (49%) and South Asia (55%), however, they still have a long way to travel (figure 2.1).

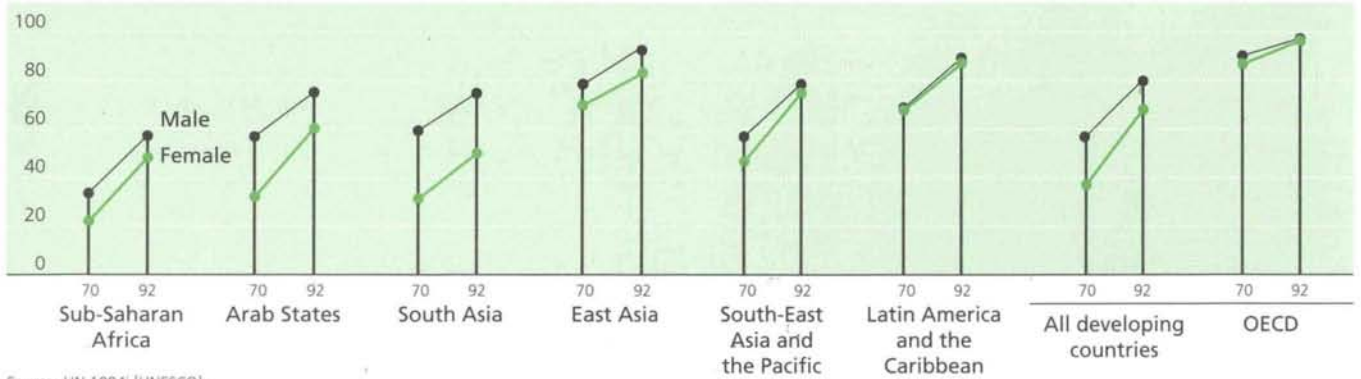
*In no society today do women enjoy the same opportunities as men*

## Women have made great advances in education

FIGURE 2.1

### Women close the enrolment gap . . .

Combined primary and secondary enrolment ratio (%), 1970 and 1992

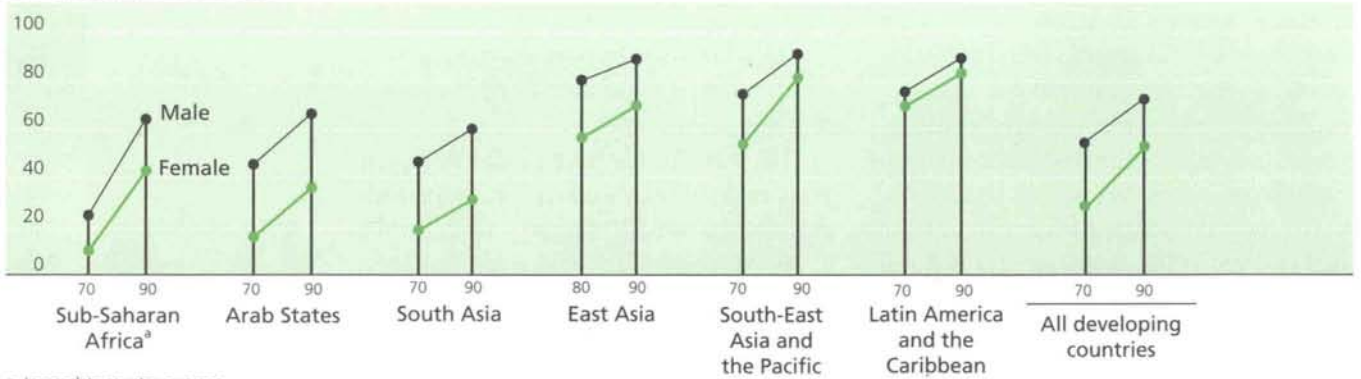


Source: UN 1994i [UNESCO].

FIGURE 2.2

### . . . climb the literacy ladder . . .

Literacy rate (%), 1970 and 1990

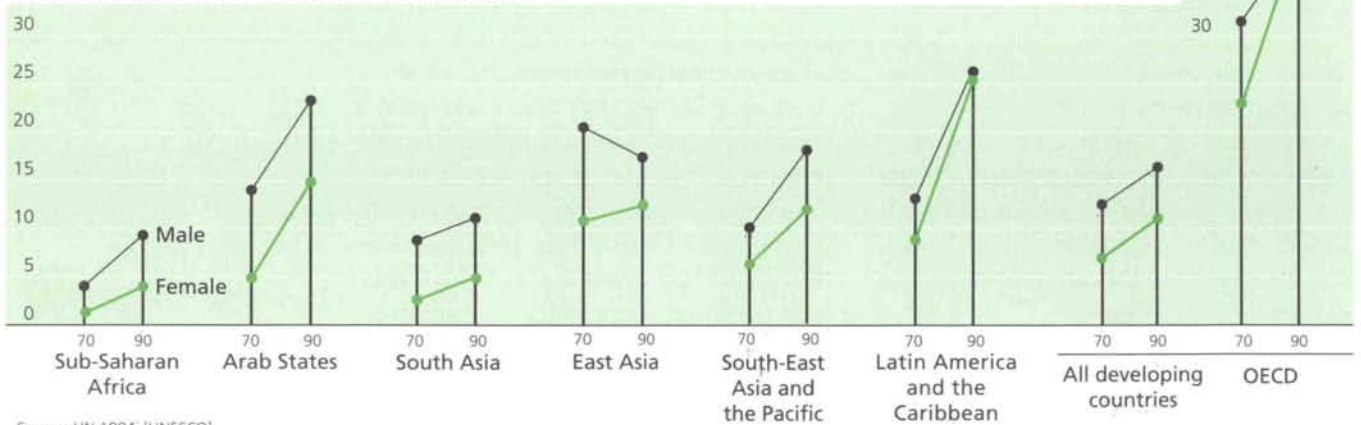


a. Incomplete country coverage.  
Source: UNESCO 1994b.

FIGURE 2.3

### . . . and prepare for career opportunities

Tertiary-school-age (18-23) enrolment ratio (%), 1970 and 1990

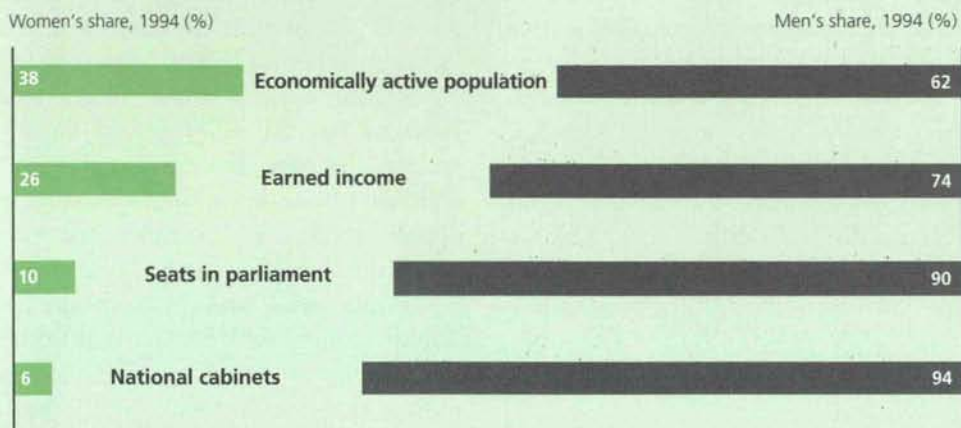


Source: UN 1994i [UNESCO].



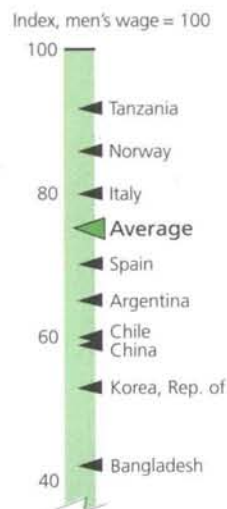
## But gaps still persist in economic and political participation

FIGURE 2.4  
In most respects, it is still an unequal world



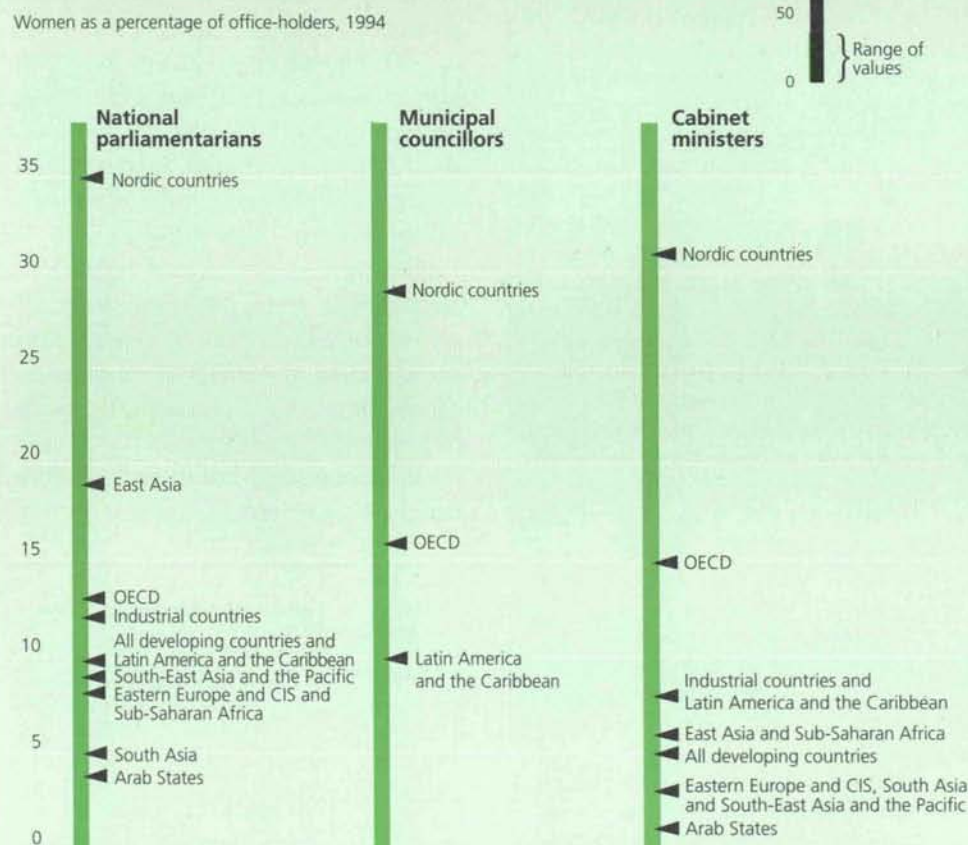
Source: Economically active population—UN forthcoming (*The World's Women*); earned income—calculated on the basis of data from UN 1994i and ILO 1994b, consultant reports prepared for the 1994 and 1995 *Human Development Reports*, World Bank 1992 and UN forthcoming (*The World's Women*); parliament—IPU 1994; cabinets—data from UN 1994i, as analysed by the United Nations Division for the Advancement of Women (revised by the Human Development Report Office in 1995).

FIGURE 2.5  
Women's average wages languish below men's



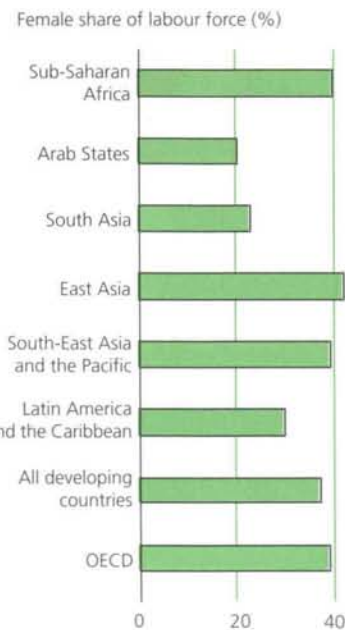
Note: Data are for latest available year.  
Source: UN 1994i, ILO 1994b, consultant reports prepared for the 1994 and 1995 *Human Development Reports* and Psacharopoulos and Tzannatos 1992.

FIGURE 2.6  
Women's political participation is low



Source: Parliamentary—IPU 1994; municipal—national reports for the Fourth World Conference on Women, FLACSO 1994, UN 1992a, 1992b and 1993a; cabinet—UN 1994i (revised by the Human Development Report Office in 1995).

FIGURE 2.7  
Women's share of the labour force is far less than men's



Note: Data are for latest available year.  
Source: UN forthcoming (*The World's Women*) [ILO].

Progress has also been impressive in higher education. In Latin America and the Caribbean, the rapid increase in female tertiary enrolment—from 9% to 26%—reflects big investments in preparing women for new career opportunities (figure 2.3).

Progress in building women's capabilities naturally varies among countries. Twelve developing countries raised female literacy by more than 30 percentage points between 1970 and 1990.

Income is not necessarily the decisive factor. Several of the world's poor nations

have been able to raise female literacy rates. With scarce resources but a strong political commitment, China, Sri Lanka and Zimbabwe raised adult women's literacy rates to 70% or more. By contrast, several richer countries lag behind (table 2.1).

In many cases, a strong political commitment has driven efforts to improve women's human development despite a shortage of resources. Countries applying socialist models, for example, used social and political mobilization and organization to achieve rapid—and equal—progress in education and health for men and women and to engineer social transformations to expand opportunities for women (boxes 2.1 and 2.2). In many cases, however, gains in these countries are now being undermined or are proving unsustainable during the transition to market-oriented models of development. The extent to which the transition weighs more heavily on women than on men is an important policy issue for these countries.

The biggest improvement in women's literacy between 1970 and 1990 (68 percentage points) took place in the United Arab Emirates. Although Arab states have clearly overcome traditional barriers to educating women, their progress still lags behind their wealth, in part because they started from a very low base. In general, women have been more successful in overcoming cultural barriers to *building* their capabilities than in overcoming the barriers to *using* these capabilities.

With improved health and nutritional conditions, women's life expectancy in the

BOX 2.1

CHINA

### Women hold up half the sky

So said Mao Zedong. The first law passed by the Chinese communists abolished concubinage and gave women the right to own property, use their own names, choose their husbands and sue for divorce. China's constitution states: "Women enjoy equal rights as men in all aspects, including politics, economy, culture, society and family life."

The status of women and their participation in all aspects of life in China improved as a result of this political commitment. Chinese women have come a long way since the prerevolutionary era, when upper-class girls had their feet bound and peasant girls were at risk of being kidnapped and sold into marriage.

Chinese women's literacy rates more than doubled in the past 50 years, to 70% in 1992, and their enrolment in tertiary education increased tenfold. There have also been significant improvements in the health of Chinese women, and their life expectancy has increased faster than men's—from 63 years in 1970 to 70 years in 1991.

Concerted government efforts have engineered the world's largest drop in fertility rates—from 5.6 live births per woman in 1960 to 2.0 in 1992. And about 83% of married Chinese women who are of child-bearing age use contraceptives, a higher share than in any other country.

The huge drop in fertility and the rise in contraceptive use resulted from the government's policy to limit the number of children per couple to one. Considerable controversy surrounds this policy,

which has allegedly led to a rise in abortion and infanticide.

Between 1979 and 1988, women's employment grew nearly 5% a year, much faster than men's, and in 1990, women accounted for about 45% of total employment.

Equal opportunity laws—and an official position reflected in the motto, "women are in all realms, women cross all bounds"—have helped equalize the occupational distribution of Chinese men and women. In some industries, such as textiles, finance, tailoring and commerce, women make up 80% of the workforce. But women still constitute less than a fifth of the engineers and hold only a third of the technical and scientific jobs. Only one of ten advanced researchers in science and technology is a woman. Male managers still far outnumber female managers. And despite equal pay laws, women earn only about three-quarters of what men earn.

In politics, Chinese women are doing better than women in many countries. They hold some 30% of official jobs, and more than a fifth of parliamentary deputies are women. That gives China the fourth highest women's parliamentary participation rate among developing countries and the twelfth highest in the world.

The Chinese experience of the past four decades shows that a country with a low per capita income and a favourable policy commitment can manage to achieve human development levels similar to those of countries with much higher per capita incomes.

Source: China 1994, *Economist* 1991, Lavelly and others 1990 and Summerfield 1994.

TABLE 2.1  
High GNP does not necessarily mean high female literacy

	GNP per capita (US dollars) 1992	Literacy rate among adult women (%) 1992
<i>Poorer countries</i>		
China	480	70
Sri Lanka	560	86
Zimbabwe	580	78
<i>Richer countries</i>		
Gabon	4,220	48
Saudi Arabia	7,780	46

Source: UNESCO 1994b and World Bank 1994c.

developing world increased from 54 years in 1970 to 63 in 1992 (table 2.2). More than half the married women of reproductive age in the developing world report that they or their partner used modern contraceptives in 1990, compared with less than a quarter in 1980. This planned parenthood has brought women much greater control over their lives. Globally, increasing contraceptive use and declining fertility rates have not always been dependent on the level of per capita income. Among the countries in which more than half the women use contraception, China registers both the highest rate of use and the lowest per capita income (figure 2.8). China's high rate of contraceptive use (83%) pulls up both the world's average and the average for developing countries.

There has been a sharp reduction in fertility rates over the past two decades (table 2.2). Life choices and opportunities are expanding as women are progressively liberated from the burden of frequent child-bearing and from the risk of dying in childbirth.

If maternal mortality and related disability rates can be further reduced in the developing world, the revolution in women's health will be more complete.

### *Rapidly closing the gaps*

Typically, gender gaps in health and education are wide at low levels of human development, narrowing as societies advance.

And with women's human development progressing faster than men's in the past two decades, the gender gaps have been closing.

In adult literacy and school enrolment, the gaps between women and men were halved between 1970 and 1990 in developing countries. Women's literacy increased from 54% of the male rate in 1970 to 74%

CUBA

BOX 2.2

### Revolution within the revolution

Since the 1959 revolution, gender equality has been among Cuba's highest priorities, and many sections of the constitution explicitly refer to it. Cuba is one of the few countries implementing the agreements stemming from the world conferences on women, and its penal code treats the infringement of the right to equal treatment as a criminal offense.

The Federation of Cuban Women—created in 1960 to organize, educate and mobilize women from all parts of Cuban society—has grown from 400,000 members in 1962 to 3.2 million in 1990. Supported by dues from members and with additional subsidies from the government, the federation has the power to influence policy at all decision-making levels of government. With good access to the media and to the facilities of government departments and ministries, the federation is able to call mass meetings, and it has facilitated women's participation in development policy-making and in all aspects of social and economic progress.

Women's political representation in Cuba is the third highest in the developing world. In 1994, 23% of parliamentarians were women, down from 34% in the previous legislature. About a quarter of the executive positions in public administration are filled by women. And between 1970 and 1990, women's economic activity rate increased by 4.3% a year, the fastest growth in Latin America and the Caribbean.

Women have taken the lead in the campaign against illiteracy and in raising educational standards for all. The women's federation has been deeply involved in improving the education of rural women. And one of its offshoots,

the Contingent of Militant Mothers for Education, with 1.4 million members, is helping to raise the education of all workers to the sixth-grade level.

The health and hygiene campaigns have been won by women. The support brigades for public health comprise more than 61,000 women committed to helping the Ministry of Public Health in such areas as immunization, cancer detection and prenatal and postnatal health care. Women constitute 48% of physicians and hold 47% of the directorships of hospitals and polyclinics. Of the 12,000 doctors in the "family doctor" scheme, 61% are women. The scheme aims to provide basic health education and primary health care to all households.

Women receive free medical services and nutritional supplements throughout pregnancy and while nursing. In 1990, the proportion of deliveries in health institutions reached 99.8%. Cuba's maternal mortality rate, 27 for every 100,000 live births, is among the lowest in the world. Among women of reproductive age, 70% used contraceptives in 1987–92, and abortion services have been available on request since 1965.

As a result of deliberate emphasis on gender equality in education policy, gender disparities in literacy and school enrolment have disappeared. In higher education, women make up 58% of the students—in part as a result of special measures to help women who have left university, mainly because of marriage or child-bearing, to resume their studies.

Strong political commitment has been a decisive factor in advancing human development and gender equality in Cuba.

Source: Cuba 1994, Morgan 1984, Nelson and Chowdhury 1994, UN 1992c and UNDP 1994b.

TABLE 2.2  
Women's health security

Country group	Life expectancy (years)		Total fertility rate (live births per woman)	
	1970	1992	1970	1992
All developing countries	53.7	62.9	5.7	3.5
Sub-Saharan Africa	46.3	52.4	6.6	6.3
Arab States	52.6	63.3	6.8	4.8
East Asia	64.0	70.6	5.3	1.9
South-East Asia and the Pacific	53.6	65.5	5.6	3.3
South Asia	49.0	60.2	5.9	4.1
Latin America and the Caribbean	63.0	71.0	5.3	3.1
Least developed countries	44.5	52.0	6.7	5.8
Industrial countries	74.2	79.4	2.3	1.9

Source: UN 1994i and 1994k.

in 1990—and combined female primary and secondary enrolment increased from 67% of the male rate to 86%. Overall, female primary enrolment in developing countries increased 1.7% a year during 1970–90, compared with 1.2% for male enrolment (table 2.3). In most Eastern European nations, women's enrolment surpassed men's by 1990, reversing the very small female-male gap seen in 1970.

Also remarkable is the rapid closing of the gap in higher education. In developing countries, female enrolment at the tertiary level was less than half the male rate in 1970, but by 1990 it had reached 70%. More

women than men are enrolled at the tertiary level in 32 countries.

But experience shows that providing education is necessary but not sufficient for women's empowerment. More has to be done to open opportunities for women to use the capabilities they are acquiring.

Annex tables A2.1–A2.7 provide a more detailed picture of women's advancing human development and the closing of gender gaps since 1970. International statistical monitoring of women's progress before 1970 is difficult because separate data for women and men were seldom collected and presented at the global level. As chapter 4 makes clear, women have been least visible in economic statistics. The World Conferences on Women—in Mexico (1975), Copenhagen (1980) and Nairobi (1985)—helped focus national and international attention on gender issues, and gender statistics are now routinely compiled and monitored for cross-country and regional comparisons.

### Persistent deprivation and inequality

The progress of the past two decades can be summarized in simple terms: expanding capabilities and limited opportunities. It is still an unequal world, reflecting both the past deficit in women's human development and the current institutional, legal and socio-economic constraints to their access to opportunities.

### Human capabilities denied

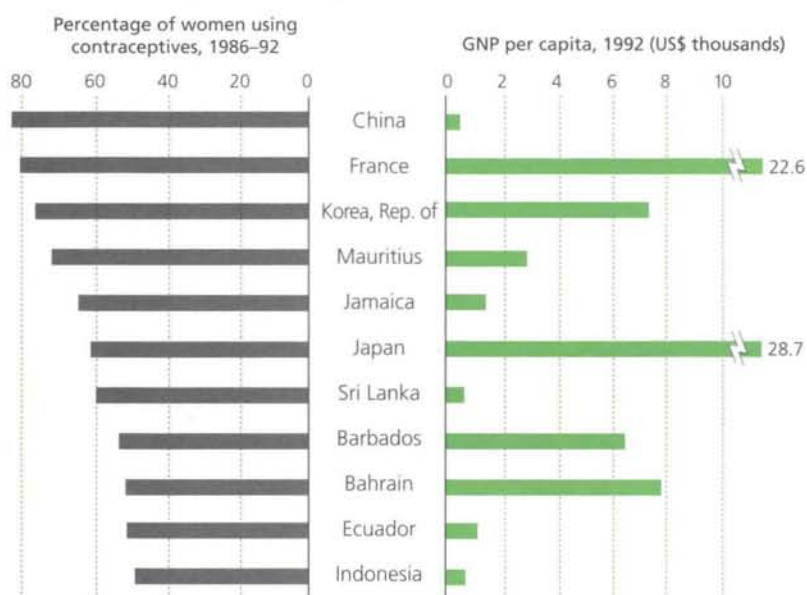
Among the world's 900 million illiterate people, women outnumber men two to one. And girls constitute the majority of the 130 million children without access to primary school. Because population has grown faster than women's education has expanded in some developing regions, the number of women who are illiterate has increased.

During the 20 years from 1970 to 1990, about half the literacy gap between men and women was closed. Another 20 years is too long to wait to close the remaining half.

Owing to inadequacies of data, it is more difficult to reach definitive judge-

FIGURE 2.8

### Family planning does not depend on income



Source: UN 1994j and World Bank 1994c.

TABLE 2.3

### Women close the enrolment gap

(annual percentage rate of growth in enrolment, 1970–90)

Country group	Primary school age (6–11 years)		Secondary school age (12–17 years)		Tertiary school age (18–23 years)	
	Female	Male	Female	Male	Female	Male
All developing countries	1.7	1.2	1.6	0.9	2.8	1.0
Sub-Saharan Africa	2.2	1.4	2.8	1.8	5.3	3.7
Arab States	3.3	1.4	4.7	2.1	6.1	2.7
East Asia	2.1	1.6	-0.1	-0.3	0.7	-0.8
South-East Asia and the Pacific	1.4	1.0	2.6	1.3	3.7	2.9
South Asia	2.1	1.0	3.6	1.9	3.8	1.3
Latin America and the Caribbean	0.9	1.0	1.6	1.2	5.2	3.6
Least developed countries	3.0	1.4	3.9	1.6	6.0	3.0
OECD	0.2	0.2	0.5	0.2	3.0	1.0

Source: UN 1994i.

ments on the gender gaps in nutrition. The perception is widespread that infant boys are fed more adequately than infant girls in poor areas, suggesting a gender bias in favour of male children. But nutrition data disaggregated by sex are limited, and they tell a conflicting story.

- In Sub-Saharan Africa, the prevalence of moderate or severe underweight (weight for age) is 17% among girl children and 32% among boy children, showing a better situation for girls.

- The reverse is true in Latin America and the Caribbean: 31% of girl children are underweight, compared with 17% of boys.

- In Bangladesh, malnutrition is experienced somewhat more by girls than by boys: 59% of girls and 56% of boys suffered chronic malnutrition, and 10% of girls and 7% of boys suffered acute malnutrition. A recent study corroborates this, suggesting that, compared with males, females achieve 88% of the satisfactory nutritional intake. Evidence of nutritional deprivation among women and girls appears most starkly in their reproductive years: 77% of pregnant women from middle-income households and more than 95% of those from low-income households weighed less than the standard of 50 kilograms.

- In India's rural Punjab, poverty takes a bigger toll on the nutrition of girls than on that of boys: 21% of the girls in low-income families suffer severe malnutrition, compared with 3% of boys in the same families. In fact, low-income boys fare better than upper-income girls.

Adult women suffer more than men from malnutrition—from iodine deficiency, iron deficiency anaemia and stunting caused by protein-energy malnutrition. Of adults suffering from iron deficiency anaemia, 458 million are women, 238 million men. Of those stunted by protein-energy malnutrition, 450 million are women, 400 million men. If the risk of death associated with stunting is the same in developing countries as in industrial ones, approximately 300,000 deaths of women between the ages of 15 and 59 would be attributable to stunting.

There is little hard evidence on access to health facilities, and conclusions often have

to be drawn from outcomes—for example, the number of girls who die before their fifth birthday compared with the number of boys who die. But such comparisons are fraught with uncertainties. At birth, females enjoy a biological edge over males in survival. For this reason—and not because of any preferential access to health services—child mortality rates (up to age five) are lower for girls than for boys.

Globally, life expectancy at birth is 65 years for females and 62 years for males. In populations in which females are treated more equally, there are about 106 females for every 100 males. In Sub-Saharan Africa, there are 102 females for every 100 males. The real gender discrimination occurs where this pattern is reversed, as in China and South and West Asia, where there are only 94 females for every 100 males. If we were to apply the Sub-Saharan African ratio of females to males, the shortfall would be particularly pronounced in China, where some 49 million women appear to be missing. Adding this figure to the shortages in North Africa and in South, South-East and West Asia, as Amartya Sen has shown, leads to an estimate of more than 100 million women “missing”.

In 13 countries, more girls than boys die at a young age, a marked departure from the biological pattern observed in most countries (table 2.4). In such cases, it can be said that there is discrimination against the

*More than 100 million women are “missing”*

TABLE 2.4  
**More girls than boys die at a young age**  
(annual deaths per thousand children aged one to four, 1984–90)

Country	Girls	Boys	Girls' deaths as % of boys'
Singapore	0.5	0.4	125
Maldives	9.3	7.8	119
Egypt	6.6	5.6	118
Grenada	1.6	1.4	114
Pakistan	9.6	8.6	112
Bangladesh	15.7	14.2	111
Suriname	2.2	2.0	110
Jamaica	1.5	1.4	107
Guatemala	11.3	10.6	107
Honduras	2.9	2.8	104
Syrian Arab Rep.	2.9	2.8	104
Algeria	12.8	12.5	102
Peru	5.7	5.6	102

Source: UN 1994i.

TABLE 2.5  
Lower average wage for women

Country	Women's non-agricultural wage as % of men's
Tanzania	92.0
Viet Nam	91.5
Australia	90.8
Sri Lanka	89.8
Iceland	89.6
Sweden	89.0
Norway	86.0
Bahrain	86.0
Kenya	84.7
Colombia	84.7
Turkey	84.5
Jordan	83.5
Costa Rica	83.0
Denmark	82.6
Hungary	82.0
Mauritius	81.3
France	81.0
New Zealand	80.6
Italy	80.0
Egypt	79.5
Zambia	78.0
Greece	78.0
Poland	78.0
Austria	78.0
Finland	77.0
Netherlands	76.7
Portugal	76.0
Brazil	76.0
Paraguay	76.0
Germany	75.8
USA	75.0
Mexico	75.0
Belgium	74.5
Uruguay	74.5
Swaziland	73.0
Central African Rep.	72.6
Singapore	71.1
Spain	70.0
United Kingdom	69.7
Hong Kong	69.5
Ireland	69.0
Thailand	68.2
Switzerland	67.6
Luxembourg	65.2
Argentina	64.5
Ecuador	63.7
Canada	63.0
Bolivia	62.3
Philippines	60.8
Cyprus	60.8
Chile	60.5
Syrian Arab Rep.	60.0
China	59.4
Korea, Rep. of	53.5
Bangladesh	42.0
Average	74.9

Note: Data are for latest available year.

Source: UN 1994i, government data from national consultants and Psacharopoulos and Tzannatos 1992.

girl child in the provision of health and nutrition.

The tragic toll of maternal mortality remains a disgraceful indictment in the developing world. The highest number of maternal deaths occur in Asia, about a third of a million women each year, with South Asia the worst affected. According to the World Health Organization (WHO), three countries—Bangladesh, India and Pakistan—account for 28% of the world's births and 46% of its maternal deaths. Second worst affected is Africa, where about 150,000 women die each year. Although the largest number of maternal deaths occur in Asia, maternal mortality rates are highest in Sub-Saharan countries. In the industrial world, maternal deaths are rare at present.

Women's special health needs suffer considerable neglect. Many developing countries do not provide qualified birth attendants, good prenatal or postnatal care or emergency care during deliveries. In most poor countries, pregnancy complications are the largest single cause of death among women in their reproductive years. Nearly half a million maternal deaths occur each year in developing countries. Too often, the miracle of life becomes a nightmare of death. The shocking facts:

- In the industrial nations, almost all births are attended by trained health personnel, but in the developing countries, fewer than half the births—and in South Asia, fewer than a third—are attended by any health staff.
- An African woman is 180 times more likely to die from pregnancy complications than a Western European woman.
- In some African countries, where the total fertility rate is seven live births per woman and maternal morbidity is 1 in 50, the chances that a woman will not survive her reproductive years are about one in six.

#### *Economic opportunities denied*

Gender disparities in building human capabilities through education, health and nutrition, though significant, are much narrower than the gaping disparities in income-earning and decision-making opportunities.

Of the estimated 1.3 billion people living in poverty, more than 70% are female. This feminization of poverty is the tragic consequence of women's unequal access to economic opportunities. And it is getting worse. The number of rural women living in absolute poverty rose by nearly 50% over the past two decades. Increasingly, poverty has a woman's face.

The feminization of poverty is also documented in industrial countries. In the United States, for example, while only 40% of the poor were women in 1940, 62% were women in 1980. The increasing poverty among women has been linked to their unequal situation in the labour market, their treatment under social welfare systems and their status and power in the family. Again in the United States, more than half of the women-headed households are poor, contributing to the feminization of poverty.

*Income.* Access to independent income continues to be a distant goal for most women. Globally, women's labour force participation rates have risen only 3.9 percentage points in the past 20 years—from 35.6% in 1970 to 39.5% in 1990, with little difference between the developing and industrial worlds. Compare that with men's participation of 58% in 1990. There has been some closing of the gender gap in economic activity—particularly in the Arab States and in Latin America and the Caribbean. But overall, the progress has been slow, hesitant and out of line with the dramatic increase in women's educational attainment for these same areas.

All regions, while acknowledging inadequate data, record a higher rate of unemployment among women than men. Women often are the first to be fired in an economic downturn.

Women's wages, on average, are considerably lower than men's, though this finding should be treated with some caution, since comparable and consistent statistics are lacking (table 2.5). Data on rural and agricultural wages are especially scarce, making it difficult to analyse trends for most women in developing countries.

Where data are available, the average wage for women is only about three-fourths

of the male wage outside agriculture. The ratio varies from 92% of the male wage in Tanzania to 75% in the United States to 42% in Bangladesh. But even these wide disparities are likely to underestimate the average disparity because the ratio of female wages to male wages is likely to be lower in sectors (particularly agriculture, where most women work) that are less unionized, organized or transparent.

The varied reasons for such disparity: women's concentration in low-skilled jobs, their lack of bargaining power through union action, the lack of legislation granting adequate maternity leave, the perception of greater absenteeism by women (facts do not support this perception) and strongly held cultural norms about which jobs are suitable for women and against mixing men and women in the workplace. A better deal for women on the wage front requires more than mere legislation. It will take a major adjustment in social and cultural norms (chapter 5).

The denial of opportunities and recognition to women pervades nearly all areas of human endeavour. Even at the global level, their achievements often go unrecognized. Since its inception in 1901, the Nobel prize has been awarded to only 28 women, a mere 4.4% of all recipients (box 2.3).

**Occupational segregation.** The proportion of women in administrative and managerial work has doubled in industrial countries, from 14% in 1970 to 28% in 1994 (table 2.6). In Australia, Canada, Hungary, Ireland and Norway, the proportion of women in such work more than tripled between 1970 and 1990. Among developing countries, the participation of women in administration and management increased fastest in East Asia. Women's share of administrative and managerial jobs more than doubled in Brunei Darussalam, the Republic of Korea, Singapore and Thailand.

The best record in women's participation in professional and technical jobs is in the Nordic countries, where women's share is 62%. In Canada and the United States, women hold more than half of such jobs, and in Poland 60%. Among developing countries, Botswana, the Philippines and

Uruguay show similar percentages—though it must be borne in mind that the data are of uneven quality and countries differ in how they categorize professional, technical and related workers.

The participation of women employed in two different streams—as professionals, technicians, administrators and managers and as clerical and sales workers—has increased during the past two decades. But the ratio between the two streams has not changed much in the developing world (except in East Asia). The increasing proportion of women employed in managerial and administrative positions is encour-

TABLE 2.6  
**Women's share of administrative and managerial jobs**  
(as % of total)

East Asia	11.3
Latin America and the Caribbean	18.8
South Asia	3.1
Sub-Saharan Africa	9.6
Industrial countries	27.7
World	14.0

Note: Data are for latest available year.

Source: UN 1994i and ILO 1993b.

BOX 2.3

### Not many Nobel prizes for women

Since the creation of the Nobel prize in 1901, only 28 of 634 individual recipients have been women, 12 of them sharing the prize with men. Eight women have received the Nobel prize for literature and nine for peace. Only a few have received recognition in scientific fields—five in medicine or physiology, four in chemistry, two in physics—and none in economics, an exclusive male preserve.

*For peace, nine women—three in partnership with men—among 80 individual recipients.*

- 1905 Baroness Bertha von Suttner (Austria)
- 1931 Jane Addams (USA), with Nicholas Murray Butler
- 1946 Emily Greene Balch (USA), with John R. Mott
- 1976 Mairead Corrigan and Betty Williams (United Kingdom)
- 1979 Mother Theresa (India)
- 1982 Alva Myrdal (Sweden), with Alfonso Garcia Robles
- 1991 Aung San Suu Kyi (Myanmar)
- 1992 Rigoberta Menchu (Guatemala)

*For literature, eight women—one in partnership—among 91 recipients.*

- 1909 Selma Lagerlof (Sweden)
- 1926 Grazia Deledda (Italy)
- 1928 Sigrid Undset (Norway)
- 1938 Pearl S. Buck (USA)
- 1945 Gabriela Mistral (Chile)
- 1966 Nelly Sachs (Germany), with Shmuel Y. Agnon

- 1991 Nadine Gordimer (South Africa)
- 1993 Toni Morrison (USA)

*For physiology or medicine, five women—four in partnership—among 158 recipients.*

- 1947 Gerty T. Cori (USA), with Carl F. Cori and Bernardo A. Hossay
- 1977 Rosalyn Yalow (USA), with Roger Charles L. Guillemin and Andrew V. Schally
- 1983 Barbara McClintock (USA)
- 1986 Rita Levi-Montalcini (Italy), with Stanley Cohen
- 1988 Gertrude Belle Elion (USA), with Georges H. Hitchings and Sir James W. Black

*For chemistry, four women—two in partnership—among 121 recipients.*

- 1911 Marie Curie (France)
- 1935 Irene Joliot-Curie (France), with Frederic Joliot-Curie
- 1964 Dorothy Crowfoot Hodgkin (United Kingdom)
- 1993 Kary B. Mullis (USA), with Michael Smith

*For physics, two women—both in partnership—among 146 recipients.*

- 1903 Marie Curie (France), with Pierre Curie and Henri Becquerel
- 1963 Maria Goeppert-Mayer (USA), with Hans D. Jensen and Eugene P. Wigner

*For economic sciences, no women among 38 recipients.*

Source: Siegman 1992.

*In many parts of the developing world, women do not have legal control over the land they farm*

aging, but it would be a mistake to interpret this as a fundamental change in the traditional pattern of women's employment. Overall, the ratio in developing countries showed little change in 1970–90.

In most of the Arab States and in South Asia, the proportion of women in administrative and managerial work is less than 10%. Even in some industrial countries, such as Japan, Luxembourg and Spain, the share of women in managerial and administrative positions is less than 10%.

In the UN system, although the proportion of women in professional positions is 30% on average—higher than in most countries—women are significantly outnumbered by men in senior management, where they hold only 11.3% of these positions (table 2.7).

So, many high-paid career opportunities remain closed to women in many soci-

eties—and women are far from exercising economic independence. As has been said, with understandable cynicism, if the designation “secretary” applies to a high-level job, as in secretary of state, chances are that a man will occupy it. But if the secretary is a woman, it will be a low-paid job.

*Agriculture.* Cultural traditions and economic necessity have always meant a significant role for women in agriculture. In much of Africa, women are responsible for food production. They work both on family plots and as wage labourers. But in many parts of the developing world, women do not have legal control over the land they farm, even in female-headed households.

In Africa, where women constitute 80% of food producers, past policies have undermined their traditional land rights. Development projects made the problem worse by allocating land ownership to men. In Latin America, women were similarly left out of the agrarian reforms of the 1960s and 1970s. In El Salvador, Honduras, Mexico and Nicaragua, women made up only 4–25% of the beneficiaries because land titles were given to household heads, assumed to be men. Even among households recognized as female-headed, few were given land. In Burkina Faso until the mid-1980s, all new tenancies were given to men despite women's responsibility for growing all the family's subsistence food. In Kenya, a woman has access to land only if she has a living husband or son.

Agricultural extension services for women also are limited. Even where women constitute a larger share of agricultural producers or where there are cultural constraints to easy communication between men and women, almost all extension workers are men. In the late 1980s, only 13% of agricultural field agents in the developing world were women—only 7% in Africa and 0.5% in India. Most Indian states do not include female farmers among extension beneficiaries—even though 48% of India's self-employed cultivators in 1983 were women. In Africa, even among the innovative farmers who were early to adopt high-yielding varieties, only 69% of female farmers received extension visits, compared with 97% of male farmers.

TABLE 2.7

**Women professionals in the UN system**  
(December 31, 1994)

Organization	All levels combined (%)	Senior management (D-1 and above) (%)	Professionals excluding senior level (P-1 to P-5) (%)	Executive heads of organizations
UNFPA	43.5	28.0	46.3	√
UNICEF	38.9	21.5	40.3	
UN Secretariat	33.0	15.5	35.7	
UNDP	32.6	16.1	36.8	
UNESCO	31.9	11.6	34.4	
UNHCR	31.1	15.3	32.1	√
UNEP	31.1	11.4	33.9	√
IMO	30.6	6.7	34.9	
WIPO	30.1	0	39.4	
World Bank <sup>a</sup>	30.0	..	..	
GATT	28.4	0	33.3	
ILO	28.1	12.0	30.5	
UNCTAD	26.7	14.7	28.6	
WHO	26.2	9.8	28.8	
IFAD	25.6	8.3	29.4	
IMF	25.3	8.0	30.0	
UNCHS	24.0	0	26.1	
UNIDO	23.9	5.7	25.7	
ITC	22.9	33.3	22.4	
WFP	22.2	21.4	22.2	√
ICAO	20.7	4.3	22.1	
ITU	19.0	0	21.4	
WMO	18.3	0	20.5	
IAEA	17.1	11.4	17.4	
UNRWA	15.6	13.3	15.9	
FAO	15.3	2.4	17.5	
UPU	14.3	0	17.6	
<b>Entire UN system</b>	<b>28.2</b>	<b>11.3</b>	<b>30.1</b>	<b>4 of 27</b>

Note: Agencies with fewer than 50 professional staff members are not included.

a. Only the total figure for female staff is given for the World Bank, as its staff grading system differs from the UN personnel classifications.

Source: UN divisions of personnel.



*Informal sector.* The scarce evidence that is available shows that women are overrepresented in the informal sector, which is generally far less secure than the formal sector, pays less than the minimum wage and is characterized by strenuous and poor working conditions.

In Congo and Zambia, women account for two-thirds of informal production in the services sector (outside transport). In Bolivia in 1988, women constituted half the workers in the urban informal sector and just a fourth of those employed in the formal sector. In the urban areas of Botswana in 1984–85, nearly half of employed women—but only 10% of employed men—were working in the informal sector. In Lima, Peru, during the 1980s, more than 80% of economically active women worked in the informal sector in commerce or services, mainly domestic labour. In Nigeria, 94% of street food vendors are women.

Women often resort to the informal sector in the face of occupational segregation, unemployment and underemployment in the formal sector. In the informal sector, women are involved mainly in domestic services, in small-scale trade and in micro-enterprises that produce clothing and processed food. Such enterprises are typically one-person operations with limited capital, little access to credit or technology and low returns.

Women's involvement in the informal sector has grown in many developing countries in the 1980s and 1990s as economic crises and structural adjustment have reduced job opportunities in the formal sector and increased the need for an additional source of family income. This was found to be true in Bolivia, Ghana, Malaysia and Peru. In Zambia, women's earnings from the informal sector increased considerably as a share of total household earnings in the 1980s.

*Credit and technology.* One of the chief reasons for women's limited access to income and economic opportunities lies in their work being at the margin of major development efforts and programmes. Men dominate such assets and inputs as land, credit, seeds, livestock, technology and infrastructure. And the enormous potential

contribution of women remains underused.

Also constrained is women's access to credit. Most banks require that borrowers be wage-earners or property owners who can provide acceptable collateral. In most countries, such borrowers are disproportionately male. Even the jewelry women wear—often their only tangible asset—usually is not accepted as collateral by formal credit institutions (formal sector lenders in Nepal are an exception). Limited education, complicated loan procedures and long distances to the nearest bank further constrain women's access to credit.

As a result, women constitute a very small proportion of borrowers from formal credit institutions. In Latin America and the Caribbean, women are 7–11% of the beneficiaries of credit programmes. A study of 38 branches of major banks in India found that only 11% of the borrowers were women. More men than women obtained loans even from the women's branch of one bank. In Zaire, women made up only 14% of borrowers from commercial banks. The experience in many other developing countries has been similar.

Rural women, although the majority of agricultural workers in many developing countries, receive very little rural credit. In many African countries, they account for more than 60% of the agricultural labour force and contribute up to 80% of total food production—yet receive less than 10% of the credit to small farmers and 1% of the total credit to agriculture. The situation is the same for loan funds from external sources. In 1990, multilateral banks allocated \$5.8 billion for rural credit to developing countries. Only 5% reached rural women.

If financial systems are to reach low-income female entrepreneurs and producers, delivery systems need to respond to the common characteristics of low-income women and their businesses:

- Women have less experience in dealing with formal financial institutions.
- Women tend to have smaller enterprises and fewer assets.
- Women are less likely to own land or other assets and face legal barriers to borrowing in many countries.

*Only 5% of multilateral banks' rural credit reaches women*

- Illiteracy rates are higher among women.
- Low-income women tend to concentrate on different economic activities than low-income men.

#### BOX 2.4

### Women's employment and pay under structural adjustment

The term *structural adjustment* signifies basic structural change in an economy. Two crucial questions: Does this change promote human development? And are women and men affected differently by it?

In many cases, women have been more adversely affected than men. In some instances, they have benefited. Compare the experiences of Mexico and Costa Rica.

#### Mexico

Since the mid-1980s, Mexico has rapidly altered the structure of its economy. Most trade barriers have been dismantled, state intervention has been drastically reduced, and the economy has been substantially deregulated. The government has focused on combating inflation and attracting capital inflows—and has engineered a drastic fall in wages to cheapen Mexican labour. But there has been little growth and even less job creation.

The human costs have been high. Working men have suffered: many have lost their jobs or seen their real wages cut in half. But working women have faced even greater losses. From 1984 to 1989, the ratio of female wages to male wages for urban workers dropped from 77% to 72%. Even after the economy had begun to recover in 1992, female workers still earned only three-fourths of men's wages. Women's total income declined from 71% of men's in 1984 to 66% in 1992.

Labour market discrimination against women worsened. They became more concentrated in low-wage sectors of the economy and in low-wage jobs within sectors. Export-oriented *maquiladoras* along the US border provided jobs, helping to raise women's share of industrial jobs from 15% in 1984 to 18% in 1992. But the cost was heavy: women's industrial wages plummeted from 80% of men's wages to only 57%. In the meantime, women were laid off

in the public sector and in other sectors, and their share of jobs dropped from 42% to 35%. Women in rural areas were hit particularly hard: their share among all income-earners dropped from 28% to 20%.

As recent events attest, Mexico's model of development has had mostly adverse effects on human development—and more so for women than for men.

#### Costa Rica

Costa Rica is well known for public policies that foster human development. Compared with Mexico, it has had some success in restructuring its economy since the mid-1980s by taking a gradual approach. Non-traditional exports and tourism have increased, helping to spur growth and employment. Export-oriented apparel and electronics assembly firms have created more jobs for women, but not by lowering their pay compared with other private sector jobs. And women have maintained their jobs and pay in the public sector—where they are heavily concentrated.

The government has made an explicit effort to promote gender equality. It has increased paid maternity leave, ratified the ILO convention against all forms of discrimination and toughened its own laws by passing the Law of Equality in 1990. Labour market discrimination against women persists but is on the decline.

As a result, from 1987 to 1993, the ratio of average female wages to male wages rose from 77% to 83%, and women's labour force participation rate also increased.

Much remains to be done. Many women still do not have jobs. And women still predominate in many low-paying jobs, such as domestic work. But thanks to Costa Rica's human development policies and public action, there are clear signs of progress for women—even during structural adjustment.

Source: Gindling 1994 and Alarçon-Gonzalez 1994.

Technological changes also ignore gender considerations. The mechanization of rice cultivation in Sierra Leone reduced men's workload—but it had the insidious effect of increasing the working day of women by half, because it required more planting and transplanting, operations traditionally performed by women. Sometimes the problem is caused by impediments to women's use of technology. In Zambia, weeding—a major task for women—can be performed six times faster with animal traction, doubling or tripling productivity. For poor women, the barrier of cost compounds the effect of cultural traditions that discourage women's use of animal traction.

*Impact of adjustment and transition.* The effects of stabilization, liberalization and privatization can be a "double whammy" for poor women. Women are disproportionately represented among the poor, who have little to cushion the shock of the transition. Women are also affected more because of the nature of their traditional roles. Structural adjustment and transition affect men primarily as producers, but they affect women in a variety of ways: as mothers, household managers, community workers and producers of goods and services.

Women's burden of economic adjustment is greater than men's in several ways:

- Responsible for feeding the family, women bear much of the burden of making ends meet when incomes fall and prices rise.
- Women take on more paid work, formal or informal, to make up some of the income shortfall. During the structural adjustment period in Ecuador, more women entered the labour force to bring in an income, and female participation rates rose from 40% in 1978 to 52% in 1988.
- Cuts in such government services as health care, child care, family planning and education normally hit women quite hard, reversing their earlier gains. In Zimbabwe, the number of women dying in childbirth in the capital, Harare, doubled in two years after an adjustment programme was implemented and government health spending fell by a third.

- Removing food subsidies—a common step under adjustment—normally has a greater impact on women, as mothers and girls are denied adequate nutrition in favour of the male members of the family.

Different societies have handled structural adjustment programmes in different ways. It is revealing to see the contrast between Mexico and Costa Rica in this context (box 2.4).

### *A political world without women*

Political space belongs to all citizens, but men monopolize it. Although women constitute half the electorate, they hold only 10% of the seats in the world's parliaments and 6% in national cabinets. Since changes in society normally come through the political process, women's lack of political opportunities is a serious concern.

During the 20th century, women gained the right to vote and to be elected to political office in almost all countries that have representative institutions—rights often achieved after a prolonged struggle for women's suffrage. New Zealand and then Australia were the pioneers in recognizing female citizenship through voting rights at the national level, beginning in 1893. But even in industrial nations, a woman's right to vote has been a recent development—with momentum starting in the early 1900s. Women won the right to vote in Finland and Norway in 1906–07, in Denmark in 1915, in Germany, Sweden and the United Kingdom in 1918 and in the United States in 1920. In France, women had to wait until 1944, in Italy until 1945 and in Switzerland until 1971. In many of these countries, only some women achieved the right to vote at the outset—women who met criteria for land ownership, ethnicity and so on. In most developing countries, women acquired the right to vote at independence because they had been partners in the struggle for freedom.

Gaining the right to vote did not automatically mean that women widely exercised it or were elected to parliament in large numbers. It takes generations to break out of gender stereotypes, with politics still regarded as the domain of men.

In many countries, it took a long time after women gained the right to vote before the first female representative was elected to the national parliament. Even among acknowledged pioneers in granting the vote to women, more than 40 years passed in Australia and 26 years in New Zealand before a woman was elected to the national legislature. Few countries have made a breakthrough in opening political opportunities to women. Among them, Norway has been a leader in gender-balanced politics (box 2.5).

The link between the extent of women's participation in political institutions and their contribution to the advancement of women has been the subject of extensive research. Although no definite relationship has been established, a 30% membership in political institutions is considered the critical mass that enables women to exert meaningful influence on policies.

#### NORWAY

BOX 2.5

### **A leader in gender-balanced politics**

One of the first countries to grant women suffrage, Norway enjoys a well-deserved reputation as having one of the world's most gender-balanced political systems. Its multiparty system has consistently produced one of the most gender-balanced cabinets in the world, with about 40% women. Only very recently did Finland and Sweden surpass this ratio. From 1986 to 1989 and from 1990 on, the head of Norway's Labour Party, Gro Harlem Brundtland, has been the prime minister.

A long tradition of egalitarianism and a strong women's movement helped improve women's socio-economic status and political participation. Consultative rather than confrontational politics helped focus political competition on issues. A lively democracy, in which more than 80% of the electorate turns out to vote in national elections, ensures the political representation of diverse interests, including women's.

Women's movements since the turn of the century have sought political empowerment to promote gender-fairness policies. This politics-first strategy departs from women's employment-first

or policy-first strategies used elsewhere. The 1960s and early 1970s witnessed the greatest leap in women's political representation. Between 1963 and 1967, women increased their representation in local councils from 5% to 12% and conducted voter education campaigns to teach women procedures and talk with them about issues.

Women in political parties and in women's organizations used the slogan "women representing women" as a means to the ends they sought. Parties began instituting quotas for female representation in the mid-1970s, and leftist and centrist parties continue to do so. Even in the major parties without quotas, women's representation exceeds 25%. The election of women was further aided by an electoral system based on proportional representation.

Increased female political participation has not made Norway a women's utopia. Women still do not enjoy equal rights with men in every area. And women's movements are now addressing such critical issues as large wage differences, job segregation and violence against women.

*Source:* Staudt 1994, Norway n.d. and UN 1991a.

## BOX 2.6

**Women political leaders currently in office***Presidents***Iceland**

Vigdís Finnbogadóttir (1980)

**Ireland**

Mary Robinson (1990)

**Nicaragua**

Violeta Barrios de Chamorro (1990)

**Sri Lanka**

Chandrika Bandaranaike Kumaratunga (1994)

*Prime ministers***Bangladesh**

Khaleda Zia (1991)

**Dominica**

Eugenia Charles (1980)

**Norway**

Gro Harlem Brundtland (1986)

**Pakistan**

Benazir Bhutto (1993)

**Sri Lanka**

Sirimavo Bandaranaike (1994)

**Turkey**

Tansu Ciller (1993)

Note: Dates in parentheses are years of election.

Women's representation in national parliaments, about 10% worldwide in mid-1994, ranges from 4% in the Arab States to 35% in the Nordic countries. Only four countries have crossed the 30% threshold—Finland (39%), Norway (39%), Sweden (34%) and Denmark (33%) (table 2.8). Among developing countries, the five leaders are Seychelles (27%), South Africa (24%), Cuba (23%), China (21%) and the Democratic People's Republic of Korea (20%).

The developing countries are not far behind the industrial countries—the average representation of women in parliament is 10% in the developing world, 12% in the industrial. So, barring the outstanding experience of the Nordic countries, women have made little entry into the national legislatures of most countries.

In 55 countries, the political world is essentially male-dominated, with women constituting 5% or less of the parliament. These countries range from very poor (Bhutan and Ethiopia) to reasonably affluent (Greece, Kuwait, the Republic of Korea and Singapore). The denial of political opportunities to women is thus more than a matter of a country's stage of development, its level of income or the education level of its women. It is bound up with many cultural and social constraints.

There nevertheless is an encouraging sign in the political role that women are carving out for themselves. The proportion of women representatives at the local level is higher than in national parliaments. Among the 78 countries with information, women's local representation surpasses their national representation in 46. In 13 of these countries, more than a quarter of the municipal representatives are women. Even these data fail to capture the dramatic rise in women's local representation. In 1994, India reserved a third of *panchayat* (local council) seats for women. As a result, at least 800,000 women will enter the local political pipeline from which national leaders emerge.

But women's political representation at the highest level—in cabinets and among presidents and prime ministers—is not in line even with their weak presence in national parliaments or local bodies. Data for mid-1994 show that women's representation in cabinets is 6% overall—5% in developing countries, 8% in industrial. Nordic countries, along with the Netherlands and the islands of Seychelles, have set a shining example by including 30% or more women in their cabinets. Finland leads the way (39%), followed by Norway (35%), Sweden (34%) and the Netherlands and Seychelles (31%). In early 1995, Sweden formed the world's first fully gender-balanced cabinet: 50% of the ministers are women.

In world forums, women are similarly underrepresented: of the 185 permanent representatives to the United Nations in December 1994, only six were women.

Few women have been heads of state or government. Only 21 women have been elected to such positions throughout history, with ten in office in early 1995 (box 2.6).

**Unequal rights—unequal protection**

Laws can become an important ally of women. For that to happen, all nations must eliminate existing legal discrimination, according to a set timetable, so that laws embrace the principle of gender equality. But even when legal discrimination is

TABLE 2.8

**Leading countries in women's political representation, 1994 (percent)**

	Parliaments	Municipalities (councillors)	Cabinet (ministerial rank)
<i>Industrial countries</i>			
Denmark	33	28	29
Finland	39	30	39
Netherlands	29	22	31
Norway	39	28	35
Sweden	34	34	30
OECD	13	16	15
<i>Developing countries</i>			
Cuba	23	14	4
Guyana	20	22	11
Jamaica	12	13	5
Nicaragua	16	13	10
Trinidad and Tobago	18	21	19
All developing countries	10	..	5
World	10	..	6

Note: These data reflect situations as of June 1994 (parliaments), between 1990 and 1994 (municipalities) and as of May 1994 (cabinets).

Source: Parliamentary—IPU 1994; municipal—national reports for the Fourth World Conference on Women and UN 1992a, 1992b and 1993a; cabinet—UN 1994i (revised by the Human Development Report Office in 1995).

removed, it can take generations for practice to catch up with the revised law.

### *Inequality under the law*

The starkest reflection of the low status accorded women in societies everywhere is the discrimination against them in law. Unless such legal barriers are removed, no progress can be made towards equal rights.

The Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) is an important step towards eliminating legal and other forms of discrimination against women. Although 139 countries have signed it, 41 UN member states have not signed it, 6 have signed without ratification, and 43 have ratified with reservations, undermining the hopes raised by its adoption in 1979 by the General Assembly of the United Nations (table 2.9).

Women still face legal discrimination every day in many countries—rich and poor, industrial and developing, democratic and authoritarian. Ironically, what unites countries across many cultural, religious, ideological, political and economic divides is their common cause *against* the equality of women—in the right to travel, marry, divorce, acquire nationality, manage property, seek employment and inherit property.

A few examples illustrate how differently laws treat men and women, only a small sample of the widespread legal discrimination in many countries.

- *Right to nationality.* In much of West Asia and North Africa, women married to foreigners cannot transfer citizenship to their husbands, though men in similar situations can.

- *Right to manage property.* Married women are under the permanent guardianship of their husbands and have no right to manage property in Botswana, Chile, Lesotho, Namibia and Swaziland.

- *Right to income-earning opportunities.* Husbands can restrict a wife's employment outside the home in Bolivia, Guatemala and Syria.

- *Right to travel.* In some Arab countries, a husband's consent is necessary for a wife to obtain a passport, but not vice versa.

Women cannot leave the country without their husband's permission in Iran.

Legislation that differentiates between men and women is grounded in interpretations of cultural traditions. The women and men of every society have to decide how to reinterpret their culture and adapt it to their needs and aspirations. But with women's participation in political and legislative decision-making constrained everywhere, no society can claim that women are participating adequately in formulating the legal framework under which they live.

The agenda for future action remains long, but it is only fair to acknowledge the

TABLE 2.9

### Convention on the Elimination of All Forms of Discrimination Against Women

(ratification or accession to the convention, January 1995)

#### No signature or accession (41 UN member states)<sup>a</sup>

Algeria	Lebanon	San Marino
Andorra	Liechtenstein	São Tomé and Príncipe
Azerbaijan	Malaysia	Saudi Arabia
Bahrain	Marshall Islands	Singapore
Botswana	Mauritania	Solomon Islands
Brunei Darussalam	Micronesia, Fed. States of	Somalia
Chad	Monaco	Sudan
Djibouti	Mozambique	Swaziland
Eritrea	Myanmar	Syrian Arab Rep.
Fiji	Niger	Turkmenistan
Iran, Islamic Rep. of	Oman	United Arab Emirates
Kazakhstan	Pakistan	Uzbekistan
Korea, Dem. People's Rep.	Palau	Vanuatu
Kyrgyzstan	Qatar	

#### Signature but no ratification (6 UN member states)

Afghanistan (1980)	South Africa (1993)
Côte d'Ivoire (1980)	Switzerland (1987)
Lesotho (1980)	USA (1980)

#### Ratification with declaration or reservation or both (43 UN member states)<sup>b</sup>

Argentina (1985)	Germany (1985)	Morocco (1993)
Australia (1983)	India (1993)	Netherlands (1991)
Austria (1982)	Indonesia (1984)	New Zealand (1985) <sup>c</sup>
Bahamas (1993)	Iraq (1986)	Poland (1980)
Bangladesh (1984)	Ireland (1985) <sup>c</sup>	Romania (1982)
Belgium (1985)	Israel (1991)	Spain (1984)
Brazil (1984)	Jamaica (1984)	Thailand (1985) <sup>c</sup>
Chile (1989)	Jordan (1992)	Trinidad and Tobago (1990)
China (1980)	Korea, Rep. of (1984) <sup>c</sup>	Tunisia (1985)
Cuba (1980)	Libyan Arab Jamahiriya (1989)	Turkey (1985)
Cyprus (1985)	Luxembourg (1989)	United Kingdom (1986)
Egypt (1981)	Maldives (1993)	Venezuela (1983)
El Salvador (1981)	Malta (1991)	Viet Nam (1982)
Ethiopia (1981)	Mauritius (1984)	Yemen (1984)
France (1983) <sup>c</sup>		

a. Accession is effected by the deposit of an instrument of accession with the Secretary-General of the United Nations. This procedure has the same legal implications as a signature and a ratification combined.

b. Through a declaration, states give their interpretation of the convention, but do not exclude or limit its implementation as they would through a reservation.

c. Not all the reservations have been withdrawn.

Source: UN 1994d.

tremendous progress that some societies have made over the past few decades towards ensuring gender equality in their legal frameworks: among them Japan and Tunisia (boxes 2.7 and 2.8). The experiences of these countries provide hope that other nations can achieve legal equality as well—if public pressure is mobilized.

### *Violence against women*

Violence against women is a universal issue, crossing the boundaries of culture, geogra-

phy, race, ethnicity, class and religion. In many countries, laws offer only limited protection to women, often treating domestic violence as a “private family matter”, one not warranting legislative intervention or administrative intrusion.

Many states have no national policy or legislation on violence against women. In much of Latin America, the law excuses the murder of a woman by her husband if she is caught in the act of adultery. The law does not excuse murder by a woman in similar circumstances.

Laws often place so much of the burden of proof for rapes on the woman that most rapes go unreported. In many countries, a woman’s character and sexual history are considered pertinent evidence in rape cases. In most countries—industrial and developing—awareness of sexual harassment is only a recent phenomenon, with legal redress still limited and uncertain.

Even though laws on the books of many countries may have begun to protect women’s human rights, practice does not. The poor are always much more exposed and more vulnerable to threats to their security. It is the low social and economic status of women that makes them vulnerable to violations of their basic human rights.

From childhood through adulthood, the lives of too many women are shadowed by the threat of violence. Data are weak in this area, but documented evidence reveals violence against females to be a widespread global problem.

- *It begins even before birth.* In some countries, testing is used to determine the sex of the fetus, which may be aborted if it is female.
- *It scars early life.* Studies show that a third of women in Barbados, Canada, the Netherlands, New Zealand, Norway and the United States report sexual abuse during childhood or adolescence. Each year, an estimated one million children, mostly girls in Asia, are forced into prostitution. And an estimated 100 million girls suffer genital mutilation.
- *It becomes a part of marriage.* Studies in Chile, Mexico, Papua New Guinea and the Republic of Korea indicate that two-thirds

BOX 2.7

JAPAN

### **Addressing legal inequalities in a post-industrial society**

Japan’s postwar constitution clearly stipulates equality under law and excludes discrimination on the basis of sex, but policy measures to overcome discriminatory practices have gained momentum only since the 1970s. The launching of the UN Decade for Women in 1975 provided important impetus.

The Equal Employment Opportunity Law was a landmark, seeking to promote equal treatment of women and men in the workplace. Equally far-reaching is the child-care leave law, which enables either the father or the mother of a child under age one to take leave, with government-provided funding of up to a third of the salary. But changes in gender roles will be gradual: between April 1992 and March 1993, 48% of new mothers but only 0.02% of new fathers took parental leave. Publicly funded and operated day-care facilities have been expanding rapidly to support working women.

The New National Plan of Action towards the year 2000 sets the following priority objectives:

- Improving popular awareness of equality between men and women.
- Achieving active and joint participation in society by men and women on an equal basis in such areas as policy decision-making and employment.
- Improving conditions to give women more choice in life.
- Enhancing welfare for elderly women.
- Promoting international cooperation and contributing to peace.

Source: Iwao 1993 and Japan 1995.

Japanese women, far from the stereotypical image, are a social force in many areas. Within the home, women dominate, in control of the household income and in charge of family life. Recent surveys show that 40% of full-time housewives with no earned income of their own considered themselves “economically independent”.

As Japan heads towards a post-industrial society, women’s role has been changing rapidly, and prescribed gender roles are breaking down. With high levels of education, health care and income, Japanese women have more choices today than ever before. Women are pursuing career opportunities in increasing numbers. But many women are questioning whether their real goal should be to assume the typical male role.

Women are increasingly active outside the home, but that has not always meant employment—full-time, activist housewives are becoming a significant political and social force. Women’s political participation is high, and a higher proportion of women than of men have voted in elections since 1980. Although the national legislature and cabinet remain male-dominated, women represent a significant force in local policy-making.

While pursuing equality under the law, equal pay and equal opportunities, Japanese women are defining their own interpretation of equality in gender relations in the home and in society.

or more of married women have suffered domestic violence. In Germany, it is estimated that up to four million women a year suffer from domestic violence.

- *It is sometimes manifested in rape.* Studies from Canada, New Zealand, the United Kingdom and the United States suggest that one woman in six is raped in her lifetime.

- *It may end in murder.* Studies in Bangladesh, Brazil, Kenya, Papua New Guinea and Thailand show that more than half of all murders of women were committed by present or former partners.

- *Or it may result in suicide.* Cross-cultural evidence from Africa, South America, several Melanesian islands and the United States established marital violence as a leading cause of female suicide.

- *And its incidence increases during conflicts.* The sharp increase in the proportion of civilian casualties of war—from about 10% around the turn of the century to 90% today—makes women among the worst sufferers, though they constitute only 2% of the world's 23 million regular army personnel. The UN High Commissioner for Refugees has reported that about 80% of the international refugees whom it has assisted were women and children. Applying this proportion to the estimated total refugee population suggests that about 18 million women and children were refugees at the end of 1993.

So, violence stalks women's lives, in peace and in war. And most laws are inadequate for stopping such violence—unless present cultural and social values change.

This chapter has summarized the main highlights of the progress women have made in the past few decades in closing gender gaps. It is clear that while gender inequality has been reduced in education

### Key initiatives for gender-sensitive legislation

Since independence in 1956, Tunisia has made a concerted effort towards gender equality. A constitutional and legal framework that emphasizes women's rights has increasingly facilitated the advance towards gender equality, with the articulation and adoption of the gender-sensitive laws spearheaded by the government.

In a marked departure from the past, Tunisian family law prohibits marriage without consent and polygamy—and establishes equal rights for men and women to seek divorce. A woman whose husband is a foreigner has the right to give her nationality to her children.

Today in Tunisia, women in divorce suits have the right to custody of children irrespective of the children's age and sex. The legal code grants freedom to use contraception, available at almost no cost. As a result of the public promotion of contraception and a conducive environment, fertility rates have been halved in the past 20 years.

In addition to legislation establishing women's rights within the family, parallel legislation strives to achieve the same within the economy. The Tunisian legal code guarantees equality in inheritance, in access to education and in the right to work. It recognizes women's right to administer property independent of their husbands.

Rules against gender discrimination in employment and pay encourage women's economic participation.

Source: CAWTAR 1994, CREDIF 1994 and Tunisia 1994.

Maternity leave and day-care centres protect women's right to work. And professional training for women has been emphasized—with 86,000 women trained between 1986 and 1992. As a result, women's labour force participation rates more than tripled, from 6% in 1966 to 21% in 1989.

The Tunisian women's movement—including women's organizations, research centres and government agencies—helped create the social transformation that progressive gender laws heralded. Participants in the movement disseminated information about these laws and contributed to the debate on the advancement of women. The reforms quickly gained popularity and are now deeply rooted, with women of nearly all classes aware of their legal rights.

Women's activism shows up in their increased participation in political decision-making. In 1994, 7% of the parliamentary deputies elected were women—well above the regional average. At the local level, women's representation is near the world average of 14%.

Even though Tunisian family law does not accord women equal rights in all aspects of social life, it is unusually progressive in some. Gender-sensitive provisions of Tunisian family and property law are considered to be in accord with—in fact, based on—traditional and religious values.

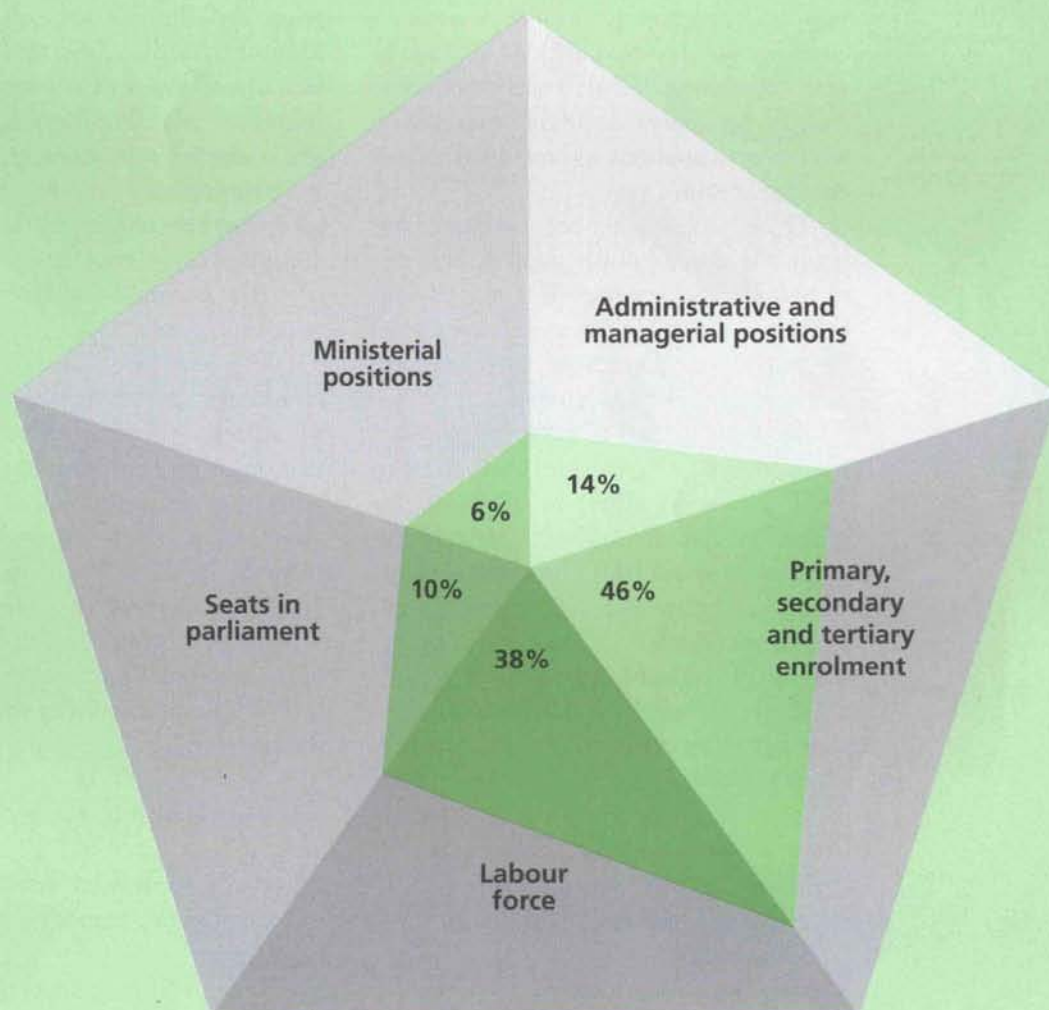
and health, it remains significant in economic and political opportunities. The next chapter designs two composite indices of gender inequality to capture those different trends.







# PROGRESS IN GENDER EQUALITY



The green area at the centre shows the female share for each indicator

### Country and regional variations

Women's achievements have increased and gender gaps have narrowed considerably in education and health since 1970. But progress in women's participation in the economic and political arenas has been much less impressive.

This statistical annex highlights country and regional variations in the global progress towards gender equality in education, health and economic and political participation in tables A2.1–A2.4. Table A2.5 presents important dimensions of women's changing social roles, and table A2.6 a summary of closing female-male gaps. Table A2.7 is a summary table of the latest data on women's occupations and on female school enrolment ratios.

These tables have been prepared for ready reference by policy-makers. They distil considerable country data and present them in a digestible, policy-related format so that easy comparisons can be made among countries and regions.

An index is used to compare women's status in 1990 or 1992 with their status in 1970. Levels for 1990 or 1992 are expressed in relation to 1970 levels, which are indexed to equal 100. The difference between the index and 100 shows the improvement or deterioration in the indicator. A figure of 100 indicates no change.

To present gender gaps, these tables express figures in relation to the male 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 female average is higher than the male average.

### Women and educational opportunity

Table A2.1 compares aspects of the educational status of girls and women in the 1990s with their status in 1970 and with that of males.

- Women's literacy rates improved in all countries for which data are available except four (Barbados, Comoros, Jamaica and Lesotho). In only three countries

(Uruguay, Jamaica and Nicaragua) are women's literacy rates higher than men's. Rural women's literacy rates are lower than urban women's in all countries for which data are available except Estonia and Tajikistan.

- A more current measure of educational progress is the increase in girls' school enrolment. The enrolment of primary-school-age girls increased or was maintained in all but 14 countries. For some countries, such as Austria, Finland and Norway, primary-school-age enrolment was already high 20 years ago. In others, such as Bulgaria, Hungary, Poland, Zaire and Zambia, the lack of improvement in primary school enrolment is related to economic adjustment and budgetary retrenchment.

- Improvement in the enrolment of secondary-school-age girls has been more consistent across countries. Only two countries (the Bahamas and Barbados) experienced a decrease.

- With very few exceptions, countries have shown greater improvement in the enrolment ratios of tertiary-school-age women than in those of primary- and secondary-school-age girls. Enrolment for this age group dropped in only four countries (Angola, Jamaica, Mozambique and Viet Nam). In three of these four, war contributed to the drop. In Viet Nam, war has been followed by a reorientation of resources away from tertiary and towards basic education.

### Women and health security

Table A2.2 focuses on women's longevity and fertility as manifestations of their health status.

- Women's life expectancy increased in all countries except Uganda. HIV/AIDS is largely responsible for this exception as well as for partly reversing the improvement in women's life expectancy in other Sub-Saharan African countries, such as Rwanda, Zambia and Zimbabwe.

- Rates of maternal mortality display the widest gap between industrial and developing countries. At 2,000 per 100,000 live

births, maternal mortality in Mali is a thousand times higher than that in Ireland.

- Since 1970, total fertility rates have dropped in most countries. Compared with other regions, Sub-Saharan Africa experienced the smallest reduction in fertility rates. Of the 14 countries in which fertility rates have increased, 11 are in Sub-Saharan Africa.

### Women and economic opportunities

Table A2.3 presents data on women's economic activity in the public domain and on their occupational distribution. The economic activity rate reflects the supply of labour for the production of goods and services as defined by the United Nations System of National Accounts.

- Men's economic activity rates are higher than women's in all countries for which data are available. The Arab States record the lowest economic participation rates for women. Three Sub-Saharan African countries record both the highest economic activity rates for women and the narrowest gaps between women and men in this rate. The narrowest gap worldwide is in Tanzania, which also registers the narrowest wage gap between women and men among the countries analysed in chapter 2.

- In industrial countries, women's participation in administrative, managerial, professional and technical occupations has generally increased since 1970. The direction of change has been less clear in clerical and sales occupations, and even less so in services. In clerical, sales and services occupations, women were already overrepresented in industrial countries in 1970.

- In developing countries, women's participation in administrative, managerial, professional, technical, clerical and sales occupations has generally increased since 1970. The direction of change is less discernible in services. The increase in women's participation in these occupations was, in general, positively correlated with countries' human development levels. On average, countries with medium human development experienced larger increases

in women's participation in those occupations than did countries with low human development.

- Relative to men, women are generally more underrepresented in administration and management than in professional and technical occupations. By contrast, they are generally overrepresented in clerical and sales and services occupations.

### Women and political participation

Table A2.4 presents data on women's participation in local and national government: in municipalities or the equivalent, in upper and lower chambers of parliaments and in cabinets. The table gives no data, however, on a very important aspect of political participation: voting. Data on voting by gender that are adequate for regional and global comparisons are not yet available.

- Women's political participation is highest in the Nordic countries and lowest in the Arab States.

- In 55 countries, the political world is essentially male-dominated, with women constituting 5% or less of the parliament.

### Women in a changing society

Table A2.5 presents dimensions of women's socio-economic role and the evolution of this role.

- Female child labour rates have fallen, and women's average age at marriage has risen.

- Change in both these indicators has been associated with expanding educational opportunities and reflected in lower fertility rates, particularly for women aged 15–19.

- The proportion of women refugees is higher among countries with low human development.

### Closing female-male gaps

Table A2.6 shows the change over time in the ratio of female to male life expectancy, literacy, school enrolment and economic activity.

- As a result of women's faster progress, gender gaps in education have narrowed considerably in all countries.
- Women's advantage in life expectancy has increased. But it remains lower in countries with medium and low human development than in countries with high human development.
- By contrast to the impressive progress in reducing gender gaps in education, gaps in employment have hardly narrowed. For the group of countries with medium human development, the gender gap in economic activity changed little. In several Sub-Saharan African countries, the gender gap in employment widened.

#### Status of women

Table A2.7 presents data on the occupational status of economically active women and on female school enrolment ratios. Other data on the status of women are incorporated in the preceding tables or are presented in the indicator tables.

#### Improving gender-related data

These tables clearly show the need for improved coverage of gender-disaggregated data for even the most basic human devel-

opment indicators. The need is particularly severe in trend analysis. As presenting education, health and economic data by gender becomes an established international standard, however, comparisons across time should become more reliable and coverage more extensive. Future *Human Development Reports* will continue to present statistics by gender to assist in policy analysis.

#### Sources of data

The data presented in these tables are based on national information reported by the United Nations and its agencies and by other internationally recognized organizations. They thus rely on the standardization and consistency of the data produced by these offices. The few exceptions in which data from other sources have been used—for example, data on parliamentary representation—are noted in the tables and the sources fully cited.

Short citations of sources are given, corresponding to the full references in the reference list. 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.

## WOMEN AND EDUCATIONAL OPPORTUNITY

HDI rank	LITERACY				ENROLMENT RATIO						
	Adult female literacy				Primary school age (6–11 years)		Secondary school age (12–17 years)		Tertiary school age (18–23 years)		Female first-, second- and third-level combined gross enrolment ratio 1992
	Rate 1992	Index (1970=100) 1992	Female as % of male 1992	Rural as % of urban 1990	Index (1970=100) 1990	Female as % of male 1990	Index (1970=100) 1990	Female as % of male 1990	Index (1970=100) 1990	Female as % of male 1990	
High human development	..	..	..	..	104	99	118	99	189	102	77
1 Canada	..	..	..	..	100	100	104	100	257	127	110
2 USA	..	..	..	..	100	100	106	97	162	119	98
3 Japan	..	..	..	..	100	100	115	102	222	66	76
4 Netherlands	..	..	..	..	103	104	111	102	337	81	87
5 Finland	..	..	..	..	98	98	123	100	245	139	101
6 Iceland	..	..	..	..	..	..	..	..	..	..	82
7 Norway	..	..	..	..	97	100	104	100	247	116	89
8 France	..	..	..	..	101	100	113	104	257	114	88
9 Spain	..	..	..	..	..	..	..	..	..	..	89
10 Sweden	..	..	..	..	107	100	109	101	141	125	79
11 Australia	..	..	..	..	100	100	105	104	343	113	80
12 Belgium	..	..	..	..	100	100	112	102	267	93	84
13 Switzerland	..	..	..	..	..	..	..	..	..	..	71
14 Austria	..	..	..	..	98	101	115	111	314	84	82
15 Germany	..	..	..	..	..	..	..	..	..	..	79
16 Denmark	..	..	..	..	100	100	168	104	215	105	86
17 New Zealand	..	..	..	..	100	100	108	100	352	104	86
18 United Kingdom	..	..	..	..	100	100	111	104	195	100	77
19 Ireland	..	..	..	..	97	102	119	105	304	99	85
20 Italy	..	..	..	..	100	100	127	102	195	90	70
21 Israel	..	..	..	..	93	104	142	106	187	97	78
22 Greece	..	..	..	..	..	..	..	..	..	..	78
23 Cyprus	..	..	..	..	..	..	..	..	..	..	75
24 Hong Kong	86.5	135	90	..	116	101	140	103	175	71	70
25 Barbados	96.3	97	98	..	107	100	95	92	373	149	73
26 Bahamas	97.7	..	99	..	100	100	98	102	..	214	77
27 Luxembourg	..	..	..	..	100	100	115	106	261	78	57
28 Costa Rica	94.4	107	100	..	98	101	105	99	224	85	66
29 Belize	..	..	..	..	..	..	..	..	..	..	..
30 Argentina	95.8	104	100	..	102	100	143	110	331	114	82
31 Korea, Rep. of	95.8	118	97	..	106	100	199	97	421	53	75
32 Uruguay	97.3	..	101	..	110	100	111	124	258	127	82
33 Chile	94.2	107	99	..	91	100	119	100	218	93	71
34 Malta	..	..	..	..	100	100	141	96	216	59	70
35 Singapore	84.3	155	88	..	108	100	164	101	415	86	66
36 Portugal	..	..	..	..	116	100	182	105	223	123	84
37 Saint Kitts and Nevis	..	..	..	..	..	..	..	..	..	..	..
38 Czech Rep.	..	..	..	..	..	..	..	..	..	..	69
39 Trinidad and Tobago	96.4	107	98	..	103	100	107	102	114	69	68
40 Slovakia	..	..	..	..	..	..	..	..	..	..	72
41 Brunei Darussalam	80.7	162	88	..	87	100	109	110	123	98	68
42 Belarus	..	..	..	95	..	..	..	..	..	..	75
43 Estonia	..	..	..	100	..	..	..	..	..	..	72
44 Bahrain	76.7	269	87	..	146	100	158	100	391	113	86
45 United Arab Emirates	77.3	869	99	..	188	100	313	108	2,182	264	84
46 Fiji	87.5	133	94	..	107	100	144	102	340	79	77
47 Venezuela	89.7	122	98	..	128	102	120	109	209	93	72
48 Latvia	..	..	..	99	..	..	..	..	..	..	69
49 Panama	89.1	114	99	..	125	101	111	102	185	120	70
50 Hungary	..	..	..	99	90	101	124	101	181	94	67
51 Poland	..	..	..	..	94	101	116	98	113	114	76
52 Russian Federation	..	..	..	96	..	..	..	..	..	..	70
53 Mexico	86.0	122	95	..	122	100	147	98	258	76	64
54 Ukraine	..	..	..	98	..	..	..	..	..	..	72
55 Antigua and Barbuda	..	..	..	..	..	..	..	..	..	..	..
56 Qatar	77.4	257	99	..	147	98	138	99	583	213	78
57 Colombia	90.2	113	100	81	112	102	149	109	318	105	69
58 Thailand	91.4	130	95	94	108	100	165	88	338	86	53
59 Malaysia	75.4	161	86	..	112	100	214	106	368	99	61
60 Mauritius	76.3	..	89	..	116	103	155	104	169	75	59
61 Kuwait	72.9	174	91	..	140	93	159	92	245	100	48
62 Seychelles	..	..	..	..	..	..	..	..	..	..	..
63 Brazil	81.3	129	99	..	125	94	142	95	300	113	70

## WOMEN AND EDUCATIONAL OPPORTUNITY

HDI rank	LITERACY				ENROLMENT RATIO						Female first-, second- and third-level combined gross enrolment ratio 1992
	Adult female literacy				Primary school age (6–11 years)		Secondary school age (12–17 years)		Tertiary school age (18–23 years)		
	Rate	Index	Female as % of male	Rural as % of urban	Index	Female as % of male	Index	Female as % of male	Index	Female as % of male	
	1992	(1970=100) 1992	1992	1990	(1970=100) 1990	1990	(1970=100) 1990	1990	(1970=100) 1990	1990	
Medium human development	69.9	..	80	..	151	95	118	83	139	72	55
64 Kazakhstan	..	..	..	98	..	..	..	..	..	..	68
65 Bulgaria	..	..	..	..	97	100	105	99	169	108	67
66 Turkey	70.1	209	77	..	147	94	115	68	251	55	54
67 Grenada	..	..	..	..	..	..	..	..	..	..	..
68 Ecuador	87.2	124	96	81	118	101	198	95	320	89	70
69 Dominica	..	..	..	..	..	..	..	..	..	..	..
70 Iran, Islamic Rep. of	55.0	216	74	56	210	89	199	73	174	47	61
71 Lithuania	..	..	..	98	..	..	..	..	..	..	68
72 Cuba	94.2	..	99	..	103	100	127	110	567	128	68
73 Libyan Arab Jamahiriya	57.4	388	67	..	141	100	334	84	1,093	102	66
74 Botswana	56.7	129	72	..	187	105	223	111	538	74	73
75 Tunisia	50.2	473	67	..	149	92	172	79	260	70	60
76 Saudi Arabia	46.3	336	66	..	261	81	494	95	2,889	79	49
77 Suriname	89.9	..	95	..	105	100	102	103	583	132	73
78 Syrian Arab Rep.	51.6	258	62	..	186	100	195	74	183	68	62
79 Saint Vincent	..	..	..	..	..	..	..	..	..	..	..
80 Jordan	75.4	..	82	..	..	..	..	..	..	..	..
81 Moldova, Rep. of	..	..	..	95	..	..	..	..	..	..	..
82 Albania	..	..	..	..	100	101	123	95	216	97	68
83 Korea, Dem. People's Rep. of	..	..	..	..	..	..	..	..	..	..	..
84 Saint Lucia	..	..	..	..	..	..	..	..	..	..	..
85 Algeria	44.1	350	63	..	176	88	261	75	605	60	60
86 Turkmenistan	..	..	..	99	..	..	..	..	..	..	..
87 Paraguay	89.5	119	96	..	119	100	115	94	149	93	58
88 Jamaica	87.9	91	111	..	104	100	133	113	93	79	65
89 Kyrgyzstan	..	..	..	97	..	..	..	..	..	..	..
90 Armenia	..	..	..	98	..	..	..	..	..	..	..
91 Oman	..	..	..	..	8,800	94	..	79	..	71	56
92 Georgia	..	..	..	99	..	..	..	..	..	..	..
93 Peru	80.9	131	86	..	134	100	127	81	232	61	74
94 Uzbekistan	..	..	..	99	..	..	..	..	..	..	..
95 South Africa	80.3	..	99	..	..	..	..	..	..	..	78
96 Dominican Rep.	80.7	123	100	..	137	104	143	113	297	83	74
97 Sri Lanka	85.8	125	92	..	125	100	139	108	152	108	67
98 Romania	..	..	..	..	101	111	107	96	160	127	61
99 Azerbaijan	..	..	..	97	..	..	..	..	..	..	68
100 Philippines	93.6	116	99	92	104	99	138	103	125	113	78
101 Lebanon	89.0	171	95	..	111	93	154	97	165	69	71
102 Samoa (Western)	..	..	..	..	..	..	..	..	..	..	..
103 Tajikistan	..	..	..	100	..	..	..	..	..	..	66
104 Indonesia	76.4	171	86	..	167	97	215	92	355	56	57
105 Guyana	96.8	109	98	..	114	100	118	105	132	78	68
106 Iraq	40.9	327	60	68	270	92	213	64	300	62	48
107 Egypt	36.1	171	58	34	189	100	278	77	200	59	61
108 Namibia	..	..	..	..	120	112	125	117	136	122	84
109 Nicaragua	65.5	115	103	..	135	105	132	110	256	92	61
110 Mongolia	74.8	..	86	..	98	106	143	111	304	141	63
111 China	69.9	..	79	77	155	95	93	78	110	75	52
112 Guatemala	47.1	122	77	..	138	94	178	74	332	48	39
113 Bolivia	72.9	..	82	..	152	93	109	83	172	52	61
114 Gabon	48.2	..	69	..	..	..	..	..	..	..	..
115 El Salvador	67.8	127	94	..	127	119	138	97	249	82	54
116 Honduras	70.4	128	99	66	125	103	145	106	423	96	61
117 Morocco	27.7	283	52	..	183	71	201	70	778	62	35
118 Maldives	92.4	..	100	..	1,250	100	..	120	..	..	66
119 Vanuatu	..	..	..	67	..	..	..	..	..	..	..
120 Viet Nam	88.7	..	93	88	107	96	115	95	70	39	47
121 Zimbabwe	77.9	..	87	..	146	101	458	95	440	52	66
122 Congo	62.1	..	78	..	..	..	..	..	..	..	..
123 Cape Verde	57.5	179	74	..	244	99	163	95	..	76	58
124 Swaziland	72.6	264	96	..	143	105	147	97	215	51	68
125 Solomon Islands	..	..	..	..	..	..	..	..	..	..	39
126 Papua New Guinea	59.5	244	75	..	169	84	176	78	333	36	30
127 Cameroon	47.5	..	66	44	126	87	166	76	640	56	44

## WOMEN AND EDUCATIONAL OPPORTUNITY

HDI rank	LITERACY				ENROLMENT RATIO						Female first-, second- and third-level combined gross enrolment ratio 1992
	Adult female literacy				Primary school age (6–11 years)		Secondary school age (12–17 years)		Tertiary school age (18–23 years)		
	Rate	Index (1970=100)	Female as % of male	Rural as % of urban	Index (1970=100)	Female as % of male	Index (1970=100)	Female as % of male	Index (1970=100)	Female as % of male	
	1992	1992	1992	1990	1990	1990	1990	1990	1990	1990	
Low human development	35.2	..	56	..	152	76	208	62	242	48	38
128 Pakistan	22.3	217	47	..	134	55	246	44	183	38	16
129 Ghana	49.0	266	67	..	118	87	105	71	107	27	39
130 Kenya	65.2	..	78	..	201	100	233	84	211	89	56
131 Lesotho	58.8	87	74	..	105	121	115	133	575	103	63
132 Myanmar	76.1	130	86	..	159	94	112	90	194	121	47
133 São Tomé and Príncipe	..	..	..	..	..	..	..	..	..	..	..
134 India	35.2	181	55	..	143	74	205	60	221	50	46
135 Madagascar	..	..	..	..	107	101	116	89	288	91	34
136 Zambia	67.4	195	81	..	96	101	156	78	750	34	46
137 Yemen	..	..	..	..	..	..	..	..	..	..	23
138 Lao People's Dem. Rep.	40.9	..	61	..	170	86	499	60	1,400	48	40
139 Comoros	48.4	94	77	..	318	84	487	88	1,350	77	34
140 Togo	32.9	463	52	..	182	70	294	48	480	22	44
141 Nigeria	42.1	..	66	..	248	78	290	72	678	53	47
142 Equatorial Guinea	63.7	..	73	..	..	..	..	..	..	..	..
143 Zaire	63.5	..	75	..	98	79	120	56	600	25	32
144 Sudan	30.6	171	56	..	147	80	263	80	600	53	27
145 Côte d'Ivoire	26.1	..	56	..	135	71	195	58	269	36	31
146 Bangladesh	24.4	185	51	..	238	86	242	50	243	27	33
147 Tanzania, U. Rep. of	52.4	352	68	..	225	104	284	91	450	68	33
148 Haiti	39.6	235	87	..	151	104	162	93	564	74	28
149 Central African Rep.	45.6	..	72	..	133	64	162	47	933	26	27
150 Mauritania	24.9	..	52	..	515	76	493	57	1,900	29	27
151 Nepal	12.4	479	32	..	601	55	1,005	47	480	30	41
152 Senegal	20.7	..	51	..	188	76	129	61	219	43	25
153 Cambodia	..	..	..	..	..	..	..	..	..	..	..
154 Djibouti	29.5	..	51	11	260	71	251	62	300	79	16
155 Benin	21.9	..	49	..	191	51	187	48	322	27	22
156 Rwanda	47.1	..	70	..	126	101	249	89	780	65	38
157 Malawi	38.8	316	55	..	215	98	234	66	325	35	43
158 Uganda	46.4	..	65	72	243	89	269	63	600	44	32
159 Liberia	19.8	192	39	..	..	..	..	..	..	..	12
160 Bhutan	25.2	..	47	..	3,240	71	3,150	42	..	22	..
161 Gambia	22.1	..	45	..	268	77	454	60	800	32	26
162 Chad	31.3	..	53	..	212	49	290	30	700	13	17
163 Guinea-Bissau	38.9	..	60	..	188	58	133	51	150	36	20
164 Angola	..	..	..	..	144	96	344	79	71	41	31
165 Burundi	20.1	..	43	..	268	91	565	69	2,800	47	27
166 Somalia	..	..	..	..	..	..	..	..	..	..	5
167 Mozambique	20.4	291	38	..	169	80	396	64	78	35	21
168 Guinea	19.3	482	41	..	105	53	134	36	300	25	13
169 Burkina Faso	8.0	..	29	12	296	63	407	56	1,200	46	14
170 Afghanistan	12.7	1,270	29	..	247	54	262	50	317	34	10
171 Ethiopia	22.6	..	53	..	320	86	430	66	250	31	12
172 Mali	19.6	..	56	28	101	59	113	54	300	34	11
173 Sierra Leone	15.9	..	38	..	146	72	156	58	243	27	22
174 Niger	5.8	..	30	..	206	52	385	61	1,400	30	10
All developing countries	59.3	..	73	..	141	88	138	78	173	70	49
Industrial countries	..	..	..	..	..	..	..	..	..	73	81
World	..	..	..	..	..	..	..	..	..	59	55
Arab States	40.7	262	62	..	191	92	251	77	325	65	48
East Asia	71.0	..	80	..	151	96	97	79	116	73	53
Latin America and the Caribbean	84.1	124	97	..	119	98	138	98	278	96	68
South Asia	34.2	203	55	..	150	75	204	60	210	48	42
South-East Asia and the Pacific	82.1	151	90	..	132	97	166	95	208	73	57
Sub-Saharan Africa	44.6	..	66	..	154	85	173	72	279	46	38
Least developed countries	35.7	..	57	..	180	84	215	67	323	44	29
European Union	..	..	..	..	..	..	..	..	..	..	81
Nordic countries	..	..	..	..	100	100	121	101	198	121	87
OECD	..	..	..	..	105	99	110	98	181	103	81

Source: Column 1: UNESCO 1994b; columns 2–10: calculated on the basis of estimates from UN 1994i [UNESCO]; column 11: UNESCO 1994c.

## WOMEN AND HEALTH SECURITY

HDI rank	LIFE SPAN				FERTILITY		
	Female life expectancy at birth		Maternal mortality rate		Women using contraception (%) 1986-93	Total fertility	
	Years	Index (1970=100)	Per 100,000 live births	Index (1970=100)		Rate	Index (1970=100)
High human development	76.0	111	67	45	..	2.0	70
1 Canada	80.7	106	5	25	..	1.9	83
2 USA	79.3	106	8	37	74	2.1	91
3 Japan	82.5	110	11	27	64	1.5	74
4 Netherlands	80.4	105	10	71	76	1.6	69
5 Finland	79.6	107	11	122	..	1.9	101
6 Iceland	80.8	105	..	..	..	2.2	74
7 Norway	80.3	104	3	20	76	1.9	78
8 France	80.8	107	9	41	81	1.7	71
9 Spain	80.5	107	5	16	..	1.2	42
10 Sweden	81.1	105	5	56	..	2.1	105
11 Australia	80.6	108	3	12	76	1.9	69
12 Belgium	79.7	107	3	14	79	1.6	77
13 Switzerland	81.2	107	5	19	..	1.6	78
14 Austria	79.2	107	8	27	..	1.5	67
15 Germany	79.0	107	5	..	75	1.3	66
16 Denmark	78.2	103	3	35	78	1.7	81
17 New Zealand	78.6	105	13	59	..	2.2	72
18 United Kingdom	78.7	105	8	47	81	1.8	79
19 Ireland	78.1	106	2	7	..	2.1	55
20 Italy	80.6	108	4	8	..	1.3	53
21 Israel	78.4	108	3	13	..	2.9	76
22 Greece	80.1	109	5	17	..	1.4	60
23 Cyprus	79.2	109	..	..	..	2.5	94
24 Hong Kong	81.8	110	6	30	81	1.2	35
25 Barbados	77.9	110	..	..	55	1.8	59
26 Bahamas	77.9	112	..	..	62	2.0	64
27 Luxembourg	79.3	107	..	..	..	1.7	79
28 Costa Rica	78.6	114	36	38	75	3.1	62
29 Belize	75.0	112	..	..	47	4.2	66
30 Argentina	75.7	108	140	101	..	2.8	89
31 Korea, Rep. of	74.9	113	26	..	79	1.7	40
32 Uruguay	75.7	105	36	47	..	2.3	80
33 Chile	77.4	119	35	21	..	2.5	63
34 Malta	78.3	109	..	..	..	2.1	97
35 Singapore	77.4	109	10	48	..	1.7	57
36 Portugal	78.0	109	10	18	66	1.6	55
37 Saint Kitts and Nevis	..	..	..	..	41	..	..
38 Czech Rep.	74.9	102	..	..	69	1.8	88
39 Trinidad and Tobago	74.0	110	110	81	53	2.4	66
40 Slovakia	75.4	103	..	..	74	1.9	77
41 Brunei Darussalam	76.3	111	..	..	..	3.1	54
42 Belarus	75.1	100	..	..	..	1.7	72
43 Estonia	74.8	101	..	..	..	1.6	77
44 Bahrain	74.1	116	..	..	53	3.8	58
45 United Arab Emirates	75.3	120	..	..	..	4.2	65
46 Fiji	73.7	113	..	..	..	3.0	65
47 Venezuela	74.7	111	..	..	49	3.3	61
48 Latvia	74.9	101	..	..	..	1.6	86
49 Panama	75.0	112	60	44	..	2.9	55
50 Hungary	73.8	102	15	43	73	1.7	84
51 Poland	75.7	103	11	41	..	1.9	83
52 Russian Federation	73.6	100	..	..	..	1.5	77
53 Mexico	73.9	116	110	77	53	3.2	49
54 Ukraine	74.2	100	..	..	..	1.6	82
55 Antigua and Barbuda	..	..	..	..	53	..	..
56 Qatar	74.2	119	..	..	32	4.3	63
57 Colombia	72.3	115	200	87	66	2.7	49
58 Thailand	71.8	119	50	24	66	2.1	38
59 Malaysia	73.0	116	59	..	48	3.6	65
60 Mauritius	73.8	115	99	66	75	2.4	63
61 Kuwait	77.2	114	6	40	35	3.1	43
62 Seychelles	..	..	..	..	..	..	..
63 Brazil	68.7	111	200	..	66	2.9	58



## WOMEN AND HEALTH SECURITY

HDI rank	LIFE SPAN				FERTILITY		
	Female life expectancy at birth		Maternal mortality rate		Women using contraception (%) 1986-93	Total fertility	
	Years 1992	Index (1970=100) 1992	Per 100,000 live births 1980-92	Index (1970=100) 1980-92		Rate 1992	Index (1970=100) 1992
Medium human development	68.6	119	161	..	71	2.6	47
64 Kazakhstan	73.9	108	..	..	..	2.5	70
65 Bulgaria	74.9	102	9	26	..	1.5	69
66 Turkey	68.6	118	150	72	63	3.4	63
67 Grenada	..	..	..	..	54	..	..
68 Ecuador	71.4	120	170	74	53	3.5	56
69 Dominica	..	..	..	..	50	..	..
70 Iran, Islamic Rep. of	68.0	125	120	..	65	5.0	74
71 Lithuania	76.0	101	..	..	..	1.8	80
72 Cuba	77.3	108	39	53	70	1.8	46
73 Libyan Arab Jamahiriya	65.0	122	70 <sup>a</sup>	..	..	6.4	85
74 Botswana	66.7	125	250	100	33	4.9	72
75 Tunisia	68.7	126	70	23	50	3.2	49
76 Saudi Arabia	71.4	134	41	..	..	6.4	88
77 Suriname	72.8	111	..	..	..	2.7	48
78 Syrian Arab Rep.	69.2	121	140	..	..	5.9	76
79 Saint Vincent	..	..	..	..	58	..	..
80 Jordan	69.8	125	48 <sup>a</sup>	47	35	5.6	71
81 Moldova, Rep. of	71.6	105	..	..	..	2.1	82
82 Albania	75.0	110	..	..	..	2.9	58
83 Korea, Dem. People's Rep. of	73.9	120	41	..	..	2.4	37
84 Saint Lucia	..	..	..	..	47	..	..
85 Algeria	68.3	126	140 <sup>a</sup>	62	47	3.9	52
86 Turkmenistan	68.5	108	..	..	..	4.0	64
87 Paraguay	71.9	107	300	54	48	4.3	72
88 Jamaica	75.8	107	120	114	67	2.4	44
89 Kyrgyzstan	72.8	109	..	..	..	3.7	76
90 Armenia	75.5	101	..	..	..	2.6	80
91 Oman	71.8	149	..	..	9	7.2	100
92 Georgia	76.7	106	..	..	..	2.1	81
93 Peru	67.9	123	300	140	59	3.4	54
94 Uzbekistan	72.2	108	..	..	..	3.9	64
95 South Africa	66.0	118	84 <sup>a</sup>	76	50	4.1	72
96 Dominican Rep.	71.7	119	..	..	56	3.1	50
97 Sri Lanka	74.2	113	80	53	62	2.5	57
98 Romania	73.3	104	72	55	57	1.5	53
99 Azerbaijan	74.5	104	..	..	..	2.5	54
100 Philippines	68.2	116	100	76	40	3.9	68
101 Lebanon	70.5	107	..	..	..	3.1	56
102 Samoa (Western)	69.2	118	..	..	..	4.5	60
103 Tajikistan	73.0	112	..	..	..	4.9	72
104 Indonesia	64.5	132	450	..	50	2.9	54
105 Guyana	68.0	110	..	..	..	2.6	46
106 Iraq	67.5	121	120	..	14	5.7	80
107 Egypt	64.8	121	270	251	46	3.9	64
108 Namibia	60.0	123	370 <sup>a</sup>	..	29	5.3	88
109 Nicaragua	68.5	121	..	..	49	5.0	72
110 Mongolia	65.0	121	200	..	..	3.6	61
111 China	70.4	113	95	..	83	2.0	36
112 Guatemala	67.3	126	200	127	23	5.4	82
113 Bolivia	61.0	127	600	..	30	4.8	74
114 Gabon	55.2	121	190	..	..	5.3	127
115 El Salvador	68.8	116	..	..	53	4.0	64
116 Honduras	70.1	128	220	126	47	4.9	68
117 Morocco	65.0	122	330	132	42	3.8	54
118 Maldives	60.8	125	..	..	..	6.8	97
119 Vanuatu	67.3	124	..	..	..	4.7	71
120 Viet Nam	67.3	130	120	..	53	3.9	66
121 Zimbabwe	55.1	106	..	..	43	5.0	68
122 Congo	53.8	111	900	90	..	6.3	101
123 Cape Verde	65.5	113	..	..	..	4.3	61
124 Swaziland	59.8	124	..	..	20	4.9	75
125 Solomon Islands	72.7	118	..	..	..	5.4	78
126 Papua New Guinea	56.7	123	900	113	..	5.1	82
127 Cameroon	57.5	122	430	..	16	5.7	92

## WOMEN AND HEALTH SECURITY

HDI rank	LIFE SPAN				FERTILITY		
	Female life expectancy at birth		Maternal mortality rate		Women using contraception (%) 1986-93	Total fertility	
	Years 1992	Index (1970=100) 1992	Per 100,000 live births 1980-92	Index (1970=100) 1980-92		Rate 1992	Index (1970=100) 1992
Low human development	56.5	122	548	..	32	4.8	77
128 Pakistan	62.6	128	500	..	12	6.2	88
129 Ghana	57.8	114	1,000	181	13	6.0	89
130 Kenya	57.3	111	170 <sup>a</sup>	83	33	6.3	77
131 Lesotho	63.0	122	..	..	23	5.2	91
132 Myanmar	59.3	118	460	354	..	4.2	71
133 São Tomé and Príncipe	..	..	..	..	..	..	..
134 India	60.4	125	460	..	43	3.8	67
135 Madagascar	58.0	124	570	449	17	6.1	92
136 Zambia	49.7	104	150	..	15	6.0	88
137 Yemen	50.4	123	..	..	7	7.6	100
138 Lao People's Dem. Rep.	52.5	126	300	..	..	6.7	109
139 Comoros	56.5	120	..	..	..	7.1	100
140 Togo	56.8	124	420	..	12	6.6	100
141 Nigeria	52.0	117	800	..	6	6.5	100
142 Equatorial Guinea	49.6	120	..	..	..	5.9	104
143 Zaire	53.7	115	800	..	8	6.7	108
144 Sudan	54.4	123	550	..	9	5.7	86
145 Côte d'Ivoire	52.4	114	..	..	..	7.4	100
146 Bangladesh	55.6	128	600	24	40	4.4	62
147 Tanzania, U. Rep. of	53.6	114	340 <sup>a</sup>	..	10	5.9	87
148 Haiti	58.3	119	600	..	10	4.8	81
149 Central African Rep.	51.9	116	600	..	..	5.7	100
150 Mauritania	53.1	121	..	..	3	5.4	83
151 Nepal	53.0	128	830	..	23	5.4	90
152 Senegal	50.3	125	600	..	7	6.1	87
153 Cambodia	52.9	119	500	..	..	5.3	89
154 Djibouti	50.0	120	..	..	..	5.8	86
155 Benin	49.3	121	160	..	..	7.1	101
156 Rwanda	48.9	106	210	..	21	6.6	80
157 Malawi	46.2	113	400	160	13	7.2	99
158 Uganda	46.2	97	550	139	5	7.3	106
159 Liberia	57.0	119	..	..	6	6.8	100
160 Bhutan	52.4	129	1,310	..	..	5.9	99
161 Gambia	46.6	124	..	..	12	5.6	86
162 Chad	49.1	124	960	112	..	5.9	98
163 Guinea-Bissau	45.1	120	700 <sup>a</sup>	..	..	5.8	109
164 Angola	48.1	125	..	..	..	7.2	111
165 Burundi	51.9	114	..	..	9	6.8	100
166 Somalia	48.6	117	1,100	..	..	7.0	100
167 Mozambique	48.0	111	300	..	..	6.5	100
168 Guinea	45.0	121	800	..	..	7.0	100
169 Burkina Faso	49.0	117	810	..	8	6.5	102
170 Afghanistan	44.0	119	640	..	..	6.9	97
171 Ethiopia	49.1	118	560 <sup>a</sup>	28	4	7.0	103
172 Mali	47.6	121	2,000	..	5	7.1	100
173 Sierra Leone	40.6	114	450	..	..	6.5	101
174 Niger	48.1	121	700	..	4	7.4	93
All developing countries	62.9	120	351	..	55	3.5	59
Industrial countries	79.4	107	10	34	..	1.8	76
World	64.4	119	320	..	58	3.0	63
Arab States	63.3	124	294	..	34	4.8	70
East Asia	70.6	114	92	..	83	1.9	37
Latin America and the Caribbean	71.0	115	189	..	58	3.1	59
South Asia	60.2	126	469	..	41	4.1	70
South-East Asia and the Pacific	65.5	125	295	..	..	3.3	59
Sub-Saharan Africa	52.4	116	606	..	15	6.3	95
Least developed countries	52.0	119	608	..	..	5.8	87
European Union	79.7	107	7	34	..	1.5	66
Nordic countries	80.0	105	5	58	..	1.9	93
OECD	77.7	110	40	46	70	1.9	73

a. Data refer to a year or period other than that specified in the column heading.

Source: Columns 1 and 2: UN 1994k; columns 3 and 4: UNICEF 1995 [WHO]; column 5: UN 1994j; column 6: UN 1994k; column 7: calculated on the basis of estimates from UN 1994k.

## WOMEN AND ECONOMIC OPPORTUNITIES

## ECONOMIC ACTIVITY

## OCCUPATION

HDI rank	Rate (age 15+)		Occupation							
	Female (%)	Female as % of male	Administrative and managerial		Professional and technical		Clerical and sales		Services	
			Female share (1970=100)	Female as % of male	Female share (1970=100)	Female as % of male	Female share (1970=100)	Female as % of male	Female share (1970=100)	Female as % of male
1994	1994	1990	1990	1990	1990	1990	1990	1990	1990	1990
High human development	43	55	226	..	126	..	..	..	..	..
1 Canada	49	63	315	68	131	127	115	209	92	133
2 USA	50	65	250	67	131	103	100	201	91	150
3 Japan	50	64	167	9	115	73	109	101	95	118
4 Netherlands	31	42	288	16	123	74	134	109	111	238
5 Finland	57	82	34	32	117	159	..	207	88	250
6 Iceland	61	74	..	..	..	..	..	..	..	..
7 Norway	52	68	339	34	139	130	121	192	111	301
8 France	44	64	..	..	..	..	..	..	..	..
9 Spain	22	31	223	10	143	89	165	90	117	141
10 Sweden	55	77	256	64	135	127	..	335	100	333
11 Australia	47	61	343	71	56	31	33	24	123	339
12 Belgium	33	47	..	..	..	..	..	..	..	..
13 Switzerland	43	53	..	..	..	..	..	..	..	..
14 Austria	45	60	83	20	130	92	124	178	100	243
15 Germany	..	..	..	..	..	..	..	..	..	..
16 Denmark	59	77	89	17	115	170	110	155	97	263
17 New Zealand	41	53	869	48	116	92	152	325	114	207
18 United Kingdom	46	60	..	..	..	..	..	..	..	..
19 Ireland	31	41	305	18	96	88	116	107	82	106
20 Italy	30	44	..	..	..	..	..	..	..	..
21 Israel	37	49	42	19	112	119	..	121	113	135
22 Greece	25	35	127	11	124	76	167	79	122	77
23 Cyprus	45	56	..	11	..	69	..	100	..	83
24 Hong Kong	50	62	189	19	95	72	193	104	118	70
25 Barbados	61	78	302	48	132	110	111	184	..	132
26 Bahamas	39	48	191	36	122	132	109	235	103	162
27 Luxembourg	32	44	105	9	115	61	111	93	97	256
28 Costa Rica	24	29	203	30	96	81	147	68	92	146
29 Belize	29	36	..	..	..	..	..	..	..	..
30 Argentina	28	38	..	..	..	..	..	..	..	..
31 Korea, Rep. of	41	52	272	4	185	74	135	79	103	156
32 Uruguay	32	44	..	26	..	157	..	85	..	210
33 Chile	29	39	113	24	105	108	152	86	105	263
34 Malta	22	29	..	..	..	..	..	..	..	..
35 Singapore	46	58	276	19	103	68	..	..	101	69
36 Portugal	39	51	262	23	118	119	163	91	108	190
37 Saint Kitts and Nevis	..	..	..	..	..	..	..	..	..	..
38 Czech Rep.	62	84	..	..	..	..	..	..	..	..
39 Trinidad and Tobago	34	42	46	29	125	121	..	144	107	112
40 Slovakia	62	81	..	..	..	..	..	..	..	..
41 Brunei Darussalam	48	56	427	13	121	54	248	109	178	67
42 Belarus	59	75	..	..	..	..	..	..	..	..
43 Estonia	59	74	..	..	..	..	..	..	..	..
44 Bahrain	17	20	..	..	..	..	..	..	..	..
45 United Arab Emirates	21	23	232	2	128	34	175	8	405	32
46 Fiji	23	27	178	10	101	66	174	62	..	93
47 Venezuela	32	39	161	23	114	123	164	84	96	136
48 Latvia	58	73	..	..	..	..	..	..	..	..
49 Panama	31	40	231	41	93	103	122	135	87	126
50 Hungary	48	70	380	139	104	96	115	307	107	306
51 Poland	57	77	58	18	121	152	..	..	..	..
52 Russian Federation	55	70	..	..	..	..	..	..	..	..
53 Mexico	30	37	119	24	128	76	121	71	103	82
54 Ukraine	52	69	..	..	..	..	..	..	..	..
55 Antigua and Barbuda	..	..	..	..	..	..	..	..	..	..
56 Qatar	19	20	16	1	115	37	273	7	462	36
57 Colombia	22	28	..	37	..	72	..	84	..	229
58 Thailand	65	77	311	29	128	111	112	134	115	128
59 Malaysia	45	55	..	..	..	..	..	..	..	..
60 Mauritius	29	35	225	17	113	71	188	44	80	70
61 Kuwait	27	33	921	5	125	58	569	23	400	85
62 Seychelles	57	72	169	40	100	139	145	143	83	141
63 Brazil	31	38	..	..	..	..	..	..	..	..

## WOMEN AND ECONOMIC OPPORTUNITIES

HDI rank	ECONOMIC ACTIVITY		OCCUPATION							
	Rate (age 15+)		Administrative and managerial		Professional and technical		Clerical and sales		Services	
	Female (%) 1994	Female as % of male 1994	Female share (1970=100) 1990	Female as % of male 1990	Female share (1970=100) 1990	Female as % of male 1990	Female share (1970=100) 1990	Female as % of male 1990	Female share (1970=100) 1990	Female as % of male 1990
Medium human development	60	68	..	..	..	..	..	..	..	..
64 Kazakhstan	54	67	..	..	..	..	..	..	..	..
65 Bulgaria	60	88	72	41	135	132	..	373	129	320
66 Turkey	45	54	72	4	127	47	148	20	121	11
67 Grenada	57	80	..	46	..	113	..	178	..	140
68 Ecuador	20	24	216	35	103	79	136	70	96	174
69 Dominica	43	57	..	56	..	130	..	..	..	200
70 Iran, Islamic Rep. of	19	24	..	4	127	48	131	5	46	8
71 Lithuania	56	71	..	..	..	..	..	..	..	..
72 Cuba	38	50	..	..	..	..	..	..	..	..
73 Libyan Arab Jamahiriya	9	12	..	..	..	..	..	..	..	..
74 Botswana	41	49	..	56	..	159	..	151	..	238
75 Tunisia	26	33	..	..	..	..	..	..	..	..
76 Saudi Arabia	9	11	..	..	..	..	..	..	..	..
77 Suriname	31	41	..	27	..	232	..	96	..	150
78 Syrian Arab Rep.	16	21	..	..	..	..	..	..	..	..
79 Saint Vincent	..	..	..	..	..	..	..	..	..	..
80 Jordan	10	13	..	..	..	..	..	..	..	..
81 Moldova, Rep. of	65	81	..	..	..	..	..	..	..	..
82 Albania	59	69	..	..	..	..	..	..	..	..
83 Korea, Dem. People's Rep. of	66	79	..	..	..	..	..	..	..	..
84 Saint Lucia	..	..	..	..	..	..	..	..	..	..
85 Algeria	8	11	99	6	132	38	200	13	142	23
86 Turkmenistan	59	74	..	..	..	..	..	..	..	..
87 Paraguay	23	26	107	19	93	105	128	86	118	255
88 Jamaica	68	82	..	..	..	147	..	..	..	255
89 Kyrgyzstan	58	74	..	..	..	..	..	..	..	..
90 Armenia	58	88	..	..	..	..	..	..	..	..
91 Oman	9	11	..	..	..	..	..	..	..	..
92 Georgia	55	71	..	..	..	..	..	..	..	..
93 Peru	25	32	411	28	123	69	161	109	65	60
94 Uzbekistan	61	78	..	..	..	..	..	..	..	..
95 South Africa	41	54	411	21	101	88	..	..	98	196
96 Dominican Rep.	16	19	..	..	..	..	..	..	..	..
97 Sri Lanka	29	36	116	7	121	98	275	28	162	61
98 Romania	54	77	..	..	..	..	..	..	..	..
99 Azerbaijan	56	70	..	..	..	..	..	..	..	..
100 Philippines	36	44	97	38	111	172	123	168	88	138
101 Lebanon	25	34	..	..	..	..	..	..	..	..
102 Samoa (Western)	49	59	131	14	108	88	130	113	98	118
103 Tajikistan	58	73	..	..	..	..	..	..	..	..
104 Indonesia	37	44	108	7	127	69	122	79	133	135
105 Guyana	29	34	..	..	..	..	..	..	..	..
106 Iraq	23	29	..	15	..	78	..	7	..	19
107 Egypt	9	12	234	12 <sup>a</sup>	118	39	351	40	60	9
108 Namibia	25	30	..	26	..	69	..	..	..	..
109 Nicaragua	30	37	..	..	..	..	..	..	..	..
110 Mongolia	72	83	..	..	..	..	..	..	..	..
111 China	70	81	..	13	..	82	..	65	..	107
112 Guatemala	18	21	172	48	111	82	156	118	120	261
113 Bolivia	26	31	..	20	..	72	..	183	..	263
114 Gabon	45	55	..	..	..	..	..	..	..	..
115 El Salvador	29	35	202	22	101	76	124	148	88	261
116 Honduras	23	27	122	38	106	100	177	147	99	263
117 Morocco	21	26	..	..	..	..	..	..	..	..
118 Maldives	25	30	..	16	..	53	..	33	..	14
119 Vanuatu	51	60	..	15	..	54	..	..	..	..
120 Viet Nam	69	82	..	..	..	..	..	..	..	..
121 Zimbabwe	43	49	..	18	..	67	..	52	..	42
122 Congo	50	61	..	..	..	..	..	..	..	..
123 Cape Verde	33	36	..	30	..	94	..	170	..	134
124 Swaziland	51	60	..	17	..	119	..	116	..	82
125 Solomon Islands	51	60	..	3	..	38	..	37	..	65
126 Papua New Guinea	57	65	..	..	..	..	..	..	..	..
127 Cameroon	39	46	..	11	..	32	..	59	..	46

## WOMEN AND ECONOMIC OPPORTUNITIES

HDI rank	ECONOMIC ACTIVITY		OCCUPATION							
	Rate (age 15+)		Administrative and managerial		Professional and technical		Clerical and sales		Services	
	Female (%) 1994	Female as % of male 1994	Female share (1970=100) 1990	Female as % of male 1990	Female share (1970=100) 1990	Female as % of male 1990	Female share (1970=100) 1990	Female as % of male 1990	Female share (1970=100) 1990	Female as % of male 1990
Low human development	37	42	..	..	..	..	..	..	..	..
128 Pakistan	14	16	..	3	..	22	..	3	..	16
129 Ghana	51	63	..	..	..	..	..	..	..	..
130 Kenya	55	62	..	..	..	..	..	..	..	..
131 Lesotho	63	69	..	50	..	130	..	144	..	209
132 Myanmar	47	56	..	..	..	..	..	..	..	..
133 São Tomé and Príncipe	..	..	..	..	..	..	..	..	..	..
134 India	28	34	..	..	..	..	..	..	..	..
135 Madagascar	53	60	..	..	..	..	..	..	..	..
136 Zambia	35	41	58	6	152	47	330	136	215	29
137 Yemen	11	13	..	..	..	..	..	..	..	..
138 Lao People's Dem. Rep.	68	77	..	..	..	..	..	..	..	..
139 Comoros	57	63	..	..	..	..	..	..	..	..
140 Togo	45	52	..	..	..	..	..	..	..	..
141 Nigeria	45	51	..	6	..	35	..	140	..	13
142 Equatorial Guinea	52	63	..	..	..	..	..	..	..	..
143 Zaire	44	52	..	..	..	..	..	..	..	..
144 Sudan	26	30	..	..	..	..	..	..	..	..
145 Côte d'Ivoire	47	54	..	..	..	..	..	..	..	..
146 Bangladesh	62	73	348	5	392	30	354	4	201	87
147 Tanzania, U. Rep. of	75	85	..	..	..	..	..	..	..	..
148 Haiti	54	64	458	48	107	65	102	752	93	188
149 Central African Rep.	65	74	..	10	..	23	..	146	..	13
150 Mauritania	25	29	..	8	..	26	..	33	..	81
151 Nepal	42	48	..	..	..	..	..	..	..	..
152 Senegal	51	60	..	..	..	..	..	..	..	..
153 Cambodia	50	59	..	..	..	..	..	..	..	..
154 Djibouti	57	64	..	2	..	25	..	..	..	..
155 Benin	75	85	..	..	..	..	..	..	..	..
156 Rwanda	77	83	..	9	..	47	..	48	..	35
157 Malawi	55	62	..	5	..	53	..	58	..	39
158 Uganda	59	65	..	..	..	..	..	..	..	..
159 Liberia	35	41	..	..	..	..	..	..	..	..
160 Bhutan	42	47	..	..	..	..	..	..	..	..
161 Gambia	56	62	..	..	..	..	..	..	..	..
162 Chad	22	25	..	..	..	..	..	..	..	..
163 Guinea-Bissau	55	61	..	..	..	..	..	..	..	..
164 Angola	50	58	..	..	..	..	..	..	..	..
165 Burundi	76	82	..	16	..	44	..	..	..	..
166 Somalia	51	59	..	..	..	..	..	..	..	..
167 Mozambique	76	85	..	..	..	..	..	..	..	..
168 Guinea	55	61	..	..	..	..	..	..	..	..
169 Burkina Faso	75	81	..	16	..	35	..	168	..	28
170 Afghanistan	9	11	..	..	..	..	..	..	..	..
171 Ethiopia	50	56	..	..	..	..	..	..	..	..
172 Mali	15	17	..	25	..	23	..	130	..	71
173 Sierra Leone	37	45	..	9	..	47	..	191	..	18
174 Niger	78	83	..	..	..	..	..	..	..	..
All developing countries	50	55	..	..	..	..	..	..	..	..
Industrial countries	46	61	..	..	..	..	..	..	..	..
World	..	..	..	..	..	..	..	..	..	..
Arab States	18	21	..	..	..	..	..	..	..	..
East Asia	69	80	..	13	..	82	..	65	..	108
Latin America and the Caribbean	30	37	..	..	..	..	..	..	..	..
South Asia	29	35	..	..	..	..	..	..	..	..
South-East Asia and the Pacific	49	56	..	..	..	..	..	..	..	..
Sub-Saharan Africa	52	58	..	..	..	..	..	..	..	..
Least developed countries	53	57	..	..	..	..	..	..	..	..
European Union	40	52	..	..	..	..	..	..	..	..
Nordic countries	56	76	242	84	129	161	..	..	93	242
OECD	44	57	216	39	125	89	111	134	98	135

a. ILO 1994b.

Source: Column 1: UN forthcoming (*The World's Women*) [ILO]; column 2: calculated on the basis of estimates from UN forthcoming (*The World's Women*) [ILO]; columns 3-10: calculated on the basis of data from UN 1994i [ILO].

## WOMEN AND POLITICAL PARTICIPATION

HDI rank	LOCAL		PARLIAMENTARY		EXECUTIVE
	Municipalities or equivalent		Upper and lower chambers		Share of women at ministerial level <sup>a</sup> (%) (as of 31/5/1994)
	Female council members (%) 1990-94	Female mayors (%) 1990-94	Seats held by women (as of 30/6/1994)	Share of seats held by women (%) (as of 30/6/1994)	
High human development	15	6	..	11	9
1 Canada	18	..	69	17	14
2 USA	21	16	55	10	15
3 Japan	3	0	51	7	6
4 Netherlands	22	12	66	29	31
5 Finland	30	16	78	39	39
6 Iceland	25	15	15	24	15
7 Norway	28	23	65	39	35
8 France	17	5	51	6	7
9 Spain	13	5	88	15	14
10 Sweden	34	..	117	34	30
11 Australia	19	..	28	13	13
12 Belgium	14	4	40	10	11
13 Switzerland	23	..	39	16	17
14 Austria	..	6	52	21	16
15 Germany	20	..	146	20	16
16 Denmark	28	10	59	33	29
17 New Zealand	35 <sup>b</sup>	13	21	21	8
18 United Kingdom	25	..	137	7	9
19 Ireland	17	12	28	12	16
20 Italy	10	4	124	13	12
21 Israel	11	0	11	9	9
22 Greece	9	2	18	6	5
23 Cyprus	..	..	3	5	7
24 Hong Kong	7	..	2	5	10
25 Barbados	..	..	7	14	0
26 Bahamas	..	..	7	11	23
27 Luxembourg	10	10	12	20	9
28 Costa Rica	14	0	8	14	10
29 Belize	..	0	3	8	6
30 Argentina	..	4	43	14	0
31 Korea, Rep. of	1	..	3	1	4
32 Uruguay	10	16	6	5	0
33 Chile	12	7	12	7	13
34 Malta	..	..	1	2	0
35 Singapore	..	..	3	4	0
36 Portugal	10	2	20	9	10
37 Saint Kitts and Nevis	..	..	1	6	13
38 Czech Rep.	17	5	20	10	0
39 Trinidad and Tobago	21	14	12	18	19
40 Slovakia	..	12	23	18	5
41 Brunei Darussalam	..	..	—	—	0
42 Belarus	..	..	13	4	3
43 Estonia	24	14	14	14	15
44 Bahrain	..	..	—	—	0
45 United Arab Emirates	..	..	0	0	0
46 Fiji	5	0	6	6	10
47 Venezuela	16	6	15	6	11
48 Latvia	39	..	15	15	0
49 Panama	10	9	5	7	13
50 Hungary	..	17	42	11	0 <sup>c</sup>
51 Poland	10	6	73	13	7
52 Russian Federation	30	0	52	8	0 <sup>c</sup>
53 Mexico	..	3	41	7	5
54 Ukraine	31	..	12	4	0 <sup>c</sup>
55 Antigua and Barbuda	..	..	4	12	0
56 Qatar	..	..	—	—	0
57 Colombia	5	6	25	9	11
58 Thailand	6	7	23	4	0
59 Malaysia	10	..	25	10	7
60 Mauritius	1	0	2	3	3
61 Kuwait	..	..	0	0	0
62 Seychelles	..	..	9	27	31
63 Brazil	..	4	32	5	5

## WOMEN AND POLITICAL PARTICIPATION

HDI rank	LOCAL		PARLIAMENTARY		EXECUTIVE
	Municipalities or equivalent		Upper and lower chambers		Share of women at ministerial level <sup>a</sup> (%) (as of 31/5/1994)
	Female council members (%) 1990-94	Female mayors (%) 1990-94	Seats held by women (as of 30/6/1994)	Share of seats held by women (%) (as of 30/6/1994)	
Medium human development	..	..	..	12	4
64 Kazakhstan	..	..	20	11	6
65 Bulgaria	20	13	31	13	0 <sup>c</sup>
66 Turkey	1	0	8	2	5
67 Grenada	..	..	4	14	10
68 Ecuador	5	3	4	5	6
69 Dominica	..	..	4	13	8
70 Iran, Islamic Rep. of	..	..	9	3	0
71 Lithuania	..	0	10	7	0
72 Cuba	14	5	134	23	4
73 Libyan Arab Jamahiriya	..	..	..	..	0
74 Botswana	..	..	2	5	6
75 Tunisia	14	0	11	7	4
76 Saudi Arabia	..	..	..	..	0 <sup>c</sup>
77 Suriname	..	..	3	6	0 <sup>c</sup>
78 Syrian Arab Rep.	..	..	21	8	7
79 Saint Vincent	••	••	2	13	11
80 Jordan	..	..	3	3	3
81 Moldova, Rep. of	..	..	5	5	0
82 Albania	..	..	8	6	0 <sup>c</sup>
83 Korea, Dem. People's Rep. of	..	..	138	20	8
84 Saint Lucia	41	33	4	14	8
85 Algeria	..	..	12	7	4
86 Turkmenistan	..	..	8	5	3
87 Paraguay	10	5	7	6	7
88 Jamaica	13	25	10	12	5
89 Kyrgyzstan	30	..	22	6	5
90 Armenia	..	..	9	4	3
91 Oman	..	..	..	..	0 <sup>c</sup>
92 Georgia	..	..	14	6	0
93 Peru	..	6	7	9	6
94 Uzbekistan	..	..	48	10	3
95 South Africa	..	6	116	24	7
96 Dominican Rep.	10	5	15	10	4
97 Sri Lanka	1 <sup>b</sup>	..	11	5	3
98 Romania	..	14	14	3	0
99 Azerbaijan	..	..	1	2	5
100 Philippines	13	8	25	11	8
101 Lebanon	..	0	3	2	0
102 Samoa (Western)	..	0	2	4	6
103 Tajikistan	..	..	7	3	3
104 Indonesia	12	1	61	12	6
105 Guyana	22	17	13	20	11
106 Iraq	..	..	27	11	0
107 Egypt	1	..	10	2	4
108 Namibia	..	..	5	7	10
109 Nicaragua	13	10	15	16	10
110 Mongolia	9	..	3	4	0
111 China	..	..	626	21	6
112 Guatemala	6	1	6	5	20
113 Bolivia	8	..	10	6	0
114 Gabon	..	..	7	6	7
115 El Salvador	15	11	9	11	10
116 Honduras	11	13	10	8	11
117 Morocco	0	..	2	1	0
118 Maldives	..	..	2	4	5
119 Vanuatu	..	0	1	2	7
120 Viet Nam	22 <sup>b</sup>	..	73	18	5
121 Zimbabwe	..	4	18	12	3
122 Congo	4	..	2	1	6
123 Cape Verde	9	8	6	8	13
124 Swaziland	..	0	8	8	0
125 Solomon Islands	..	..	1	2	5
126 Papua New Guinea	..	..	0	0	0
127 Cameroon	8 <sup>b</sup>	18	22	12	3

## WOMEN AND POLITICAL PARTICIPATION

HDI rank	LOCAL		PARLIAMENTARY		EXECUTIVE
	Municipalities or equivalent		Upper and lower chambers		Share of women at ministerial level <sup>a</sup> (%) (as of 31/5/1994)
	Female council members (%) 1990-94	Female mayors (%) 1990-94	Seats held by women (as of 30/6/1994)	Share of seats held by women (%) (as of 30/6/1994)	
Low human development	..	..	..	6	5
128 Pakistan	..	..	5	2	4
129 Ghana	8	..	15	8	11
130 Kenya	3	..	6	3	0
131 Lesotho	..	..	1	2	6
132 Myanmar	..	..	..	..	0
133 São Tomé and Príncipe	..	..	6	11	0
134 India	..	..	56	7	3
135 Madagascar	..	..	5	4	0
136 Zambia	1	6	10	7	6
137 Yemen	11	..	2	1	0
138 Lao People's Dem. Rep.	..	..	8	9	0
139 Comoros	..	..	1	2	0
140 Togo	..	..	1	1	5
141 Nigeria	..	1	14	2 <sup>d</sup>	3
142 Equatorial Guinea	..	..	7	9	4
143 Zaire	..	4	31	4	7
144 Sudan	..	..	14	5	0
145 Côte d'Ivoire	..	3 <sup>b</sup>	8	5	8
146 Bangladesh	..	0	34	10	8
147 Tanzania, U. Rep. of	2	0	28	11	13
148 Haiti	..	..	3	3	13
149 Central African Rep.	..	..	3	4	5
150 Mauritania	..	1	0	0	0
151 Nepal	1	..	7	3	0
152 Senegal	8	0	14	12	7
153 Cambodia	..	..	5	4	0
154 Djibouti	..	..	0	0	0 <sup>c</sup>
155 Benin	..	0	4	6	10
156 Rwanda	1	0	12	17	9
157 Malawi	..	..	10	6	9
158 Uganda	..	..	47	17	10
159 Liberia	..	..	2	6	5
160 Bhutan	..	..	0	0	22
161 Gambia	..	..	4	8	0
162 Chad	..	0	9	16	5
163 Guinea-Bissau	..	..	19	13	4
164 Angola	..	..	21	10	6
165 Burundi	..	..	8	10	7
166 Somalia	..	..	..	..	0 <sup>c</sup>
167 Mozambique	27	..	39	16	0
168 Guinea	..	3	..	..	9
169 Burkina Faso	..	18	6	6	17
170 Afghanistan	..	..	7	2 <sup>d</sup>	0
171 Ethiopia	..	..	1	1	10
172 Mali	..	0	3	2	10
173 Sierra Leone	..	..	..	..	0
174 Niger	..	..	5	6	5
All developing countries	..	..	..	10	5
Industrial countries	..	..	..	12	8
World	..	..	..	10	6
Arab States	..	..	..	4	1
East Asia	..	..	..	19	6
Latin America and the Caribbean	10	4	..	10	8
South Asia	..	..	..	5	3
South-East Asia and the Pacific	..	..	..	9	3
Sub-Saharan Africa	..	..	..	8	6
Least developed countries	..	..	..	6	5
European Union	16	5	..	14	16
Nordic countries	29	17	..	35	31
OECD	16	6	..	13	15

— No representative institutions. •• No local representative structure.

a. Including elected heads of state and governors of central banks.

b. Before 1990-94.

c. 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.

d. The parliament has been dissolved.

Source: *Columns 1 and 2*: national reports for the Fourth World Conference on Women, FLACSO 1994, UN 1988, 1991b, 1992a, 1992b, 1992d, 1993a and 1994a and International Colloquium of Mayors for Social Development 1994; *columns 3 and 4*: calculated on the basis of data from IPU 1994; *column 5*: data from UN 1994i as analysed by the United Nations Division for the Advancement of Women (revised by the Human Development Report Office in 1995).



## WOMEN IN A CHANGING SOCIETY

## LIFE-CYCLE TRANSITIONS

## DISPLACEMENT

HDI rank	Female child economically active rate (% age 10-14)		Women's average age at marriage				Fertility rate (per 1,000 women, age 15-19)		Female-headed households (%)		Female refugees <sup>d</sup> (thousands)	Female refugees as % of male refugees <sup>d</sup>
	1970 <sup>a</sup>	1990 <sup>b</sup>	Years		As % of men's		1970 <sup>a</sup>	1990 <sup>b</sup>	1980 <sup>c</sup>	1990 <sup>b</sup>	1993	1993
			1970 <sup>a</sup>	1990 <sup>b</sup>	1970 <sup>a</sup>	1990 <sup>b</sup>	1970 <sup>a</sup>	1990 <sup>b</sup>	1980 <sup>c</sup>	1990 <sup>b</sup>		
High human development	4.5	..	22.5	..	88	..	51.2	44.7	19.3	25.2	70T	..
1 Canada	1.8	..	22.0	24.3	90	92	42.1	25.0	25.4	..	..	..
2 USA	1.2	..	21.5	..	91	..	69.2	60.0	..	32.3	..	..
3 Japan	1.0	..	24.7	26.9	90	89	4.4	3.5	15.2	17.0	..	..
4 Netherlands	1.9	..	23.1	..	92	..	22.6	8.3	..	..	..	..
5 Finland	0.4	..	22.5	26.1	88	92	32.2	12.1	..	..	..	..
6 Iceland	0.8	..	..	..	..	..	73.1	30.4	..	..	..	..
7 Norway	0.1	..	21.9	..	88	..	44.6	16.9	37.6	..	..	..
8 France	1.6	..	23.1	..	89	..	26.4	9.0	21.9	..	..	..
9 Spain	3.5	..	23.7	..	86	..	14.1	16.7	15.8	..	..	..
10 Sweden	0.4	..	23.7	24.7	90	90	34.0	12.7	26.7	..	..	..
11 Australia	1.2	..	21.5	..	88	..	50.9	22.0	24.6	..	..	..
12 Belgium	0.5	..	21.5	..	89	..	31.1	12.2	21.5	..	..	..
13 Switzerland	0.2	..	22.6	..	87	..	22.8	6.6	25.1	..	..	..
14 Austria	2.6	..	21.9	..	84	..	61.4	21.3	31.2	..	..	..
15 Germany	1.1	..	..	..	..	..	..	..	..	30.2	..	..
16 Denmark	0.6	..	22.0	..	88	..	32.4	9.1	..	..	..	..
17 New Zealand	0.1	..	21.3	26.7	89	93	64.3	35.0	23.9	..	..	..
18 United Kingdom	0.1	..	21.1	..	88	..	49.7	33.0	25.2	..	..	..
19 Ireland	2.2	0.3	23.5	..	91	..	16.9	16.0	..	..	..	..
20 Italy	3.3	0.4	22.6	..	83	..	42.8	10.0	19.9	..	..	..
21 Israel	1.0	..	22.8	..	90	..	49.6	20.3	18.4	..	..	..
22 Greece	6.5	0.8	..	..	..	..	36.5	26.3	16.0	..	0.5	42
23 Cyprus	5.3	0.7	24.2	..	93	..	21.2	27.0	..	..	..	..
24 Hong Kong	8.3	2.5	23.8	26.6	79	91	17.7	6.0	..	25.7	13.4	84
25 Barbados	4.2	0.9	..	..	..	..	94.3	43.8	43.9	..	..	..
26 Bahamas	8.6	6.1	22.4	..	86	..	77.1	67.7	..	..	..	..
27 Luxembourg	1.1	..	21.4	..	84	..	28.0	11.6	22.5	..	..	..
28 Costa Rica	3.5	0.9	21.7	..	85	..	93.8	..	17.6	20.0	5.6	86
29 Belize	..	..	..	..	..	..	142.6	132.1	..	..	1.7	100
30 Argentina	6.2	0.7	22.9	..	88	..	68.5	74.0	19.2	..	0.9	45
31 Korea, Rep. of	3.6	0.7	23.3	24.7	86	89	12.0	3.7	14.7	15.7	..	..
32 Uruguay	3.9	0.5	..	22.9	..	91	51.8	57.3	21.0	23.0	..	..
33 Chile	1.6	0.2	23.3	..	91	..	68.9	66.0	21.6	21.0	..	..
34 Malta	1.0	0.7	24.0	..	93	..	12.6	11.9	..	..	..	..
35 Singapore	2.9	0.5	24.3	27.0	87	91	26.2	8.0	18.2	..	..	..
36 Portugal	9.5	1.8	23.3	..	91	..	29.4	26.3	17.9	..	..	..
37 Saint Kitts and Nevis	..	..	..	..	..	..	152.2	88.8	45.6	..	..	..
38 Czech Rep.	..	..	..	..	..	..	..	44.7	..	25.6	..	..
39 Trinidad and Tobago	1.0	0.2	22.1	..	81	..	83.2	70.0	25.3	..	..	..
40 Slovakia	..	..	..	..	..	..	..	..	..	..	..	..
41 Brunei Darussalam	19.9	8.3	22.4	25.0	85	96	73.4	36.0	..	..	..	..
42 Belarus	..	..	..	..	..	..	..	45.2	..	..	..	..
43 Estonia	..	..	..	..	..	..	..	43.5	..	15.8	..	..
44 Bahrain	1.0	0.7	20.0	25.5	78	88	..	16.0	..	..	..	..
45 United Arab Emirates	1.8	1.9	..	23.1	..	90	..	56.0	..	..	..	..
46 Fiji	1.5	1.2	21.1	22.5	86	89	77.0	62.0	..	12.4	..	..
47 Venezuela	2.5	0.4	20.4	..	80	..	114.1	100.9	21.8	21.3	..	..
48 Latvia	..	..	..	..	..	..	..	43.2	..	..	..	..
49 Panama	4.4	1.0	20.4	21.9	82	86	133.7	94.1	21.5	22.3	..	..
50 Hungary	2.5	0.2	20.9	..	84	..	50.5	40.1	19.9	..	..	..
51 Poland	0.7	..	..	23.0	..	88	30.0	31.5	26.7	..	..	..
52 Russian Federation	..	..	..	..	..	..	..	51.4	..	..	2.3	77
53 Mexico	3.5	1.2	21.2	..	87	..	91.9	84.0	15.2	..	20.9	97
54 Ukraine	..	..	..	..	..	..	..	59.7	..	..	..	..
55 Antigua and Barbuda	..	..	..	..	..	..	..	..	..	..	..	..
56 Qatar	1.9	2.2	..	22.7	..	86	..	43.0	..	..	..	..
57 Colombia	5.7	1.6	22.4	22.6	86	87	101.0	70.0	..	22.7	..	..
58 Thailand	38.2	14.5	22.0	..	89	..	52.3	62.0	16.5	..	17.6	80
59 Malaysia	8.6	1.9	22.3	..	86	..	53.6	19.4	17.7	..	2.8	60
60 Mauritius	2.3	1.4	22.5	22.8	83	82	58.0	44.9	18.5	..	..	..
61 Kuwait	2.1	1.8	19.6	22.4	74	89	132.0	42.4	5.0	..	..	..
62 Seychelles	..	..	25.6	23.8	88	90	105.2	63.0	..	..	..	..
63 Brazil	7.8	2.6	23.0	..	88	..	68.0	56.0	14.4	20.1	0.4	29

## WOMEN IN A CHANGING SOCIETY

HDI rank	LIFE-CYCLE TRANSITIONS										DISPLACEMENT	
	Female child economically active rate (% age 10-14)		Women's average age at marriage				Fertility rate (per 1,000 women, age 15-19)		Female-headed households (%)		Female refugees <sup>d</sup> (thousands) 1993	Female refugees as % of male refugees <sup>d</sup> 1993
			Years		As % of men's							
	1970 <sup>a</sup>	1990 <sup>b</sup>	1970 <sup>a</sup>	1990 <sup>b</sup>	1970 <sup>a</sup>	1990 <sup>b</sup>	1970 <sup>a</sup>	1990 <sup>b</sup>	1980 <sup>c</sup>	1990 <sup>b</sup>		
Medium human development	26.7	13.8	..	..	..	..	..	41.3	13.8	16.6	400T	..
64 Kazakhstan	..	..	..	..	..	..	..	51.7	..	..	..	..
65 Bulgaria	0.9	0.1	20.7	21.1	86	85	71.5	69.9	..	..	..	..
66 Turkey	25.1	8.1	20.3	21.5	85	87	81.1	..	10.0	..	..	..
67 Grenada	..	..	..	..	..	..	..	..	45.3	..	..	..
68 Ecuador	5.0	1.7	21.1	..	85	..	81.4	91.0	..	..	..	..
69 Dominica	..	..	..	..	..	..	..	..	37.7	..	..	..
70 Iran, Islamic Rep. of	7.2	5.2	18.5	..	74	..	..	88.5	7.3	..	110.3	49
71 Lithuania	..	..	..	..	..	..	..	34.8	..	..	..	..
72 Cuba	0.4	0.0	19.5	..	84	..	127.8	81.2	28.2	..	..	..
73 Libyan Arab Jamahiriya	2.7	1.4	18.7	..	76	..	271.9	..	..	..	..	..
74 Botswana	15.3	4.3	24.8	25.0	85	..	77.0	125.0	45.2	45.9	..	..
75 Tunisia	..	..	20.9	25.0	77	..	46.3	17.0	10.4	..	..	..
76 Saudi Arabia	2.0	2.2	19.0	21.7	74	85	..	55.0	..	..	5.4	29
77 Suriname	0.7	0.1	..	..	..	..	..	..	..	..	..	..
78 Syrian Arab Rep.	6.5	6.0	20.7	..	80	..	..	..	..	..	..	..
79 Saint Vincent	..	..	..	..	..	..	..	..	42.4	..	..	..
80 Jordan	1.5	1.0	..	24.7	..	89	124.0	49.0	..	..	..	..
81 Moldova, Rep. of	..	..	..	..	..	..	..	62.8	..	..	..	..
82 Albania	4.0	1.6	..	..	..	..	..	..	..	..	..	..
83 Korea, Dem. People's Rep. of	6.5	1.0	..	..	..	..	..	..	..	..	..	..
84 Saint Lucia	..	..	28.7	..	90	..	..	113.6	38.8	..	..	..
85 Algeria	1.3	0.9	19.3	23.7	79	86	..	144.0	..	11.0	..	..
86 Turkmenistan	..	..	..	..	..	..	..	26.0	..	..	..	..
87 Paraguay	5.5	2.6	21.7	..	82	..	88.0	97.0	18.1	17.0	..	..
88 Jamaica	0.5	0.1	30.0	..	91	..	..	100.0	..	..	..	..
89 Kyrgyzstan	..	..	..	..	..	..	..	51.0	..	..	..	..
90 Armenia	..	..	..	..	..	..	..	79.9	..	..	..	..
91 Oman	1.7	1.8	..	19.2	..	75	..	134.0	..	..	..	..
92 Georgia	..	..	..	..	..	..	..	58.8	..	..	..	..
93 Peru	4.1	1.6	21.6	..	85	..	75.0	62.0	..	17.3	..	..
94 Uzbekistan	..	..	..	..	..	..	..	44.1	..	..	..	..
95 South Africa	1.5	0.0	..	..	..	..	86.7	124.0	..	..	..	..
96 Dominican Rep.	1.9	1.4	19.7	..	75	..	123.0	88.0	21.7	25.0	..	..
97 Sri Lanka	4.2	1.4	23.5	..	84	..	49.6	35.0	17.4	..	..	..
98 Romania	0.9	0.1	20.2	..	82	..	66.0	52.1	..	..	..	..
99 Azerbaijan	..	..	..	..	..	..	..	31.6	..	..	..	..
100 Philippines	12.8	4.7	22.8	23.8	90	90	36.3	42.5	..	11.3	..	..
101 Lebanon	5.9	3.6	23.2	..	81	..	40.0	..	..	..	..	..
102 Samoa (Western)	..	..	22.0	24.6	84	88	42.3	29.0	..	12.5	..	..
103 Tajikistan	..	..	..	..	..	..	..	46.6	..	..	239.2	85
104 Indonesia	13.3	6.0	19.3	21.1	81	85	127.0	67.0	14.2	13.0	..	..
105 Guyana	1.4	0.3	21.5	..	87	..	97.8	..	24.4	..	..	..
106 Iraq	1.6	5.0	20.6	22.3	81	85	75.0	39.0	..	..	10.1	95
107 Egypt	4.9	3.5	20.0	22.0	76	..	..	76.0	..	12.0	..	..
108 Namibia	18.3	3.7	..	..	..	..	..	109.0	..	..	..	..
109 Nicaragua	4.5	3.3	20.2	..	82	..	144.2	..	..	24.3	..	..
110 Mongolia	3.8	1.2	..	..	..	..	..	..	..	..	..	..
111 China	38.0	22.3	..	..	..	..	19.9	22.2	..	..	..	..
112 Guatemala	4.4	3.1	19.7	..	83	..	134.4	125.5	..	16.9	..	..
113 Bolivia	9.8	6.8	..	..	..	..	95.0	94.0	..	..	..	..
114 Gabon	20.2	13.1	..	..	..	..	..	..	..	..	..	..
115 El Salvador	5.2	2.8	19.4	..	79	..	149.2	107.3	..	26.6	..	..
116 Honduras	3.0	1.0	20.0	..	82	..	130.6	134.8	..	20.4	..	..
117 Morocco	8.7	10.3	19.4	..	78	..	..	49.0	..	17.3	..	..
118 Maldives	16.7	9.1	..	..	..	..	..	..	..	..	..	..
119 Vanuatu	..	..	21.0	22.5	80	90	26.0	81.0	11.4	..	..	..
120 Viet Nam	25.0	8.1	..	23.2	..	95	..	35.0	..	31.9	2.8	122
121 Zimbabwe	33.4	21.3	..	20.7	..	..	29.6	109.0	..	32.6	..	..
122 Congo	22.1	9.5	19.6	..	74	..	107.0	..	21.1	..	2.0	87
123 Cape Verde	6.2	5.0	..	..	..	..	..	77.9	..	..	..	..
124 Swaziland	33.6	20.8	..	29.0	..	92	..	..	..	40.3	..	..
125 Solomon Islands	33.3	22.4	22.3	21.2	81	85	126.0	103.0	..	16.2	..	..
126 Papua New Guinea	41.7	26.6	19.4	20.8	79	85	80.0	..	..	..	1.7	85
127 Cameroon	28.8	16.1	..	19.7	..	..	..	164.0	13.8	18.5	24.1	121

## WOMEN IN A CHANGING SOCIETY

HDI rank	LIFE-CYCLE TRANSITIONS										DISPLACEMENT	
	Female child economically active rate (% age 10–14)		Women's average age at marriage				Fertility rate (per 1,000 women, age 15–19)		Female-headed households (%)		Female refugees <sup>d</sup> (thousands) 1993	Female refugees as % of male refugees <sup>d</sup> 1993
			Years		As % of men's							
	1970 <sup>a</sup>	1990 <sup>b</sup>	1970 <sup>a</sup>	1990 <sup>b</sup>	1970 <sup>a</sup>	1990 <sup>b</sup>	1970 <sup>a</sup>	1990 <sup>b</sup>	1980 <sup>c</sup>	1990 <sup>b</sup>		
Low human development	21.1	13.1	..	..	..	..	..	..	13.8	17.5	1,250T	..
128 Pakistan	4.5	3.3	19.7	21.7	77	82	61.1	84.0	4.3	..	..	..
129 Ghana	8.1	3.6	19.4	21.1	72	..	..	124.0	..	32.2	71.4	92
130 Kenya	36.6	27.1	..	21.1	..	..	..	152.0	..	22.0	140.4	114
131 Lesotho	15.0	9.9	20.3	..	78	..	..	..	..	..	..	..
132 Myanmar	29.7	17.6	21.3	..	88	..	..	22.0	16.0	..	..	..
133 São Tomé and Príncipe	..	..	..	..	..	..	..	..	..	..	..	..
134 India	20.8	10.9	17.7	..	78	..	..	88.3	..	..	13.3	110
135 Madagascar	34.4	24.0	..	..	..	..	131.7	..	15.5	..	..	..
136 Zambia	20.9	13.9	18.2	20.0	75	..	..	156.0	27.8	16.2	14.3	99
137 Yemen	7.3	6.4	..	..	..	..	..	103.0	..	..	..	..
138 Lao People's Dem. Rep.	32.0	13.2	..	..	..	..	..	..	..	..	..	..
139 Comoros	37.5	28.5	..	..	..	..	..	..	16.3	..	..	..
140 Togo	35.4	25.9	18.5	20.3	70	..	..	127.0	..	26.4	..	..
141 Nigeria	19.5	12.8	..	..	..	..	..	144.0	..	..	1.3	38
142 Equatorial Guinea	31.8	14.7	..	..	..	..	..	..	..	..	..	..
143 Zaire	30.3	14.0	..	..	..	..	..	..	16.1	..	124.2	98
144 Sudan	10.1	6.3	18.7	24.1	72	..	..	69.0	..	..	179.4	104
145 Côte d'Ivoire	33.8	15.9	..	..	..	..	..	193.0	15.6	..	128.7	105
146 Bangladesh	4.0	3.4	16.4	18.0	68	71	219.0	79.0	16.8	..	99.7	101
147 Tanzania, U. Rep. of	44.6	33.3	17.9	20.6	74	..	..	144.0	..	18.6	..	..
148 Haiti	41.0	20.8	22.4	..	80	..	66.0	103.0	30.0	..	..	..
149 Central African Rep.	44.5	28.9	..	18.9	..	78	..	170.0	..	18.7	16.5	92
150 Mauritania	14.7	7.7	..	23.1	..	78	..	78.0	..	..	..	..
151 Nepal	36.2	30.7	17.5	..	83	..	131.0	..	..	..	42.2	91
152 Senegal	43.6	31.7	..	23.7	..	78	..	..	..	..	30.2	110
153 Cambodia	27.6	18.9	..	..	..	..	..	..	..	..	..	..
154 Djibouti	38.1	28.0	..	19.3	..	71	..	..	..	18.4	18.0	112
155 Benin	28.6	18.4	..	..	..	..	..	..	21.0	..	61.9	114
156 Rwanda	47.5	40.0	20.1	..	89	..	..	..	25.2	..	..	..
157 Malawi	43.5	29.0	..	..	..	..	..	..	..	..	..	..
158 Uganda	39.1	31.2	17.7	19.0	74	..	179.0	187.0	..	20.6	..	..
159 Liberia	19.9	13.3	18.7	19.7	70	..	217.0	..	..	19.1	1.1	92
160 Bhutan	36.2	30.7	..	..	..	..	..	..	..	..	..	..
161 Gambia	36.6	27.2	..	..	..	..	156.0	..	..	..	..	..
162 Chad	11.5	8.7	..	..	..	..	..	..	..	..	..	..
163 Guinea-Bissau	35.4	25.9	..	..	..	..	..	..	..	..	..	..
164 Angola	31.3	18.7	..	..	..	..	..	..	..	..	5.7	112
165 Burundi	47.5	40.0	21.5	21.9	91	..	..	52.0	..	24.7	0.9	100
166 Somalia	32.4	20.4	..	..	..	..	..	..	..	..	..	..
167 Mozambique	50.9	36.4	..	22.2	..	..	..	..	..	..	..	..
168 Guinea	36.3	25.9	..	..	..	..	..	..	12.7	..	287.3	99
169 Burkina Faso	47.1	39.1	..	..	..	..	..	152.0	5.1	9.7	..	..
170 Afghanistan	4.0	3.0	..	..	..	..	..	..	..	..	..	..
171 Ethiopia	35.4	25.5	..	..	..	..	..	102.4	15.5	..	18.3	71
172 Mali	15.0	12.3	..	16.4	..	..	..	201.0	15.1	..	..	..
173 Sierra Leone	19.0	8.6	..	18.0	..	66	212.0	..	..	10.8	..	..
174 Niger	49.9	40.5	..	16.3	..	69	..	142.0	..	9.7	..	..
All developing countries	22.6	12.3	..	..	..	..	..	64.1	..	..	1,470T	..
Industrial countries	1.5	..	..	..	..	..	43.0	36.0	..	..	240T	..
World	18.8	12.1	..	..	..	..	..	59.2	..	..	1,720T	..
Arab States	6.4	5.3	19.8	22.8	77	..	..	73.9	..	..	210T	..
East Asia	35.5	20.9	..	..	..	..	19.6	21.5	..	..	10T	..
Latin America and the Caribbean	6.0	2.1	22.1	..	86	..	84.8	74.6	17.0	..	30T	..
South Asia	16.7	9.1	17.9	..	77	..	..	86.1	..	..	270T	..
South-East Asia and the Pacific	20.0	8.5	20.7	22.1	85	88	90.4	51.6	..	..	20T	..
Sub-Saharan Africa	28.3	19.6	..	..	..	..	..	139.2	..	..	930T	..
Least developed countries	25.0	17.8	..	..	..	..	..	..	..	..	870T	..
European Union	2.0	..	22.5	..	87	..	34.0	16.7	21.5	..	..	..
Nordic countries	0.3	..	22.7	..	89	..	35.6	12.8	..	..	..	..
OECD	3.1	..	22.3	..	89	..	49.2	38.0	19.5	..	20T	..

a. Around 1970.

b. Around 1990.

c. Around 1980.

d. Based on selected information on UNHCR-assisted refugee populations by country of asylum. The data are not necessarily representative of the total refugee population, as the basis and quality vary greatly.

Source: Columns 1 and 2: UN 1994i [ILO]; columns 3–10: UN 1994i [UN]; columns 11 and 12: UN forthcoming (*The World's Women*) [UNHCR].

## CLOSING FEMALE-MALE GAPS

(INDEX: MALES=100)

HDI rank	LIFE SPAN		LITERACY		ENROLMENT RATIO						EMPLOYMENT	
	Life expectancy at birth		Adult literacy		Primary school age (6-11 years)		Secondary school age (12-17 years)		Tertiary school age (18-23 years)		Economic activity rate (age 15+)	
	1970	1992	1970	1992	1970	1990	1970	1990	1970	1990	1970	1994
High human development	109	109	..	..	100	99	94	99	71	102	47	55
1 Canada	110	109	..	..	100	100	99	100	67	127	47	63
2 USA	111	109	100	..	100	100	96	97*	83	119	53	65
3 Japan	108	108	..	..	100	100	100	102	41	66	60	64
4 Netherlands	108	108	..	..	102	104	90	102	40	81	35	42
5 Finland	112	111	..	..	99	98	102	100	108	139	70	82
6 Iceland	108	107	..	..	..	..	..	..	..	..	51	74
7 Norway	108	109	..	..	110	100	102	100	74	116	40	68
8 France	111	111	..	..	101	100	107	104	77	114	53	64
9 Spain	108	108	92	..	101	..	83	..	46	..	22	31
10 Sweden	107	108	..	..	102	100	101	101	83	125	54	77
11 Australia	110	108	..	..	101	100	86	104	51	113	45	61
12 Belgium	110	109	..	..	100	100	99	102	62	93	41	47
13 Switzerland	108	109	..	..	..	..	..	..	..	..	47	53
14 Austria	111	108	..	..	100	101	104	111	51	84	53	60
15 Germany	109	109	..	..	..	..	..	..	..	..	..	..
16 Denmark	107	108	..	..	100	100	96	104	72	105	54	77
17 New Zealand	109	108	..	..	100	100	95	100	65	104	41	53
18 United Kingdom	109	107	..	..	100	100	101	104	59	100	51	60
19 Ireland	107	108	..	..	102	102	105	105	64	99	35	41
20 Italy	109	109	97	..	100	100	84	102	57	90	37	44
21 Israel	105	105	90	..	100	104	103	106	85	97	43	49
22 Greece	105	107	82	..	100	..	84	..	46	..	32	35
23 Cyprus	104	106	..	..	..	..	..	..	..	..	47	56
24 Hong Kong	110	108	71	90	100	101	84	103	66	71	50	62
25 Barbados	108	107	100	98	100	100	109	92	71	149	54	78
26 Bahamas	110	113	..	99	100	100	104	102	..	214	39	48
27 Luxembourg	110	110	..	..	100	100	103	106	59	78	35	44
28 Costa Rica	106	106	100	100	99	101	102	99	84	85	22	29
29 Belize	102	104	100	..	..	..	..	..	..	..	21	36
30 Argentina	110	110	98	100	103	100	105	110	87	114	33	38
31 Korea, Rep. of	109	111	86	97	98	100	73	97	38	53	47	52
32 Uruguay	110	109	..	101	98	100	108	124	86	127	35	44
33 Chile	111	110	98	99	104	100	97	100	84	93	27	39
34 Malta	106	106	..	..	100	100	93	96	54	59	23	29
35 Singapore	106	107	65	88	96	100	93	101	42	86	36	58
36 Portugal	110	110	84	..	101	100	88	105	74	123	28	51
37 Saint Kitts and Nevis	..	..	100	..	..	..	..	..	..	..	..	..
38 Czech Rep.	110	110	..	..	..	..	..	..	..	..	71	84
39 Trinidad and Tobago	107	107	95	98	101	100	99	102	70	69	40	42
40 Slovakia	109	113	..	..	..	..	..	..	..	..	75	81
41 Brunei Darussalam	104	105	66	88	101	100	90	110	88	98	56	56
42 Belarus	113	116	..	..	..	..	..	..	..	..	80	75
43 Estonia	113	117	..	..	..	..	..	..	..	..	75	74
44 Bahrain	106	106	58	87	81	100	70	100	59	113	7	20
45 United Arab Emirates	106	103	33	99	63	100	46	108	24	264	9	23
46 Fiji	105	106	84	94	99	100	84	102	64	79	14	27
47 Venezuela	108	108	92	98	102	102	106	109	77	93	26	39
48 Latvia	113	118	..	..	..	..	..	..	..	..	76	73
49 Panama	104	106	98	99	101	101	96	102	91	120	35	40
50 Hungary	108	114	99	..	100	101	87	101	70	94	60	70
51 Poland	110	113	98	..	106	101	96	98	107	114	76	77
52 Russian Federation	116	119	..	..	..	..	..	..	..	..	74	70
53 Mexico	107	109	90	95	100	100	75	98	42	76	21	37
54 Ukraine	112	115	..	..	..	..	..	..	..	..	74	69
55 Antigua and Barbuda	..	..	..	..	..	..	..	..	..	..	..	..
56 Qatar	106	108	84	99	77	98	96	99	87	213	9	20
57 Colombia	106	109	97	100	107	102	98	109	60	105	26	28
58 Thailand	107	108	81	95	95	100	70	88	59	86	86	77
59 Malaysia	105	106	68	86	89	100	69	106	49	99	45	55
60 Mauritius	107	110	..	89	98	103	79	104	32	75	24	35
61 Kuwait	106	105	66	91	73	93	60	92	53	100	13	33
62 Seychelles	..	..	108	..	..	..	..	..	..	..	..	72
63 Brazil	108	107	91	99	104	94	95	95	88	113	27	38

## CLOSING FEMALE-MALE GAPS

(INDEX: MALES=100)

HDI rank	LIFE SPAN		LITERACY		ENROLMENT RATIO				EMPLOYMENT			
	Life expectancy at birth		Adult literacy		Primary school age (6–11 years)		Secondary school age (12–17 years)		Tertiary school age (18–23 years)		Economic activity rate (age 15+)	
	1970	1992	1970	1992	1970	1990	1970	1990	1970	1990	1970	1994
Medium human development	104	106	..	80	85	95	75	83	53	72	63	68
64 Kazakhstan	118	114	..	..	..	..	..	..	..	..	69	67
65 Bulgaria	107	110	90	..	100	100	103	99	85	108	78	88
66 Turkey	107	106	49	77	78	94	51	68	27	55	62	54
67 Grenada	..	..	100	..	..	..	..	..	..	..	..	80
68 Ecuador	105	108	90	96	99	101	89	95	58	89	19	24
69 Dominica	..	..	100	..	..	..	..	..	..	..	..	57
70 Iran, Islamic Rep. of	99	101	53	74	57	89	53	73	39	47	15	24
71 Lithuania	112	117	..	..	..	..	..	..	..	..	75	71
72 Cuba	105	105	..	99	101	100	102	110	67	128	24	50
73 Libyan Arab Jamahiriya	106	106	24	67	71	100	34	84	14	102	7	12
74 Botswana	107	106	119	72	112	105	97	111	29	74	61	49
75 Tunisia	102	103	29	67	70	92	48	79	31	70	13	33
76 Saudi Arabia	106	104	34	66	49	81	28	95	12	79	5	11
77 Suriname	107	107	..	95	100	100	98	103	52	132	32	41
78 Syrian Arab Rep.	106	106	34	62	64	100	43	74	27	68	12	21
79 Saint Vincent	..	..	100	..	..	..	..	..	..	..	..	..
80 Jordan	106	105	..	82	..	..	..	..	..	..	7	13
81 Moldova, Rep. of	111	113	..	..	..	..	..	..	..	..	84	81
82 Albania	104	108	..	..	94	101	86	95	54	97	67	69
83 Korea, Dem. People's Rep. of	107	109	..	..	..	..	..	..	..	..	77	79
84 Saint Lucia	..	..	102	..	..	..	..	..	..	..	..	..
85 Algeria	104	103	30	63	66	88	47	75	30	60	6	11
86 Turkmenistan	112	111	..	..	..	..	..	..	..	..	72	74
87 Paraguay	106	106	89	96	99	100	83	94	89	93	26	26
88 Jamaica	106	106	101	111	101	100	96	113	88	79	67	82
89 Kyrgyzstan	115	112	..	..	..	..	..	..	..	..	73	74
90 Armenia	109	109	..	..	..	..	..	..	..	..	72	88
91 Oman	105	106	..	..	18	94	..	79	..	71	7	11
92 Georgia	112	112	..	..	..	..	..	..	..	..	74	71
93 Peru	106	106	74	86	91	100	79	81	59	61	25	32
94 Uzbekistan	111	109	..	..	..	..	..	..	..	..	75	78
95 South Africa	111	110	..	99	106	..	104	..	50	..	47	54
96 Dominican Rep.	106	106	95	100	105	104	100	113	74	83	13	19
97 Sri Lanka	103	106	80	92	92	100	105	108	99	108	37	36
98 Romania	107	110	..	..	99	111	93	96	88	127	72	77
99 Azerbaijan	112	112	..	..	..	..	..	..	..	..	69	70
100 Philippines	106	106	96	99	98	99	98	103	108	113	49	44
101 Lebanon	106	106	69	95	86	93	73	97	38	69	22	34
102 Samoa (Western)	107	105	100	..	..	..	..	..	..	..	67	59
103 Tajikistan	108	108	..	..	..	..	..	..	..	..	71	73
104 Indonesia	105	106	64	86	88	97	64	92	37	56	41	44
105 Guyana	107	109	94	98	99	100	98	105	65	78	25	34
106 Iraq	103	105	35	60	45	92	39	64	35	62	7	29
107 Egypt	105	104	44	58	66	100	50	77	43	59	7	12
108 Namibia	105	104	..	..	112	112	118	117	116	122	28	30
109 Nicaragua	106	106	98	103	102	105	102	110	62	92	25	37
110 Mongolia	105	104	..	86	101	106	102	111	96	141	81	83
111 China	102	106	..	79	87	95	77	78	54	75	74	81
112 Guatemala	105	108	72	77	86	94	74	74	44	48	15	21
113 Bolivia	110	106	..	82	71	93	64	83	50	52	25	31
114 Gabon	108	106	..	69	..	..	..	..	..	..	64	55
115 El Salvador	107	108	88	94	99	119	88	97	68	82	26	35
116 Honduras	108	107	94	99	102	103	99	106	53	96	17	27
117 Morocco	106	106	29	52	56	71	47	70	26	62	14	26
118 Maldives	95	96	..	100	107	100	50	120	..	..	35	30
119 Vanuatu	106	106	..	..	..	..	..	..	..	..	65	60
120 Viet Nam	111	107	..	93	89	96	77	95	40	39	80	82
121 Zimbabwe	107	105	..	87	85	101	66	95	54	52	56	49
122 Congo	112	110	..	78	..	..	..	..	..	..	63	61
123 Cape Verde	105	103	63	74	98	99	89	95	..	76	28	36
124 Swaziland	110	108	88	96	100	105	84	97	39	51	69	60
125 Solomon Islands	106	106	..	..	..	..	..	..	..	..	70	60
126 Papua New Guinea	99	103	62	75	63	84	49	78	21	36	77	65
127 Cameroon	107	106	..	66	77	87	60	76	25	56	56	46

## CLOSING FEMALE-MALE GAPS

(INDEX: MALES=100)

HDI rank	LIFE SPAN		LITERACY		ENROLMENT RATIO						EMPLOYMENT	
	Life expectancy at birth		Adult literacy		Primary school age (6-11 years)		Secondary school age (12-17 years)		Tertiary school age (18-23 years)		Economic activity rate (age 15+)	
	1970	1992	1970	1992	1970	1990	1970	1990	1970	1990	1970	1994
Low human development	101	103	..	56	61	76	44	62	28	48	44	42
128 Pakistan	99	103	35	47	37	55	26	44	24	38	11	16
129 Ghana	107	107	43	67	85	87	66	71	28	27	70	63
130 Kenya	108	106	..	78	77	100	59	84	35	89	70	62
131 Lesotho	111	109	154	74	145	121	137	133	57	103	84	69
132 Myanmar	107	106	69	86	91	94	68	90	60	121	62	56
133 São Tomé and Príncipe	..	..	..	..	..	..	..	..	..	..	..	..
134 India	97	100	41	55	64	74	44	60	29	50	43	34
135 Madagascar	107	105	..	..	87	101	72	89	53	91	69	60
136 Zambia	107	104	57	81	92	101	58	78	14	34	34	41
137 Yemen	101	101	..	..	..	..	..	..	..	..	7	13
138 Lao People's Dem. Rep.	107	106	..	61	62	86	42	60	23	48	88	77
139 Comoros	102	102	78	77	47	84	44	88	29	77	71	63
140 Togo	108	107	26	52	45	70	36	48	22	22	59	52
141 Nigeria	108	107	..	66	60	78	50	72	35	53	58	51
142 Equatorial Guinea	108	107	..	73	80	..	51	..	26	..	66	63
143 Zaire	107	107	..	75	64	79	40	56	13	25	65	52
144 Sudan	107	105	40	56	71	80	43	80	19	53	25	30
145 Côte d'Ivoire	108	105	..	56	60	71	43	58	22	36	70	54
146 Bangladesh	97	100	35	51	48	86	23	50	13	27	6	73
147 Tanzania, U. Rep. of	107	106	35	68	69	104	59	91	33	68	97	85
148 Haiti	106	106	65	87	83	104	75	93	40	74	79	64
149 Central African Rep.	113	111	..	72	49	64	31	47	15	26	87	74
150 Mauritania	108	106	..	52	41	76	29	57	10	29	25	29
151 Nepal	97	98	12	32	20	55	15	47	21	30	52	48
152 Senegal	105	104	..	51	65	76	55	61	36	43	68	60
153 Cambodia	107	106	..	..	..	..	..	..	..	..	68	59
154 Djibouti	108	107	..	51	45	71	40	62	34	79	73	64
155 Benin	108	107	..	49	44	51	45	48	38	27	90	85
156 Rwanda	107	107	..	70	81	101	69	89	42	65	91	83
157 Malawi	103	103	36	55	69	98	42	66	17	35	75	62
158 Uganda	107	106	..	65	69	89	50	63	24	44	75	65
159 Liberia	107	106	36	39	51	..	33	..	33	..	46	41
160 Bhutan	104	107	..	47	6	71	5	42	..	22	52	47
161 Gambia	109	107	..	45	44	77	31	60	29	32	71	62
162 Chad	108	107	..	53	37	49	21	30	8	13	29	25
163 Guinea-Bissau	109	108	..	60	50	58	37	51	50	36	69	61
164 Angola	109	107	..	..	57	96	54	79	55	41	66	58
165 Burundi	108	107	..	43	53	91	33	69	9	47	91	82
166 Somalia	108	107	..	..	38	..	24	..	14	..	67	59
167 Mozambique	108	107	39	38	52	80	48	64	45	35	95	85
168 Guinea	103	102	29	41	49	53	34	36	14	25	71	61
169 Burkina Faso	108	107	..	29	58	63	48	56	29	46	91	81
170 Afghanistan	100	102	8	29	20	54	14	50	12	34	7	11
171 Ethiopia	108	107	2	53	58	86	34	66	18	31	65	56
172 Mali	109	107	..	56	59	59	42	54	21	34	19	17
173 Sierra Leone	109	108	..	38	67	72	49	58	20	27	51	45
174 Niger	108	107	..	30	53	52	44	61	33	30	95	83
All developing countries	103	104	..	73	79	88	68	78	49	70	53	55
Industrial countries	111	109	..	..	..	..	..	..	..	73	52	61
World	104	105	..	..	..	..	..	..	..	59	53	..
Arab States	105	105	38	61	63	92	47	77	34	65	13	21
East Asia	103	106	..	80	87	96	76	79	53	73	73	80
Latin America and the Caribbean	107	108	91	97	101	98	91	98	96	70	27	37
South Asia	97	101	40	55	60	75	43	60	30	48	35	35
South-East Asia and the Pacific	106	106	72	90	90	97	74	95	62	73	57	56
Sub-Saharan Africa	108	106	..	66	72	85	60	72	34	46	65	58
Least developed countries	105	105	..	57	61	84	43	67	25	44	63	57
European Union	109	109	..	..	101	..	95	..	62	..	42	52
Nordic countries	108	109	..	..	102	100	100	101	84	121	55	76
OECD	109	109	..	..	99	99	93	98	69	103	48	57

Source: Columns 1 and 2: UN 1994k; columns 3 and 4: UNESCO 1994b; columns 5-10: UN 1994i [UNESCO]; column 11: UN 1994i [ILO]; column 12: UN forthcoming (*The World's Women*) [ILO].

## STATUS OF WOMEN

HDI rank	OCCUPATION				ENROLMENT RATIO			
	Administrative and managerial workers (% women)	Professional, technical and related workers (% women)	Clerical and sales workers (% women)	Service workers (% women)	Primary school age (6–11 years)	Secondary school age (12–17 years)	Tertiary school age (18–23 years)	Overall enrolment (6–23 years)
	1990	1990	1990	1990	1990	1990	1990	1990
High human development	..	..	..	..	92.2	77.4	36.7	69.1
1 Canada	40.7	56.0	67.6	57.1	100.0	98.0	73.4	90.6
2 USA	40.1	50.8	66.7	60.1	100.0	92.5	72.9	87.8
3 Japan	7.9	42.0	50.3	54.2	100.0	98.2	19.5	71.3
4 Netherlands	13.5	42.5	52.2	70.4	96.7	82.6	41.1	70.1
5 Finland	24.1	61.4	67.4	71.4	79.7	100.0	82.3	87.2
6 Iceland	..	..	..	..	..	..	..	..
7 Norway	25.4	56.5	65.9	75.1	83.1	91.6	64.4	78.8
8 France	..	..	..	..	100.0	89.1	51.2	79.5
9 Spain	9.5	47.0	47.4	58.6	..	..	..	..
10 Sweden	38.9 <sup>a</sup>	63.3	77.0	76.9	83.4	92.2	44.0	71.6
11 Australia	41.4	23.8	19.3	77.2	100.0	86.8	31.9	71.2
12 Belgium	..	..	..	..	100.0	91.3	44.4	76.0
13 Switzerland	..	..	..	..	..	..	..	..
14 Austria	16.4	47.9	64.1	70.8	91.8	79.9	31.4	64.0
15 Germany	..	..	..	..	..	..	..	..
16 Denmark	14.7	62.9	60.9	72.5	100.0	93.8	61.6	78.1
17 New Zealand	32.3	47.8	76.4	67.4	100.0	82.4	40.8	73.0
18 United Kingdom	..	..	..	..	100.0	77.4	26.1	65.0
19 Ireland	15.1	46.7	51.6	51.5	91.9	92.0	31.9	74.3
20 Italy	..	..	..	..	100.0	74.9	31.8	64.0
21 Israel	15.8	54.3	54.7	57.4	92.5	92.9	29.7	73.9
22 Greece	10.0	43.1	44.2	43.5	..	..	..	..
23 Cyprus	10.2	40.8	49.9	45.3	..	..	..	..
24 Hong Kong	15.9	41.9	51.1	41.3	100.0	85.3	19.4	67.1
25 Barbados	32.6	52.3	64.7	56.8	100.0	74.2	18.3	56.1
26 Bahamas	26.3	56.9	70.2	61.9	100.0	78.6	25.7	68.1
27 Luxembourg	8.6	37.7	48.3	71.9	100.0	76.7	18.3	56.8
28 Costa Rica	23.1	44.8	40.4	59.3	87.1	50.4	21.5	55.4
29 Belize	..	..	..	..	..	..	..	..
30 Argentina	..	..	..	..	100.0	82.4	55.0	82.2
31 Korea, Rep. of	4.1	42.5	44.0	60.9	100.0	81.8	24.0	69.1
32 Uruguay	20.6	61.1	45.9	67.7	90.3	91.1	49.5	78.2
33 Chile	19.4	51.9	46.3	72.5	83.9	84.4	28.5	65.7
34 Malta	..	..	..	..	100.0	86.2	12.5	69.3
35 Singapore	15.7	40.3	..	40.8	100.0	87.8	19.9	67.0
36 Portugal	18.9	54.4	47.6	65.5	100.0	76.3	34.1	68.1
37 Saint Kitts and Nevis	..	..	..	..	..	..	..	..
38 Czech Rep.	..	..	..	..	..	..	..	..
39 Trinidad and Tobago	22.5	54.7	59.1	52.8	97.3	66.0	5.8	59.7
40 Slovakia	..	..	..	..	..	..	..	..
41 Brunei Darussalam	11.3	35.3	52.2	40.2	80.3	82.2	27.9	65.1
42 Belarus	..	..	..	..	..	..	..	..
43 Estonia	..	..	..	..	..	..	..	..
44 Bahrain	..	..	..	..	93.4	91.8	29.3	74.3
45 United Arab Emirates	1.6	25.1	7.6	24.5	100.0	72.1	24.0	76.9
46 Fiji	9.1	39.7	38.3	48.3	100.0	70.5	14.6	67.6
47 Venezuela	18.6	55.2	45.7	57.5	94.7	64.2	24.7	63.8
48 Latvia	..	..	..	..	..	..	..	..
49 Panama	28.9	50.7	57.5	55.8	93.0	64.1	31.9	63.8
50 Hungary	58.2	49.0	75.4	75.4	85.5	85.7	14.5	63.7
51 Poland	15.6	60.4	..	..	80.6	92.2	32.3	70.9
52 Russian Federation	..	..	..	..	..	..	..	..
53 Mexico	19.4	43.2	41.7	45.1	100.0	59.5	16.5	61.5
54 Ukraine	..	..	..	..	..	..	..	..
55 Antigua and Barbuda	..	..	..	..	..	..	..	..
56 Qatar	0.9	26.8	6.3	26.6	94.5	80.5	54.8	80.6
57 Colombia	27.2	41.8	45.5	69.6	74.0	69.5	24.5	56.6
58 Thailand	22.2	52.7	57.3	56.1	81.4	34.6	16.2	43.9
59 Malaysia	..	..	..	..	93.1	66.7	7.0	58.8
60 Mauritius	14.3	41.4	30.5	41.2	100.0	54.6	6.6	54.9
61 Kuwait	5.2	36.8	18.9	46.0	75.4	72.8	24.5	59.8
62 Seychelles	28.5	58.1	58.8	58.5	..	..	..	..
63 Brazil	..	..	..	..	76.7	67.1	29.4	59.4

## STATUS OF WOMEN

HDI rank	OCCUPATION				ENROLMENT RATIO			
	Administrative and managerial workers	Professional, technical and related workers	Clerical and sales workers	Service workers	Primary school age	Secondary school age	Tertiary school age	Overall enrolment
	(% women) 1990	(% women) 1990	(% women) 1990	(% women) 1990	(6-11 years) 1990	(12-17 years) 1990	(18-23 years) 1990	(6-23 years) 1990
Medium human development	..	..	..	..	84.2	44.6	13.3	46.6
64 Kazakhstan	..	..	..	..	..	..	..	..
65 Bulgaria	28.9	57.0	78.9	76.2	81.1	84.7	34.8	67.3
66 Turkey	4.2	31.9	16.4	10.2	94.1	33.1	9.3	46.4
67 Grenada	31.6	53.1	64.0	58.4	..	..	..	..
68 Ecuador	26.0	44.2	40.9	63.5	92.6	71.7	35.2	68.7
69 Dominica	35.7	56.5	..	69.2	..	..	..	..
70 Iran, Islamic Rep. of	3.5	32.6	5.1	7.0	88.8	48.9	8.0	54.8
71 Lithuania	..	..	..	..	..	..	..	..
72 Cuba	..	..	..	..	100.0	77.4	36.3	65.4
73 Libyan Arab Jamahiriya	..	..	..	..	100.0	72.1	30.6	74.5
74 Botswana	36.1	61.4	60.2	70.4	83.3	86.2	12.9	65.3
75 Tunisia	..	..	..	..	92.4	55.5	14.3	56.7
76 Saudi Arabia	..	..	..	..	55.5	48.9	26.0	46.1
77 Suriname	21.5	69.9	48.9	60.0	99.7	78.1	27.4	67.3
78 Syrian Arab Rep.	..	..	..	..	100.0	44.9	15.7	58.2
79 Saint Vincent	..	..	..	..	..	..	..	..
80 Jordan	..	..	..	..	..	..	..	..
81 Moldova, Rep. of	..	..	..	..	..	..	..	..
82 Albania	..	..	..	..	83.9	91.4	16.6	65.0
83 Korea, Dem. People's Rep. of	..	..	..	..	..	..	..	..
84 Saint Lucia	..	..	..	..	..	..	..	..
85 Algeria	5.9	27.6	11.4	18.8	83.8	50.6	12.1	53.0
86 Turkmenistan	..	..	..	..	..	..	..	..
87 Paraguay	16.1	51.2	46.2	71.8	86.5	44.6	11.2	51.2
88 Jamaica	..	59.6	..	71.8	100.0	80.4	5.2	62.4
89 Kyrgyzstan	..	..	..	..	..	..	..	..
90 Armenia	..	..	..	..	..	..	..	..
91 Oman	..	..	..	..	79.2	59.3	8.9	55.9
92 Georgia	..	..	..	..	..	..	..	..
93 Peru	22.1	40.9	52.1	37.6	100.0	66.8	26.2	69.7
94 Uzbekistan	..	..	..	..	..	..	..	..
95 South Africa	17.4	46.7	..	66.2	..	..	..	..
96 Dominican Rep.	..	..	..	..	89.1	77.9	33.3	68.3
97 Sri Lanka	6.9	49.6	22.1	37.7	100.0	64.3	12.3	61.4
98 Romania	..	..	..	..	89.1	81.9	24.2	64.0
99 Azerbaijan	..	..	..	..	..	..	..	..
100 Philippines	27.7	63.2	62.7	58.0	82.6	76.3	27.6	64.5
101 Lebanon	..	..	..	..	90.3	71.8	26.3	62.6
102 Samoa (Western)	12.3	46.9	53.1	54.2	..	..	..	..
103 Tajikistan	..	..	..	..	..	..	..	..
104 Indonesia	6.6	40.8	44.2	57.5	92.6	57.7	13.5	56.2
105 Guyana	..	..	..	..	100.0	72.1	7.8	60.0
106 Iraq	12.7	43.9	6.6	15.8	91.6	43.0	15.9	54.4
107 Egypt	10.3	28.3	28.5	8.1	100.0	53.6	15.0	58.6
108 Namibia	..	..	..	..	78.0	89.9	26.2	68.1
109 Nicaragua	..	..	..	..	71.6	56.1	21.0	52.7
110 Mongolia	..	..	..	..	64.1	89.8	25.8	61.8
111 China	11.6	45.1	39.3	51.7	80.7	36.3	12.3	40.0
112 Guatemala	32.4	45.2	54.0	72.3	52.8	37.8	9.3	36.4
113 Bolivia	16.8	41.9	64.7	72.5	85.7	39.3	15.1	50.5
114 Gabon	..	..	..	..	..	..	..	..
115 El Salvador	17.7	43.3	59.7	72.3	70.6	55.6	20.9	51.6
116 Honduras	27.8	50.0	59.6	72.4	80.5	50.0	18.2	53.1
117 Morocco	..	..	..	..	43.3	30.4	14.0	30.5
118 Maldives	14.0	34.6	24.7	12.2	100.0	84.2	0.0	68.3
119 Vanuatu	13.2	35.2	..	..	..	..	..	..
120 Viet Nam	..	..	..	..	91.4	44.9	1.9	49.4
121 Zimbabwe	15.4	40.0	34.2	29.6	84.0	87.5	11.0	64.4
122 Congo	..	..	..	..	..	..	..	..
123 Cape Verde	23.3	48.4	63.0	57.3	86.5	44.8	1.9	47.8
124 Swaziland	14.5	54.3	53.7	44.9	88.5	71.8	10.3	62.5
125 Solomon Islands	2.6	27.4	27.1	39.6	..	..	..	..
126 Papua New Guinea	..	..	..	..	55.3	17.4	2.0	27.1
127 Cameroon	10.1	24.4	36.9	31.4	70.1	43.4	9.6	45.3



## STATUS OF WOMEN

HDI rank	OCCUPATION				ENROLMENT RATIO			
	Administrative and managerial workers (% women)	Professional, technical and related workers (% women)	Clerical and sales workers (% women)	Service workers (% women)	Primary school age (6–11 years)	Secondary school age (12–17 years)	Tertiary school age (18–23 years)	Overall enrolment (6–23 years)
	1990	1990	1990	1990	1990	1990	1990	1990
Low human development	..	..	..	..	..	..	..	..
128 Pakistan	3.0	18.4	2.8	13.9	20.6	10.1	2.2	12.4
129 Ghana	..	..	..	..	58.5	43.8	4.5	39.3
130 Kenya	..	..	..	..	85.8	57.2	4.0	55.9
131 Lesotho	33.4	56.6	59.0	67.7	74.7	84.9	18.4	63.1
132 Myanmar	..	..	..	..	92.9	23.9	6.4	43.2
133 São Tomé and Príncipe	..	..	..	..	..	..	..	..
134 India	..	..	..	..	67.8	32.6	6.2	37.7
135 Madagascar	..	..	..	..	63.7	32.3	9.2	38.8
136 Zambia	6.1	31.9	57.6	22.4	62.2	53.1	4.5	43.6
137 Yemen	..	..	..	..	..	..	..	..
138 Lao People's Dem. Rep.	..	..	..	..	64.0	35.4	4.2	38.5
139 Comoros	..	..	..	..	50.6	38.5	8.1	35.7
140 Togo	..	..	..	..	62.5	37.4	4.8	38.9
141 Nigeria	5.5	26.0	57.8	11.2	51.9	26.7	6.1	31.8
142 Equatorial Guinea	..	..	..	..	..	..	..	..
143 Zaire	..	..	..	..	52.1	27.4	3.6	31.6
144 Sudan	..	..	..	..	33.4	25.2	7.2	23.8
145 Côte d'Ivoire	..	..	..	..	40.9	32.6	3.5	28.9
146 Bangladesh	5.1	23.1	4.2	46.4	58.0	13.3	1.7	26.3
147 Tanzania, U. Rep. of	..	..	..	..	35.7	49.9	2.7	31.5
148 Haiti	32.6	39.3	88.3	65.2	26.4	42.2	12.4	27.6
149 Central African Rep.	9.0	18.9	59.4	11.8	44.0	16.0	2.8	24.1
150 Mauritania	7.7	20.4	24.8	44.9	31.9	19.7	3.8	20.4
151 Nepal	..	..	..	..	43.9	21.1	2.4	25.8
152 Senegal	..	..	..	..	35.6	22.6	7.0	23.8
153 Cambodia	..	..	..	..	..	..	..	..
154 Djibouti	2.1	19.9	..	..	30.4	17.3	3.3	19.0
155 Benin	..	..	..	..	33.0	14.4	2.9	19.0
156 Rwanda	8.2	32.1	32.2	25.8	62.3	34.3	3.9	38.3
157 Malawi	4.8	34.7	33.3	27.8	45.5	41.1	1.3	32.5
158 Uganda	..	..	..	..	59.1	35.3	3.6	36.6
159 Liberia	..	..	..	..	..	..	..	..
160 Bhutan	..	..	..	..	16.2	6.3	0.4	8.5
161 Gambia	..	..	..	..	35.1	28.6	1.6	24.1
162 Chad	..	..	..	..	27.5	11.6	0.7	15.0
163 Guinea-Bissau	..	..	..	..	28.6	17.1	1.8	17.6
164 Angola	..	..	..	..	45.8	34.1	1.2	30.5
165 Burundi	13.4	30.4	..	..	45.5	24.3	2.8	27.0
166 Somalia	..	..	..	..	..	..	..	..
167 Mozambique	..	..	..	..	33.6	22.2	0.7	21.0
168 Guinea	..	..	..	..	17.2	10.3	3.0	11.2
169 Burkina Faso	13.5	25.8	62.6	22.1	20.4	11.8	2.4	12.7
170 Afghanistan	..	..	..	..	14.1	10.2	1.9	9.2
171 Ethiopia	..	..	..	..	17.9	19.8	1.0	14.0
172 Mali	19.7	19.0	56.5	41.4	10.6	9.0	2.1	7.8
173 Sierra Leone	8.0	32.2	65.7	15.4	33.9	19.5	1.7	20.5
174 Niger	..	..	..	..	14.6	10.0	1.4	9.7
All developing countries	..	..	..	..	71.3	39.9	11.3	42.1
Industrial countries	..	..	..	..	..	..	..	..
World	..	..	..	..	..	..	..	..
Arab States	..	..	..	..	77.3	45.6	15.0	48.9
East Asia	11.4	45.0	39.5	..	81.4	38.3	12.7	41.2
Latin America and the Caribbean	..	..	..	..	85.2	65.4	26.2	61.1
South Asia	..	..	..	..	61.7	29.1	5.4	34.5
South-East Asia and the Pacific	..	..	..	..	89.1	52.2	13.0	53.3
Sub-Saharan Africa	..	..	..	..	47.3	32.5	4.3	31.1
Least developed countries	..	..	..	..	46.2	23.6	3.2	26.8
European Union	..	..	..	..	..	..	..	..
Nordic countries	37.0	61.6	58.6	70.7	85.8	94.1	60.0	77.9
OECD	25.7	46.3	53.7	57.1	98.9	79.8	40.8	72.6

a. ILO 1993b.

Source: Columns 1–4: UN 1994i [ILO]; columns 5–8: UN 1994i [UNESCO].



# Measuring gender inequality

*Two composite measures are suggested to capture gender disparities*

This chapter is concerned with the measurement of gender inequality by simple composite indices based on readily available data. For this purpose, two composite measures are suggested to capture gender disparities and their adverse effects on social progress. Capturing such a complex reality in a single, simple index is not easy. But a beginning must be made, however limited, to place the problem of gender inequality firmly on the social agenda. For policy-makers particularly, it is useful to look at composite measures—for their own countries and for others—to draw policy conclusions about critical shortfalls in gender capabilities or opportunities and about priorities to consider in their plans of action.

The basic indicator of human development, the human development index (HDI), is supplemented in this Report by the gender-related development index (GDI). The GDI concentrates on the same variables as the HDI but focuses on inequality between women and men as well as on the average achievement of all people taken together.

This chapter also introduces the gender empowerment measure (GEM), an index that focuses on three variables that reflect women's participation in political decision-making, their access to professional opportunities and their earning power. Women often are excluded from such participation and are effectively disenfranchised. The GEM gives some indication of how much women are empowered in these spheres in different countries.

The GDI and the GEM can capture only what is measurable and therefore do not cover other important dimensions of gender inequality, such as participation in community life and decision-making, con-

sumption of resources within the family, dignity and personal security. These dimensions can nonetheless be powerful determinants of the relative status of women and the quality of their lives.

Paying attention to inequality is a general moral and political imperative, and the case for correcting inequality in assessing overall achievement applies to many fields. This Report focuses on the pervasive—and persistent—inequality between women and men. A case for similar corrections could be made along other dividing lines—involving, say, class, community or location. All the group parameters that influence inequality between individuals remain potentially relevant for estimating equity-sensitive indicators. The focus on gender inequality is only a beginning in this respect, but it is an important starting point, since a widespread gender bias severely affects the social, economic and political situation of many countries.

## **GDI and GEM indices**

Since 1990, the *Human Development Report* has published the human development index, which measures longevity, knowledge and access to the basic resources individuals need to develop their capabilities. Measured at the national level, the HDI is an overall average of these three dimensions.

Several exercises have been undertaken in the past to disaggregate the HDI. For example, it has been adjusted for the inequality of income distribution for countries for which data were available on the Gini coefficient or the share of the top and bottom 20% of the population in total income. It has also been computed for

regions within a country, for ethnic groups and by gender. But because of limited data, such disaggregation has been attempted for only a few countries.

In earlier *Human Development Reports*, attempts were made to construct a gender-disparity-adjusted HDI. First, each of the three components of the HDI was expressed in terms of the female value as a percentage of the male value. Then, the overall HDI was multiplied by this simple average female-male ratio to obtain the gender-disparity-adjusted HDI.

There were two problems with these exercises. First, they did not relate the female-male disparity to the overall level of achievement in a society. It makes considerable difference whether gender equality exists at a lower or a higher level of achievement. One society may have managed perfect gender equality but at an overall literacy rate of, say, 30%. Another may show some disparity with a male literacy rate of 90% and a female literacy rate of 85%. Which is the better social outcome? The method of estimation suggested in technical note 1, unlike the method adopted in past reports, deals with this issue.

Second, each society can choose a specific value for its “aversion to gender inequality” ( $\epsilon$ ), depending on where it starts and what goals it wants to achieve over what time period. In previous *Human Development Reports*,  $\epsilon$  was implicitly assumed to be zero—that is, no policy preference for gender equality was adopted. But policy-makers must make an explicit choice of the weight they wish to assign to their preference for gender equality. In the extreme case, if  $\epsilon = \text{infinity}$ , only achievements of women get a positive weight, and the relative achievements of men are ignored. The illustrative calculations of the GDI and the GEM in this chapter are based on  $\epsilon = 2$  (harmonic mean), which expresses a moderate degree of inequality aversion. This is only to show that, even with modest weights, the profile of gender inequality looks fairly bad in most countries.

In estimating the GDI, a measure is constructed for the overall achievements of women and men in the three dimensions of the HDI—life expectancy, educational

attainment, adjusted real income—after taking note of inequalities between women and men. In other words, the GDI is the HDI adjusted for gender inequality.

The gender empowerment measure concentrates on participation—economic, political and professional. It seeks to determine how much women have been empowered or enfranchised to take part in different aspects of public life—in comparison with men. Because of data limitations, it cannot, unfortunately, capture many aspects of empowerment—particularly within the household, or in community life or in rural areas. It focuses on only three variables: income-earning power, share in professional and managerial jobs and share of parliamentary seats.

The methods for constructing the GDI and the GEM and their detailed application are in technical notes 1 and 2. The basic concepts are summarized in box 3.1.

The gender-disparity-adjusted HDI in the 1994 Report covered only 43 countries. The GDI estimate has been extended to 130 countries and the GEM to 116 countries. It will be necessary to improve and refine the data further and to extend the coverage of these indices to more countries over time.

### *The GDI is the HDI adjusted for gender inequality*

#### The HDI, the GDI and the GEM

BOX 3.1

##### *HDI*

The human development index (HDI) measures the average achievement of a country in basic human capabilities. The HDI indicates whether people lead a long and healthy life, are educated and knowledgeable and enjoy a decent standard of living. The HDI examines the average condition of all people in a country: distributional inequalities for various groups of society have to be calculated separately.

##### *GDI*

The gender-related development index (GDI) measures achievement in the same basic capabilities as the HDI does, but takes note of inequality in achievement between women and men. The methodology used imposes a penalty for inequality, such that the GDI falls when

the achievement levels of both women and men in a country go down or when the disparity between their achievements increases. The greater the gender disparity in basic capabilities, the lower a country's GDI compared with its HDI. The GDI is simply the HDI discounted, or adjusted downwards, for gender inequality.

##### *GEM*

The gender empowerment measure (GEM) examines whether women and men are able to actively participate in economic and political life and take part in decision-making. While the GDI focuses on expansion of capabilities, the GEM is concerned with the use of those capabilities to take advantage of the opportunities of life.

The estimates of the GDI and the GEM will be adopted as a permanent feature of the *Human Development Report* to serve as a constant reminder to policy-makers that they should pay serious attention to the issue of gender equality.

### Gender-related development index

The gender-related development index adjusts the HDI for gender equality in life expectancy, educational attainment and income (box 3.2). For life expectancy, allowance is made for the biological edge that women enjoy in living longer than men, since biology is not country-specific. The calculation of life expectancy allows for this factor in its choice of fixed goal posts, by taking a range of 27.5 years to 87.5 years as the minimum and maximum values for female life expectancy and a range of 22.5 years to 82.5 years for male life expectancy.

In adjusting this component for gender differences in the new GDI calculations, women's actual life expectancy relative to its maximum value and men's actual life expectancy relative to its maximum value are separately calculated and then combined in an equity-sensitive way. For example, in Barbados, male life expectancy is 72.9 years, and female life expectancy 77.9 years. Adjusting for the biological difference between males and females, the index for life expectancy is as follows:

$$\text{Male: } (72.9 - 22.5)/(82.5 - 22.5) = 0.840$$

$$\text{Female: } (77.9 - 27.5)/(87.5 - 27.5) = 0.840$$

In other words, the disparity identified is not in actual achievement: the observed difference in male and female life expectancy in Barbados is precisely in line with expectations based on women's biological edge.

For educational attainment, the GDI gives two-thirds weight to adult literacy and one-third to combined primary, secondary and tertiary enrolment—as in the HDI (see chapter 1).

The GDI's third dimension, income, raises more serious issues of estimation. In most countries, there is substantial disparity between men and women in earned income, but data on such disparities are sorely lacking. It is important to get some sensible estimate of income disparity between men and women in as many countries as possible. As discussed in chapter 2, while gender gaps in education and health have been closing, the gaps in income have remained wide and sometimes increased. GDI estimates that fail to include an estimate of gender disparities in earned income—however crude—would be deficient. For this reason, a special effort has been made to estimate income disparities between men and women for the 130 countries included in the GDI exercise.

The shares of earned income for women and men are derived by calculating their wages as a ratio to the average national wage and multiplying this ratio by their shares of the labour force. Their shares of earned income are then divided by their population shares. If there is gender disparity between

#### BOX 3.2

#### Penalty for gender inequality

Once data for gender disparities in life expectancy, adult literacy, combined enrolment and income are collected for each country, the next step is to determine the explicit trade-off between greater equality and higher average achievement. For example, Mexico has an average combined enrolment ratio of 65%—64% for females and 66% for males. Iran's average combined enrolment ratio is higher at 68%, but it shows greater gender disparity, with a female enrolment ratio of 61% and a male rate of 74%.

Which is the better social outcome? The judgement depends on the weight given to the objective of achieving equality. In the calculations, this is represented by an adjustable parameter called  $\epsilon$ . The GDI's general procedure of gender-equity adjustment is to use the value of  $\epsilon$  as the "penalty" for inequality. In this regard, it belongs to the class of gender-equity-sensitive indicators (see technical note 1).

The higher the "aversion to inequality", the larger the value of the parameter  $\epsilon$  for the weighting procedure. If  $\epsilon = 0$  (no aversion to inequality), Iran's

performance is better than Mexico's because its average enrolment ratio is higher. That is the principle used in calculating the HDI. But if the equity preference ( $\epsilon$ ) is sufficiently high—reflecting a strong social objective of achieving equality—Mexico's performance is better than Iran's.

The GDI calculations in table 3.1 are based on  $\epsilon = 2$ , the harmonic mean of female and male achievements. The incremental achievement of women has four times the weight of men's if the ratio of male to female achievement is two and  $\epsilon = 2$ . If the ratio of male to female achievement is lower than two, the incremental achievement of women is given less weight, although the value of  $\epsilon$  remains the same. Policy-makers may use different values for  $\epsilon$ , depending on their starting points and on their time-tables for overcoming gender inequality. For example, if  $\epsilon = 3$ , women's incremental achievement gets eight times the weight of men's if the ratio of male to female achievement is two. If  $\epsilon = \infty$  and women's achievement is lower than men's, only incremental achievement by women gets a positive weight.

these two proportional shares of earned income, average real GDP per capita is adjusted downwards accordingly. The size of the downward adjustment depends on the weight ( $\epsilon$ ) attached to inequality. For further details, see technical note 2.

In both the GDI and the GEM, the income variable reflects a family member's earning power, an important factor in economic recognition, independence and reward. It does not reflect the distribution of income or consumption within the family. Although an important issue, how family resources are shared within the household is difficult to determine, and it differs widely among cultures. In some cases, women who earn income in outside employment may have no control of it within the household. In other cases, women who do not earn income may control what is earned by male members of the household.

In comparing countries, the GDI and the GEM are limited to using data that are widely available in international data sets. Data disaggregated by gender are not abundant. For certain indicators, we have used the latest available estimate. In addition, some indicators are subject to variation in how broad categories are defined. Calculation of the income variable relies on ratios of female wages to male wages. In most cases, we have used information from the ILO *Yearbook of Labour Statistics*, but these data are not always strictly comparable. In several instances, we have supplemented this information with data from government income and expenditure surveys. Data on wages in rural areas and in the informal sector are rare. We have therefore confined our attention to non-agricultural wages and assumed that the ratio of female wages to male wages in this sector applies across the rest of the economy. All these considerations and constraints should be kept in mind in interpreting the final results.

#### *GDI values and rankings*

Estimates of the gender-related development index have been prepared for 130 countries having adequate and comparable data (table 3.1). Because gender inequality

exists in every country, the GDI is always lower than the HDI.

The four top-ranking countries in the GDI are from the Nordic belt—Sweden, Finland, Norway and Denmark, in that order. This is hardly surprising. These countries have adopted gender equality and women's empowerment as a conscious national policy.

Several developing countries and areas also do quite well in the GDI ranking: Barbados (rank of 11), Hong Kong (17), the Bahamas (26), Singapore (28), Uruguay (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 Afghanistan, Sierra Leone, Mali, Niger and Burkina Faso, 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 derived from an analysis of GDI rankings.

First, *no society treats its women as well as its men*. This is obvious from the GDI values. A value of 1.0 reflects a maximum achievement in basic capabilities with perfect gender equality. But no society achieves such a value. Sweden tops the GDI rankings with a value of 0.92. The average GDI value (a simple arithmetic average) for the 130 countries included in the sample is 0.6, showing the long distance still to be traveled towards gender equality in basic capabilities. More disturbing is that as many as 45 countries have a GDI value below 0.5, showing that women suffer the double deprivation of gender disparity and low achievement. And only 32 countries have a GDI value above 0.8, underscoring the point that substantial progress on gender equality has been made in only a few societies.

Second, *gender equality does not depend on the income level of a society*. Comparing the GDI ranks of countries with their income levels confirms that removing gender inequalities is not dependent on having a high income. China is ten GDI ranks above Saudi Arabia, although its real per

*Gender equality does not depend on the income level of a society*

TABLE 3.1

## Gender-related development index (GDI)

GDI rank	Gender-related development index (GDI)	Share of earned income (%) <sup>a</sup>		Life expectancy (years) 1992		Adult literacy rate (%) 1990		Combined primary, secondary and tertiary gross enrolment ratio (%) 1992		HDI rank minus GDI rank	
		Female	Male	Female	Male	Female	Male	Female	Male		
1	Sweden	0.919	41.6	58.4	81.1	75.4	99.0	99.0	79.3	76.7	8
2	Finland	0.918	40.6	59.4	79.6	71.7	99.0	99.0	100.0	90.6	3
3	Norway	0.911	37.8	62.2	80.3	73.6	99.0	99.0	88.6	86.4	3
4	Denmark	0.904	39.8	60.2	78.2	72.5	99.0	99.0	85.6	82.3	10
5	USA	0.901	34.6	65.4	79.3	72.5	99.0	99.0	98.1	91.9	-3
6	Australia	0.901	36.0	64.0	80.6	74.7	99.0	99.0	80.3	77.5	4
7	France	0.898	35.7	64.3	80.8	73.0	99.0	99.0	87.5	83.5	0
8	Japan	0.896	33.5	66.5 <sup>b</sup>	82.5	76.4	99.0	99.0	76.3	78.4	-5
9	Canada	0.891	29.3	70.7	80.7	74.2	99.0	99.0	100.0	100.0	-8
10	Austria	0.882	33.6	66.4	79.2	73.0	99.0	99.0	82.0	85.9	3
11	Barbados	0.878	39.4	60.6 <sup>b</sup>	77.9	72.9	96.3	97.8	73.1	74.8	10
12	New Zealand	0.868	30.9	69.1	78.6	72.5	99.0	99.0	85.6	83.5	3
13	United Kingdom	0.862	30.8	69.2	78.7	73.6	99.0	99.0	77.4	76.1	3
14	Italy	0.861	27.6	72.4	80.6	74.2	99.0	99.0 <sup>c</sup>	70.3	69.0	4
15	Czech Rep.	0.858	40.5	59.5 <sup>b</sup>	74.9	67.8	99.0	99.0 <sup>c</sup>	69.0	67.6	16
16	Slovakia	0.855	39.7	60.3 <sup>b</sup>	75.4	66.5	99.0	99.0 <sup>c</sup>	72.1	70.7	17
17	Hong Kong	0.854	29.4	70.6	81.8	75.6	86.5	95.7	69.7	70.2	3
18	Belgium	0.852	27.3	72.7	79.7	73.0	99.0	99.0	84.3	84.1	-7
19	Switzerland	0.852	27.1	72.9	81.2	74.7	99.0	99.0	70.8	76.8	-7
20	Netherlands	0.851	25.2	74.8	80.4	74.4	99.0	99.0	86.5	89.4	-16
21	Estonia	0.839	39.5	60.5 <sup>b</sup>	74.8	63.8	99.0	99.0	72.0	68.9	14
22	Poland	0.838	39.3	60.7	75.7	66.7	99.0	99.0	76.4	74.4	21
23	Hungary	0.836	39.1	60.9	73.8	64.5	99.0	99.0	66.9	66.1	19
24	Latvia	0.833	39.9	60.1 <sup>b</sup>	74.9	63.3	99.0	99.0	69.2	66.0	16
25	Portugal	0.832	29.9	70.1	78.0	71.1	81.0	89.0 <sup>d</sup>	84.3	70.2	5
26	Bahamas	0.828	28.3	71.7	77.9	68.7	97.7	98.4	76.8	71.8	-4
27	Greece	0.825	22.2	77.8	80.1	75.0	89.0	97.0 <sup>d</sup>	77.6	77.4	-8
28	Singapore	0.822	28.9	71.1	77.4	72.4	84.3	95.4	66.3	68.9	1
29	Russian Federation	0.822	38.4	61.6 <sup>b</sup>	73.6	61.7	98.7	98.7 <sup>c</sup>	69.7	67.3	15
30	Ireland	0.813	22.2	77.8	78.1	72.6	99.0	99.0	84.6	80.6	-13
31	Brunei Darussalam	0.812	27.3	72.7 <sup>b</sup>	76.3	72.5	80.7	91.3	67.8	67.6	3
32	Uruguay	0.802	26.2	73.8	75.7	69.3	97.3	96.5	81.9	71.8	-5
33	Thailand	0.798	34.6	65.4	71.8	66.3	91.4	95.8	52.8	53.1	15
34	Spain	0.795	18.6	81.4	80.5	74.6	98.0	98.0	88.7	83.0	-26
35	Luxembourg	0.790	23.1	76.9	79.3	71.9	99.0	99.0	57.4	55.6	-12
36	Trinidad and Tobago	0.786	24.7	75.3 <sup>b</sup>	74.0	69.3	96.4	98.5	67.8	67.9	-4
37	Korea, Rep. of	0.780	22.0	78.0	74.9	67.3	95.8	99.1	75.0	83.5	-11
38	Malaysia	0.768	29.2	70.8 <sup>b</sup>	73.0	68.7	75.4	87.8	61.1	59.6	11
39	Argentina	0.768	20.9	79.1	75.7	68.6	95.8	95.9	81.8	75.2	-14
40	Venezuela	0.765	22.8	77.2 <sup>b</sup>	74.7	68.9	89.7	91.3	71.6	69.7	-1
41	Panama	0.765	22.8	77.2 <sup>b</sup>	75.0	70.9	89.1	90.2	69.5	67.2	0
42	Costa Rica	0.763	19.0	81.0	78.6	74.0	94.4	94.2	65.7	67.9	-18
43	Chile	0.759	19.8	80.2	77.4	70.4	94.3	94.8	70.5	71.3	-15
44	Lithuania	0.750	38.1	61.9 <sup>b</sup>	76.0	64.9	98.4	98.4 <sup>c</sup>	67.5	65.6	12
45	Turkey	0.744	30.2	69.8	68.6	64.5	70.1	90.6	54.1	68.3	8
46	Mexico	0.741	22.3	77.7	73.9	67.8	86.0	90.7	64.0	66.0	-1
47	Cuba	0.726	27.2	72.8 <sup>b</sup>	77.3	73.5	94.2	95.5	67.7	62.2	10
48	Fiji	0.722	16.7	83.3 <sup>b</sup>	73.7	69.5	87.5	92.7	77.1	78.4	-10
49	Mauritius	0.722	22.6	77.4	73.8	66.9	76.4	86.0	59.1	58.6	1
50	Colombia	0.720	20.1	79.9	72.3	66.4	90.2	90.4	69.0	64.9	-3
51	Kuwait	0.716	18.4	81.6 <sup>b</sup>	77.2	73.3	72.9	80.0	47.6	47.0	0
52	Jamaica	0.710	38.6	61.4 <sup>b</sup>	75.8	71.4	87.9	79.4	64.6	64.5	14
53	Brazil	0.709	22.9	77.1	68.7	64.0	81.3	82.2	69.7	71.1	-1
54	Suriname	0.699	24.3	75.7 <sup>b</sup>	72.8	67.8	89.9	94.6	72.5	69.2	8
55	Botswana	0.696	28.5	71.5 <sup>b</sup>	66.7	63.0	56.7	78.8	73.4	68.6	4
56	Bahrain	0.686	10.1	89.9	74.1	69.8	76.8	87.8	85.8	81.3	-20
57	United Arab Emirates	0.674	6.8	93.2 <sup>b</sup>	75.3	72.9	77.4	77.8	83.9	76.3	-20
58	Sri Lanka	0.660	25.1	74.9	74.2	69.7	85.8	92.9	67.1	65.6	11
59	Tunisia	0.641	19.5	80.5 <sup>b</sup>	68.7	66.9	50.2	75.3	60.2	68.4	1
60	Ecuador	0.641	13.3	86.7	71.4	66.4	87.2	91.1	70.3	72.1	-6
61	Qatar	0.639	5.3	94.7 <sup>b</sup>	74.2	68.8	77.4	78.3	77.9	71.5	-15
62	Peru	0.631	19.4	80.6 <sup>b</sup>	67.9	64.1	80.9	93.6	73.6	83.9	5
63	Paraguay	0.628	16.1	83.9	71.9	68.1	89.5	92.9	58.0	59.3	2
64	Philippines	0.625	21.1	78.9	68.2	64.5	93.7	94.4	78.2	76.6	6
65	Lebanon	0.622	21.8	78.2 <sup>b</sup>	70.5	66.6	89.0	94.1	71.2	73.9	6
66	Iran, Islamic Rep. of	0.611	14.9	85.1 <sup>b</sup>	68.0	67.0	55.0	74.5	61.3	73.6	-11
67	Mongolia	0.596	38.5	61.5 <sup>b</sup>	65.0	62.3	74.8	87.4	62.9	56.2	10
68	Indonesia	0.591	25.3	74.7 <sup>b</sup>	64.5	61.0	76.4	88.8	57.1	63.5	4
69	Dominican Rep.	0.590	12.1	87.9 <sup>b</sup>	71.7	67.6	80.7	80.8	73.8	70.0	-1
70	Guyana	0.584	21.2	78.8 <sup>b</sup>	68.0	62.4	96.8	98.3	68.2	68.1	3

GDI rank	Gender-related development index (GDI)	Share of earned income (%) <sup>a</sup>		Life expectancy (years) 1992		Adult literacy rate (%) 1990		Combined primary, secondary and tertiary gross enrolment ratio (%) 1992		HDI rank minus GDI rank	
		Female	Male	Female	Male	Female	Male	Female	Male		
71	China	0.578	31.2	68.8	70.4	66.7	70.0	88.2	51.8	58.0	7
72	Syrian Arab Rep.	0.571	11.3	88.7	69.2	65.2	51.6	83.6	61.5	71.4	-9
73	Nicaragua	0.560	24.2	75.8 <sup>b</sup>	68.5	64.8	65.5	63.7	61.1	61.1	3
74	Viet Nam	0.537	44.9	55.1	67.3	62.9	88.7	95.5	47.4	50.0	11
75	Libyan Arab Jamahiriya	0.534	7.5	92.5 <sup>b</sup>	65.0	61.6	57.4	85.5	66.4	66.0	-17
76	El Salvador	0.533	22.2	77.8 <sup>b</sup>	68.8	63.9	67.8	72.1	53.5	54.1	5
77	Honduras	0.524	16.7	83.3 <sup>b</sup>	70.1	65.4	70.4	71.0	60.5	57.0	5
78	Iraq	0.523	17.7	82.3 <sup>b</sup>	67.5	64.5	40.9	67.9	47.9	61.8	-4
79	Maldives	0.522	17.2	82.8 <sup>b</sup>	60.8	63.4	92.4	92.8	66.3	66.3	5
80	Bolivia	0.519	17.1	82.9	61.0	57.7	72.9	88.8	60.9	71.6	0
81	Saudi Arabia	0.514	5.3	94.7 <sup>b</sup>	71.4	68.4	46.3	69.9	49.3	55.0	-20
82	Zimbabwe	0.512	27.4	72.6 <sup>b</sup>	55.1	52.4	77.9	89.1	66.4	72.8	0
83	Swaziland	0.508	33.4	66.6	59.8	55.2	72.6	75.5	68.4	71.7	5
84	Algeria	0.508	7.5	92.5 <sup>b</sup>	68.3	66.0	44.1	70.5	59.9	71.2	-19
85	Cape Verde	0.502	26.0	74.0 <sup>b</sup>	65.5	63.5	57.5	77.5	57.6	60.5	2
86	Papua New Guinea	0.487	31.2	68.8 <sup>b</sup>	56.7	55.2	59.5	79.1	30.3	37.3	3
87	Guatemala	0.481	13.8	86.2 <sup>b</sup>	67.3	62.4	47.1	61.3	39.2	46.8	-7
88	Kenya	0.471	34.8	65.2	57.3	54.2	65.2	83.9	55.7	59.1	5
89	Lesotho	0.466	35.7	64.3 <sup>b</sup>	63.0	58.0	58.8	79.1	62.8	51.5	5
90	Cameroon	0.462	26.2	73.8 <sup>b</sup>	57.5	54.5	47.5	72.1	44.4	55.3	0
91	Ghana	0.460	32.7	67.3 <sup>b</sup>	57.8	54.2	49.0	72.9	39.0	50.6	1
92	Egypt	0.453	8.2	91.8	64.8	62.4	36.1	61.8	60.5	73.9	-16
93	Morocco	0.450	16.4	83.6 <sup>b</sup>	65.0	61.6	27.7	53.8	35.4	49.8	-9
94	Myanmar	0.448	30.0	70.0 <sup>b</sup>	59.3	56.0	76.1	88.2	46.6	48.2	1
95	Madagascar	0.432	31.9	68.1	58.0	55.0	73.0	87.0 <sup>d</sup>	33.7	35.5	2
96	Lao People's Dem. Rep.	0.405	37.8	62.2 <sup>b</sup>	52.5	49.5	40.9	66.8	40.2	56.4	4
97	Zambia	0.403	25.3	74.7	49.7	48.0	67.4	83.5	45.5	53.3	1
98	Comoros	0.402	31.9	68.1 <sup>b</sup>	56.5	55.5	48.4	62.7	34.4	39.5	3
99	India	0.401	19.2	80.8 <sup>b</sup>	60.4	60.3	35.2	63.7	45.8	63.8	-3
100	Nigeria	0.383	28.5	71.5 <sup>b</sup>	52.0	48.8	42.1	63.4	47.3	55.5	3
101	Togo	0.380	28.9	71.1 <sup>b</sup>	56.8	53.2	32.9	63.6	43.9	75.1	1
102	Zaire	0.372	29.0	71.0 <sup>b</sup>	53.7	50.4	63.5	84.3	31.5	45.7	2
103	Pakistan	0.360	10.1	89.9 <sup>b</sup>	62.6	60.6	22.3	47.8	16.3	32.6	-12
104	Tanzania	0.359	45.0	55.0	53.6	50.5	52.4	77.0	32.9	35.0	4
105	Haiti	0.354	34.2	65.8 <sup>b</sup>	58.3	54.9	39.6	45.8	28.4	30.5	4
106	Central African Rep.	0.350	37.4	62.6	51.9	46.9	45.6	63.2	27.2	47.6	4
107	Côte d'Ivoire	0.341	27.8	72.2 <sup>b</sup>	52.4	49.7	26.1	46.5	30.6	47.2	-1
108	Bangladesh	0.334	22.8	77.2	55.6	55.6	24.4	47.8	32.8	43.1	-1
109	Sudan	0.332	18.5	81.5 <sup>b</sup>	54.4	51.6	30.6	54.8	27.0	34.8	-4
110	Uganda	0.316	33.5	66.5 <sup>b</sup>	46.2	43.6	46.4	71.3	32.0	41.6	7
111	Senegal	0.316	31.3	68.7 <sup>b</sup>	50.3	48.3	20.7	40.5	25.0	36.6	2
112	Djibouti	0.315	33.4	66.6 <sup>b</sup>	50.0	46.7	29.5	57.4	15.6	20.4	2
113	Malawi	0.315	33.3	66.7 <sup>b</sup>	46.2	45.0	38.8	70.3	42.7	48.3	3
114	Benin	0.314	40.0	60.0 <sup>b</sup>	49.3	45.9	21.9	44.5	22.0	46.0	1
115	Nepal	0.310	26.4	73.6 <sup>b</sup>	53.0	54.0	12.5	38.7	41.4	68.4	-3
116	Mauritania	0.309	18.5	81.5 <sup>b</sup>	53.1	49.9	24.9	48.1	26.5	36.7	-5
117	Yemen	0.307	9.2	90.8	50.4	49.9	26.0	50.0 <sup>e</sup>	22.5	64.6	-18
118	Angola	0.286	31.5	68.5	48.1	44.9	28.0	56.0 <sup>e</sup>	30.5	35.6	3
119	Gambia	0.277	32.6	67.4 <sup>b</sup>	46.6	43.4	22.1	49.7	26.3	40.0	-1
120	Guinea-Bissau	0.276	32.6	67.4 <sup>b</sup>	45.1	41.9	38.9	65.2	19.7	35.7	0
121	Burundi	0.274	40.2	59.8 <sup>b</sup>	51.9	48.4	20.1	46.9	27.4	34.6	1
122	Chad	0.260	16.5	83.5 <sup>b</sup>	49.1	45.9	31.3	59.1	16.5	38.5	-3
123	Mozambique	0.229	40.0	60.0 <sup>b</sup>	48.0	44.9	20.4	54.2	20.9	28.7	0
124	Ethiopia	0.217	29.4	70.6 <sup>b</sup>	49.1	45.9	22.6	42.7	11.8	15.6	3
125	Guinea	0.214	31.6	68.4 <sup>b</sup>	45.0	44.0	19.3	46.8	13.4	30.4	-1
126	Burkina Faso	0.214	38.5	61.5 <sup>b</sup>	49.0	45.8	8.0	27.2	14.1	23.1	-1
127	Niger	0.196	39.6	60.4 <sup>b</sup>	48.1	44.9	5.8	19.3	10.2	18.0	3
128	Mali	0.195	11.8	88.2 <sup>b</sup>	47.6	44.4	19.6	35.2	11.1	18.9	0
129	Sierra Leone	0.195	26.2	73.8 <sup>b</sup>	40.6	37.5	15.9	42.2	22.0	33.5	0
130	Afghanistan	0.169	7.1	92.9 <sup>b</sup>	44.0	43.0	12.7	44.1	9.6	18.7	-4

Note: HDI ranks have been recalculated for the universe of 130 countries. Gross enrolment ratios are capped at 100%. A positive difference between a country's HDI and GDI ranks indicates that it performs relatively better on gender equality than on average achievement alone.

a. Data are for latest available year.

b. An estimate of 75% was used for the ratio of the female non-agricultural wage to the male non-agricultural wage.

c. National figure used for both male and female values.

d. Estimated on the basis of data from World Bank 1994e.

e. Estimated on the basis of data from World Bank 1994b.

Source: Columns 2 and 3: calculated on the basis of data from UN 1994i and ILO 1994b, consultant reports prepared for the 1994 and 1995 Human Development Reports, World Bank 1992 and UN 1994k and forthcoming (*The World's Women*); columns 4 and 5: UN 1994k; columns 6 and 7: UNESCO 1994b; columns 8 and 9: UNESCO 1994c.

*The decision to seek gender equality seems to cut across income levels, political ideologies, cultures and stages of development*

capita income (PPP-adjusted) is only a fifth of Saudi Arabia's. Thailand outranks Spain in the GDI, even though Thailand's real per capita income is less than half of Spain's. Poland's GDI rank is 50 places higher than Syria's, even though the two countries enjoy about the same real per capita income. So, gender equality can be pursued—and has been—at all levels of income. What it requires is a firm political commitment, not enormous financial wealth.

Third, *significant progress has been achieved over the past two decades, though there is still a long way to go.* The GDI values of all countries have improved since 1970. Not a single country has slipped back in the march towards greater gender equality at higher levels of capabilities, though the pace of progress has been extremely

uneven. On average, 79 countries for which the GDI values have been computed for both 1970 and 1992, on the basis of available data, show an improvement in their GDI value from 0.432 in 1970 to 0.638 in 1992, a rise of 48% (table 3.2). On the whole, the developing countries have made more rapid progress (an increase of 62% in the average GDI value during 1970–92) than the industrial countries (28%), since developing countries started from a much lower base in 1970. These trends are examined in more detail in a later section.

*HDI and GDI comparison*

An interesting comparison is between a country's HDI rank and its GDI rank, since that gives some indication of how equitably basic human capabilities are distributed between men and women (tables 3.1 and 3.3).

The countries showing a marked improvement in their GDI ranks over their HDI ranks are fairly diverse. They include industrial countries, such as Sweden, Denmark, Finland and Norway; Eastern European countries, such as Poland, Hungary, Slovakia and the Czech Republic; and developing countries, such as Barbados, Malaysia, Sri Lanka, Thailand, Jamaica and Cuba. All these countries have invested in the education and health of their people, irrespective of gender, and as a result achieved much progress in building women's basic capabilities. Moreover, in these countries, gender equality in income is greater than average. The decision to seek gender equality seems to cut across income levels, political ideologies, cultures and stages of development.

The developing countries with sharply reduced GDI ranks compared with their HDI ranks include Argentina, Chile, Costa Rica and several of the Arab States. In the Arab States, much investment in basic human capabilities is needed before women can catch up with men. As discussed in chapter 2, however, the Arab States have made the fastest progress in the past two decades in many human development indicators—particularly in accelerating women's literacy.

TABLE 3.2  
Change in average GDI values, 1970–92

Group	GDI 1970	GDI 1992	Percentage change
All countries	0.432	0.638	48
Industrial countries	0.689	0.869	28
Developing countries	0.345	0.560	62

TABLE 3.3  
Comparison of HDI and GDI ranks, 1992

Country	HDI rank	GDI rank	HDI rank minus GDI rank
<i>Greatest improvement in rank</i>			
Poland	43	22	+21
Hungary	42	23	+19
Slovakia	33	16	+17
Czech Rep.	31	15	+16
Latvia	40	24	+16
Russian Federation	44	29	+15
Thailand	48	33	+15
Estonia	35	21	+14
Jamaica	66	52	+14
Lithuania	56	44	+12
<i>Greatest fall in rank</i>			
Spain	8	34	-26
United Arab Emirates	37	57	-20
Bahrain	36	56	-20
Saudi Arabia	61	81	-20
Algeria	64	83	-19
Costa Rica	24	42	-18
Yemen	98	116	-18
Libyan Arab Jamahiriya	58	75	-17
Netherlands	4	20	-16
Egypt	75	91	-16

Note: The HDI rank is by the 130 countries included in the GDI.



Among industrial countries, there are sharply reduced ranks for four—Canada (from number 1 to 9), Luxembourg (–12), the Netherlands (–16) and Spain (–26). In all four, the real difference is not so much in education and health indicators, which are fairly well distributed between women and men. It is in the female share of earned income compared with the male share—reflecting women’s much lower participation in the labour force and lower average wage rate. The female share in earned income is only 23% of the male share in Spain, 30% in Luxembourg, 34% in the Netherlands and 41% in Canada. Compare these shares with 71% for Sweden, which tops the GDI rankings.

In most industrial countries, gender inequality has been substantially reduced in education, health and nutrition indicators. The main battlefield has shifted to economic and political opportunities—a theme discussed below in the analysis of the gender empowerment measure.

One way of gauging the gender inequality in a country is to compare its GDI value with its HDI value. This can be simply done by taking the percentage reduction of the GDI from the HDI, or:

$$(HDI - GDI)/HDI.$$

With a value of  $\epsilon$  equal to two, this is equivalent to measuring one minus the ratio of the harmonic mean to the arithmetic mean, a variation on the Atkinson measure of inequality (see technical note 1).

Now compare the extent of gender inequality in different countries. Although Uruguay’s GDI rank is lower than its HDI rank (–5), it has a better record on gender equality than many other Latin American countries. Relative to its HDI, its GDI is 9% lower, compared with about 14% lower for Colombia and Chile, 16% for the Dominican Republic and 18% for Ecuador.

Most countries of Latin America have a 10–20% drop in their GDI relative to their HDI, indicating that gender inequality in basic capabilities is still a significant problem in the region. But there is less gender inequality in the Caribbean region: the

Bahamas’ GDI, for example, is only 7% lower, Cuba’s 6% and Barbados’s 2%.

In most countries in Sub-Saharan Africa, gender inequality is less severe than in Latin America. Their level of achievement in basic capabilities, however, is much lower for both women and men. The percentage drop in the GDI relative to the HDI for most African countries is less than 10%. For Botswana, it is 9%, for example, and for Zimbabwe and Ghana 5%. Countries that have percentage declines greater than 10% include Mauritius, Sudan, Chad, Mali, Sierra Leone and Mauritania.

In Asia, countries with percentage declines greater than 10% are exceptions. They include the Republic of Korea (12%) in East Asia and Pakistan (25%) in South Asia. Malaysia and Indonesia, for example, have a 7% decline, Hong Kong and Singapore a 6% decline.

Tunisia’s record is among the best in the Arab States: its GDI is 16% lower than its HDI, but Libya’s, for example, is 30% lower and Saudi Arabia’s 33% lower. Most of the Arab States have percentage declines of more than 20%. Despite considerable progress, the Arab States still show the greatest gender inequality in basic capabilities of any region in the developing world.

#### *Changes in the GDI over time*

For 79 countries having comparable data for 1970–92, there have been some significant changes in GDI values and ranks (table 3.4). The GDI values of all countries have improved, but at different rates because of differences in average achievement and disparity. In 1970, the United States ranked first, but by 1992 it was fifth. Canada moved from second to ninth. Belgium, Spain, the Netherlands and Luxembourg also moved down several ranks. Sweden moved up from third to first, and Finland and Norway rose several places to occupy the second and third ranks.

Relative to other industrial countries, the Nordic countries have significantly improved their record of achievement and gender equality in basic capabilities. Part of the reason is their notable progress in edu-

*In most countries in Sub-Saharan Africa, gender inequality is less severe than in Latin America*

TABLE 3.4  
GDI over time—ranks and values, 1970–92

	GDI value		Percentage change in value	Rank in 1970 minus rank in 1992		GDI value		Percentage change in value	Rank in 1970 minus rank in 1992
	1970	1992				1970	1992		
1 Sweden	0.764	0.919	20	2	41 Sri Lanka	0.468	0.660	41	-7
2 Finland	0.714	0.918	29	6	42 Tunisia	0.274	0.641	135	16
3 Norway	0.719	0.911	27	4	43 Ecuador	0.425	0.641	51	-4
4 Denmark	0.759	0.904	19	0	44 Peru	0.423	0.631	49	-4
5 USA	0.810	0.901	11	-4	45 Paraguay	0.475	0.628	32	-12
6 Australia	0.725	0.901	24	0	46 Philippines	0.455	0.625	37	-9
7 France	0.742	0.898	21	-2	47 Iran, Islamic Rep. of	0.301	0.611	103	9
8 Japan	0.702	0.896	28	2	48 Indonesia	0.307	0.591	92	5
9 Canada	0.766	0.891	16	-7	49 Dominican Rep.	0.407	0.590	45	-6
10 Austria	0.685	0.882	29	4	50 Guyana	0.490	0.584	19	-20
11 Barbados	0.595	0.878	48	9	51 Syrian Arab Rep.	0.306	0.571	87	3
12 New Zealand	0.691	0.868	26	0	52 Nicaragua	0.369	0.560	52	-5
13 United Kingdom	0.690	0.862	25	0	53 El Salvador	0.384	0.533	39	-9
14 Italy	0.651	0.861	32	2	54 Honduras	0.343	0.524	53	-5
15 Belgium	0.696	0.852	22	-4	55 Iraq	0.263	0.523	99	5
16 Netherlands	0.702	0.851	21	-7	56 Saudi Arabia	0.242	0.514	113	10
17 Portugal	0.502	0.832	66	12	57 Swaziland	0.261	0.508	94	4
18 Greece	0.570	0.825	45	4	58 Algeria	0.252	0.508	101	6
19 Singapore	0.519	0.822	58	7	59 Papua New Guinea	0.269	0.487	81	0
20 Ireland	0.618	0.813	32	-3	60 Guatemala	0.309	0.481	56	-8
21 Thailand	0.448	0.798	78	17	61 Lesotho	0.322	0.466	45	-10
22 Spain	0.600	0.795	32	-4	62 Ghana	0.259	0.460	78	1
23 Luxembourg	0.674	0.790	17	-8	63 Egypt	0.261	0.453	74	-1
24 Trinidad and Tobago	0.555	0.786	42	-1	64 Morocco	0.223	0.450	102	3
25 Malaysia	0.422	0.768	82	16	65 Myanmar	0.339	0.448	32	-15
26 Argentina	0.580	0.768	32	-5	66 Zambia	0.291	0.403	38	-9
27 Venezuela	0.515	0.765	48	0	67 India	0.250	0.401	60	-2
28 Panama	0.504	0.765	52	0	68 Togo	0.186	0.380	105	4
29 Costa Rica	0.533	0.763	43	-4	69 Pakistan	0.196	0.360	84	1
30 Chile	0.543	0.759	40	-6	70 Tanzania, U. Rep. of	0.197	0.359	82	-1
31 Turkey	0.381	0.744	95	15	71 Haiti	0.209	0.354	69	-3
32 Mexico	0.476	0.741	56	-1	72 Bangladesh	0.174	0.334	92	1
33 Fiji	0.467	0.722	55	2	73 Sudan	0.189	0.332	76	-2
34 Colombia	0.460	0.720	56	2	74 Malawi	0.157	0.315	100	0
35 Kuwait	0.475	0.716	51	-3	75 Nepal	0.128	0.310	143	1
36 Jamaica	0.598	0.710	19	-17	76 Mozambique	0.150	0.229	52	-1
37 Brazil	0.418	0.709	69	5	77 Ethiopia	0.106	0.217	105	1
38 Botswana	0.302	0.696	131	17	78 Guinea	0.110	0.214	96	-1
39 Bahrain	0.383	0.686	79	6	79 Afghanistan	0.084	0.169	101	0
40 United Arab Emirates	0.352	0.674	92	8					

Note: HDI and GDI ranks have been recalculated for the universe of 79 countries. A positive difference in rank means an improvement from 1970 to 1992.

cation. In the 1970s, Sweden, Finland and Norway had average enrolment ratios of 60–70%, with small differences between men and women. By 1992, enrolment ratios had improved substantially for both, but women had noticeably higher enrolment ratios than men. In Norway, women's enrolment ratio increased from 66% to 89%, men's from 66% to 86%. In Finland in 1992, women had an enrolment ratio of 100%, men 91%—compared with 64% for women and 63% for men in 1970. From 1970 to 1992, the change in enrolment alone accounted for 17% of the increase in Finland's GDI.

In these three countries, women made the most dramatic strides in closing the gap with men in earned income. Women's wages rose relative to men's, and women's share of the labour force also increased. This trend was clearest in Norway, where women's share of earned income rose from 24% to 38%. In Sweden, women's share rose from 31% to 42%. For all three countries, the closing of the gender gap in earned income together with the average increase in income accounted for about 70–80% of the rise in the GDI from 1970 to 1992.

Several developing countries moved down ten or more ranks in this small set of

countries: Guyana, Jamaica, Myanmar, Paraguay and Lesotho. Among the developing countries that rose markedly in rank are Botswana, Thailand, Malaysia, Tunisia, Turkey and Barbados. Botswana and Thailand rose 17 ranks, Malaysia and Tunisia 16 and Turkey 15 (figure 3.1).

All the Arab States rose in rank, except Kuwait and Egypt. Saudi Arabia rose ten ranks, the United Arab Emirates eight and Bahrain six. Almost all the Arab States registered an impressive increase of 70–130% in GDI value during this period. Improvements in education were very important in bringing this about. In the United Arab Emirates, the literacy rate was 9% for women and 27% for men in 1970. But in 1992, the rates were almost equal, at 77%. In Bahrain, the domestic gross enrolment ratio was 50% for women and 63% for men in 1970. By 1992, women's enrolment ratio had increased to 86% and men's to 81%. The rapid rise in average educational attainment, combined with greater gender equality, accounted for 43% of both Bahrain's and Saudi Arabia's rise in the GDI value and 57% of the United Arab Emirates'.

The Arab States' record in improving women's access to economic opportunities is less impressive. In 1970, women's share of earned income in the United Arab Emirates was 4%, and in 1992, it was still only 7%. The corresponding shares for Bahrain are 5% and 12%, and for Saudi Arabia 5% and 7%. Tunisia has one of the better records among the Arab States: women's share of earned income rose from one-eighth to one-quarter. In this region generally, women benefited much more from the average rise in income than from greater equality in income. Tunisia's average adjusted income, for example, rose tenfold, Saudi Arabia's fivefold and Bahrain's threefold.

In many of these countries, however, the change in income explains less of the rise in the GDI than the changes in educational attainment or life expectancy. In Saudi Arabia, the change in income explains 24% of the rise in the GDI, the change in education 43% and the change in life expectancy 33%.

The story is much the same for some of the newly industrializing countries of South-East Asia, such as Malaysia and Thailand, which have dramatically improved their GDIs. Women in these countries have gained greater equality in education than in access to earned income. In 1970, women in Malaysia had a combined enrolment ratio of 45%, compared with 54% for men. By 1992, women had a 61% ratio, men 60%. In 1970 in Thailand, women had a literacy rate of 70%, compared with 87% for men, but by 1992 they had a 91% rate, men 96%.

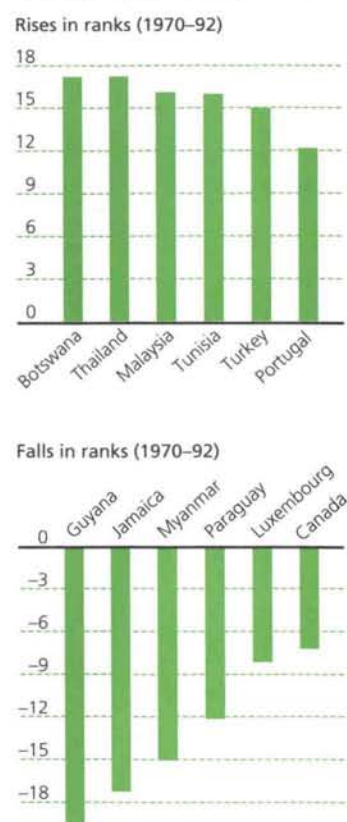
In contrast, the share of women in the labour force declined in Thailand as the country became more industrial. Women's share of the labour force in Malaysia rose, but only from 30% to 36% in 22 years. Women benefited most from a sharp rise in average income, not from greater equality with men in earning power in this region.

Myanmar stands in contrast to Malaysia and Thailand. It dropped 15 ranks during this period. The main reason is its slower economic growth. Moreover, women's share of the labour force dropped from 38% to 36%. The change in income—both in level and in gender disparity—accounts for only 20% of the rise in Myanmar's GDI. The change in educational attainment and the change in life expectancy each account for about 40%.

Countries in South Asia showed little change in ranking in the GDI. Sri Lanka dropped the most (seven ranks). In that country, women gained relative to men in literacy and gross enrolment. But over two decades, women increased their share of the labour force only from 25% to 27%.

The great majority of countries in Latin America and the Caribbean dropped in rank. Barbados and Brazil are two noteworthy exceptions. Exhibiting the biggest drops in rank are Guyana (–20), El Salvador (–9) and Guatemala (–8). Chile dropped six ranks despite a threefold increase in average adjusted income. For a developing country, Chile had relatively high literacy rates and gross enrolment ratios in 1970 and little gender inequality in educational attainment. By 1992, these rates had risen, and minimal differences remained between women and men. But women closed very

FIGURE 3.1  
Rises and falls in GDI ranks



*The GEM measures women's participation in economic, political and professional activities*

little of the gap with men in earned income. In 1970, women's share of earned income was 17%—in 1992, 20%.

Guyana had the biggest drop in rank among the 79 countries (–20). Women only marginally improved their achievement levels relative to men in education and life expectancy. Not only did the country grow slowly during this period, but women did not significantly increase their share of the labour force and of earned income.

The countries of Sub-Saharan Africa remained concentrated at the bottom of the GDI rankings, with only marginal changes in rank. A notable exception is Botswana, which rose dramatically (17 ranks). But almost 58% of the rise in Botswana's GDI is due to its phenomenal rate of growth in average income. Its adjusted real income increased almost fifteenfold during this period. At the same time, women's share of the labour force dropped from 45% to 35%. Both women and men in Botswana now have a much higher educational attainment, but the gap in literacy between the two has widened. It is thus the rise in average achievement that has caused Botswana's GDI to rise, not a significant improvement in gender equality.

### **Gender empowerment measure**

The gender empowerment measure (GEM) concentrates on participation—economic, political and professional. It differs from the GDI, which is concerned primarily with basic capabilities and living standards. Like the HDI and the GDI, the GEM focuses on a few selected variables, even though participation can take many forms. Given data availability, it concentrates on three broad classes of variables (technical note 2):

1. For power over economic resources based on earned income, the variable is per capita income in PPP dollars (unadjusted).
2. For access to professional opportunities and participation in economic decision-making, the variable is the share of jobs classified as professional and technical and administrative and managerial.
3. For access to political opportunities and participation in political decision-making,

the variable is the share of parliamentary seats.

The GDI and the GEM treat the income variable differently. In the GEM, income is evaluated not for its contribution to basic human development—such as a longer life, literacy and freedom from poverty. It is evaluated as a source of economic power that frees the income-earner to choose from a wider set of possibilities and exercise a broader range of options. That is why income above the average world per capita income is not discounted as it is in both the HDI and the GDI.

For access to professional opportunities and participation in economic decision-making, the variable chosen is women's share of jobs classified as administrative or managerial and professional or technical. Administrative and managerial jobs lie closer to decision-making, but professional and technical jobs represent opportunities for career development. Women often acquire specialized higher education but are prevented by cultural or economic barriers from taking jobs that will use the valuable skills they gain. Their potential is thus underused. It should be borne in mind that the quality of data for professional careers and decision-making positions is uneven, with some variation in how countries categorize these occupations.

The best record is in the Nordic countries, where the share of women in professional and technical careers exceeds 60% for some countries. Among developing countries, Botswana, the Philippines and Uruguay show similar percentages. Generally, the proportion of women in professional and technical jobs is lower—with the average ratio 40%.

In administrative and managerial positions, the share of women is even smaller. An exception is Hungary, where women hold 58% of such positions. In Australia, Canada and the United States, women hold about 40% of such positions. Elsewhere, the percentages are quite low. In most developing countries, the proportion of women in administrative and managerial positions is less than 10%. Even in industrially advanced France, Japan, Luxembourg and Spain, the share of women in such posi-

tions is less than 10%. Thus, many high-paid career opportunities still are not open to women in many societies.

The third variable is access to political opportunities and participation in political decision-making. Here, the facts are even more startling than in the economic arena. No gender-specific training is required to be a parliamentarian. Neither public speaking, nor the ability to represent the opinions of the electorate, nor the art of winning public confidence requires exclusively masculine traits. But politics remains an obstacle course for women.

One of the best indicators of political participation would be women's share of representation in local bodies, such as municipal councils, but these data are unavailable for many countries. So, the variable chosen for the GEM is representation in parliament, in both upper and lower houses, in June 1994.

Women have obtained the highest representation in parliament in Norway and Finland, with four-fifths of the seats that men have. The next best record is in Sweden and Denmark, where the proportion was about one-third. Some countries, such as Sweden, have made dramatic strides more recently.

Beyond the four Nordic countries, the disparity widens dramatically. In Thailand, 96.4% of the seats are held by men, 3.6% by women. In the Republic of Korea, the proportions are 99% and 1%. Even this is better than having no women in parliament, which is the case in some countries. The average representation of women in parliaments worldwide is 10%.

The three dimensions are valued equally in constructing the gender empowerment measure. In computing the index, the parameter of inequality aversion ( $\epsilon$ ) chosen is 2, the same as that for the gender-related development index.

The GEM is not meant to be a prescriptive index, with the intent of setting universal cultural norms. What is crucial is not achieving a certain percentage representation in selected political and economic arenas, but providing equality of choices to both women and men. The GEM examines outcomes in economic and political partic-

ipation. These outcomes could be caused by structural barriers to women's access to these arenas. Or they could be the result of choices by both women and men on their desired roles in society. This is a matter for the people of each country to determine for themselves.

#### *GEM values and rankings*

The GEM is estimated for 116 countries with comparable data for the three dimensions (table 3.5). Sweden and Norway rank at the top, followed at a distance by Finland and Denmark. The Nordic countries are not only good at strengthening the basic capabilities of women—through liberal investment in education and health—but they have also opened many opportunities for women to participate in economic and political fields. The Nordic countries are the only ones that have crossed the critical 30% threshold for meaningful participation by women.

The ranking also shows that some developing countries outperform much richer industrial countries in gender equality in political, economic and professional activities. This is the case for Barbados, the Bahamas, Trinidad and Tobago, Cuba, Costa Rica, China, Guyana, the Philippines and Colombia. Trinidad and Tobago has a GEM of 0.533, higher than the GEM for Switzerland, Hungary, the United Kingdom, Spain, Japan or France. France's GEM, for example, is 0.433.

Only nine countries have GEM values above 0.60. Twenty-four have values below 0.25. The low values of the GEM 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 traveled in building their basic capabilities.

A number of countries have very low GEM values compared with their GDI values. Although the GEM and the GDI are not strictly comparable because of differences in variables and their construction, substantial differences in the values of the two indices are illustrative of important problems that policy-makers need to address. Among industrial countries, the

*The GEM is not meant to be a prescriptive index*

TABLE 3.5

## Gender empowerment measure (GEM)

GEM rank	Gender empowerment measure (GEM)	Seats held in parliament (% women) <sup>a</sup> 1994	Administrators and managers (% women) 1992	Professional and technical workers (% women) 1992	Earned income share (% women) <sup>b</sup>
1	Sweden	0.757	38.9 <sup>c</sup>	63.3	41.6
2	Norway	0.752	39.4	25.4	37.8
3	Finland	0.722	39.0	23.9	40.6
4	Denmark	0.683	33.0	14.7	39.8
5	Canada	0.655	17.3	40.7	29.3
6	New Zealand	0.637	21.2	32.3	47.8
7	Netherlands	0.625	29.3	13.5	42.5
8	USA	0.623	10.3	40.2	50.8
9	Austria	0.610	21.1	16.4	48.0
10	Italy	0.585	13.0	37.6 <sup>d</sup>	46.3
11	Australia	0.568	12.6	41.4	23.8
12	Barbados	0.545	14.3	32.6	52.3
13	Luxembourg	0.542	20.0	8.6	37.7
14	Bahamas	0.533	10.8	26.3	56.9
15	Trinidad and Tobago	0.533	17.7	22.5	54.7
16	Cuba	0.524	22.8	18.5	47.8
17	Switzerland	0.513	15.9	5.3	39.0
18	Hungary	0.506	10.9	58.2	49.0
19	United Kingdom	0.483	7.4	22.7	39.6
20	Bulgaria	0.481	12.9	28.9	57.0
21	Belgium	0.479	10.1	13.0	47.1
22	Costa Rica	0.474	14.0	23.1	44.9
23	China	0.474	21.0	11.6	45.1
24	Ireland	0.469	12.4	15.1	46.7
25	Guyana	0.461	20.0	12.8	47.5
26	Spain	0.452	14.6	9.5	47.0
27	Japan	0.442	6.7	8.0	42.0
28	Philippines	0.435	11.2	27.7	63.2
29	Colombia	0.435	9.4	27.2	41.8
30	Portugal	0.435	8.7	18.9	54.4
31	France	0.433	5.7	9.4	41.4
32	Poland	0.432	13.0	15.6	60.4
33	Panama	0.430	7.5	28.9	50.7
34	Nicaragua	0.427	16.3	12.4 <sup>f</sup>	42.9 <sup>f</sup>
35	Singapore	0.424	3.7	15.7	40.3
36	Argentina	0.415	14.2	6.9 <sup>f</sup>	54.8 <sup>f</sup>
37	Dominican Rep.	0.412	10.0	21.2	49.5
38	Botswana	0.407	5.0	36.1	61.4
39	Honduras	0.406	7.8	27.8	50.0
40	Chile	0.402	7.2	19.5	52.0
41	Peru	0.400	8.8	22.1	40.9
42	Mexico	0.399	7.3	19.4	43.2
43	Zimbabwe	0.398	12.0	15.4	40.0
44	El Salvador	0.397	10.7	17.7	43.3
45	Venezuela	0.391	6.0	18.6	55.2
46	Guatemala	0.390	5.2	32.4	45.2
47	Iraq	0.386	10.8	12.7	43.9
48	Cyprus	0.385	5.4	10.2	40.8
49	Malaysia	0.384	10.0	8.3	38.2
50	Korea, Dem. People's Rep. of	0.380	20.1	3.7	24.6
51	Cape Verde	0.379	7.6	23.3	48.4
52	Namibia	0.376	6.9	20.8 <sup>g</sup>	40.9 <sup>g</sup>
53	Ecuador	0.375	5.2	26.0	44.2
54	Thailand	0.373	3.7	22.2	52.7
55	Belize	0.369	7.9	12.6	51.9
56	Indonesia	0.362	12.2	6.6	40.8
57	Uruguay	0.361	4.6	20.6	61.2
58	Brazil	0.358	5.5	17.3	57.2
59	Swaziland	0.357	8.4	14.5	54.3
60	Romania	0.352	2.9	44.8	26.6 <sup>f</sup>

GEM rank	Gender empowerment measure (GEM)	Seats held in parliament (% women) <sup>a</sup> 1994	Administrators and managers (% women) 1992	Professional and technical workers (% women) 1992	Earned income share (% women) <sup>b</sup>
61	Mozambique	0.350	11.3	20.4	40.0 <sup>e</sup>
62	Mauritius	0.350	14.3	41.4	22.6
63	Haiti	0.349	32.6	39.3	34.2 <sup>e</sup>
64	Suriname	0.348	21.5	69.9	24.3 <sup>e</sup>
65	Bolivia	0.344	16.8	41.9	17.1
66	Paraguay	0.343	16.1	51.2	16.1
67	Greece	0.343	10.1	43.1	22.2
68	Cameroon	0.339	10.1	24.4	26.2 <sup>e</sup>
69	Lesotho	0.339	33.4	56.6	35.7 <sup>e</sup>
70	Burundi	0.337	13.4	30.5	40.2 <sup>e</sup>
71	Malta	0.334	20.8	44.9 <sup>f</sup>	18.3 <sup>e</sup>
72	Guinea-Bissau	0.327	7.9 <sup>f</sup>	26.2 <sup>f</sup>	32.6 <sup>e</sup>
73	Nepal	0.315	22.8	36.2	26.4 <sup>e</sup>
74	Gambia	0.315	14.5	26.5	32.6 <sup>e</sup>
75	Fiji	0.314	9.1	39.7	16.7 <sup>e</sup>
76	Ghana	0.313	8.9	35.7	32.7 <sup>e</sup>
77	Samoa (Western)	0.309	12.3	46.9	30.1 <sup>e</sup>
78	Maldives	0.294	14.0	34.7	17.2 <sup>e</sup>
79	Sri Lanka	0.288	6.9	49.6	25.1
80	Bangladesh	0.287	5.1	23.1	22.8
81	Syrian Arab Rep.	0.285	5.6 <sup>f</sup>	26.4 <sup>f</sup>	11.3
82	Burkina Faso	0.280	13.5	25.8	38.5 <sup>e</sup>
83	Angola	0.278	4.3 <sup>f</sup>	27.7 <sup>f</sup>	31.5 <sup>e</sup>
84	Benin	0.271	6.9	30.1 <sup>f</sup>	40.0 <sup>e</sup>
85	Morocco	0.271	25.6 <sup>d</sup>	24.1	16.4 <sup>e</sup>
86	Zambia	0.271	6.1	31.9	25.3
87	Algeria	0.266	5.9	27.6	7.5 <sup>e</sup>
88	Senegal	0.265	3.7 <sup>f</sup>	16.5	31.3 <sup>e</sup>
89	Malawi	0.255	4.8	34.7	33.3 <sup>e</sup>
90	Korea, Rep. of	0.255	4.1	42.5	22.0
91	Tunisia	0.254	7.3	17.6	19.5 <sup>e</sup>
92	Equatorial Guinea	0.250	1.6	26.8	33.2 <sup>e</sup>
93	Kuwait	0.241	5.2	36.8	18.4 <sup>e</sup>
94	United Arab Emirates	0.239	1.6	25.1	6.8 <sup>e</sup>
95	Iran, Islamic Rep. of	0.237	3.5	32.6	14.9 <sup>e</sup>
96	Egypt	0.237	10.4	28.3	8.2
97	Mali	0.237	19.7	19.0	11.8 <sup>e</sup>
98	Turkey	0.234	4.3	31.9	30.2
99	Jordan	0.230	5.4 <sup>f</sup>	33.8 <sup>f</sup>	9.4
100	Papua New Guinea	0.228	11.6	29.5	31.2 <sup>e</sup>
101	India	0.226	2.3	20.5	19.2 <sup>e</sup>
102	Sudan	0.219	2.4	28.8	18.5 <sup>e</sup>
103	Lebanon	0.212	2.1 <sup>f</sup>	37.8 <sup>f</sup>	21.8 <sup>e</sup>
104	Congo	0.206	6.1	28.5	33.0 <sup>e</sup>
105	Ethiopia	0.205	11.2	23.9	29.4 <sup>e</sup>
106	Central African Rep.	0.205	9.0	18.9	37.4
107	Zaire	0.201	9.0	16.6	29.0 <sup>e</sup>
108	Nigeria	0.198	5.5	26.0	28.5 <sup>e</sup>
109	Solomon Islands	0.198	2.6	27.4	29.6 <sup>e</sup>
110	Togo	0.182	7.9	21.2	28.9 <sup>e</sup>
111	Mauritania	0.163	7.7	20.7	18.5 <sup>e</sup>
112	Côte d'Ivoire	0.157	0.0	15.2 <sup>f</sup>	27.8 <sup>e</sup>
113	Comoros	0.157	0.0	22.3	31.9 <sup>e</sup>
114	Pakistan	0.153	2.9 <sup>c</sup>	18.4	10.2 <sup>e</sup>
115	Djibouti	0.130	2.1	19.9	33.4 <sup>e</sup>
116	Afghanistan	0.111	0.7 <sup>f</sup>	13.5 <sup>f</sup>	7.1 <sup>e</sup>

a. Data are as of June 1994. A value of 0 was converted to 0.001 for purposes of calculation.

b. Data are for latest available year. The manufacturing wage was used for the Central African Republic, Finland, Greece, Ireland, Norway, Sweden and Syria.

c. Data are from ILO 1993b.

d. Administrators, managers and clerical workers.

e. An estimate of 75% was used for the ratio of the female non-agricultural wage to the male non-agricultural wage.

f. Data are for a year between 1970 and 1980.

g. Data are from ILO 1994b.

Source: Column 2: annex table 2.4; columns 3 and 4: UN 1994i and ILO 1993b and 1994b; column 5: calculated on the basis of data from UN 1994i, ILO 1994b, consultant reports prepared for the 1994 and 1995 Human Development Reports, World Bank 1992 and UN 1994k and forthcoming (*The World's Women*).

*In most countries, industrial or developing, women are not yet allowed into the corridors of economic and political power*

widest differences in value between the GDI and the GEM are found in France, Japan and Greece—followed by the United Kingdom, Ireland and Spain. Greece's GDI is 0.825, for example, and its GEM only 0.343. Women in Greece hold only 6% of the seats in parliament and only 10% of administrative and managerial positions. Moreover, women receive only 22% of earned income. The story is similar in France and Japan.

Among developing countries, the Republic of Korea, Turkey, Kuwait, the United Arab Emirates and Mauritius have very low GEM values compared with their GDI values. Turkey has a low GEM value (0.234) mainly because women hold only 2% of parliamentary seats and only 4% of administrative and managerial positions.

Comparing GEM ranks with income ranks can help to highlight problem areas. Unadjusted income is part of the GEM, so richer countries should rank higher on the GEM on the basis of income alone. If they do not, this indicates the need for more progress in achieving gender equality. Several Mediterranean countries, such as Turkey, Greece and Cyprus, rank much lower in the GEM than they do in real GDP per capita. The same is true of many Arab states. For example, the United Arab Emirates ranks third in real GDP per capita among the 116 countries, but 94 in the GEM. Kuwait ranks 32 in GDP per capita and 93 in the GEM. One reason: neither country has any women in parliament. In the United Arab Emirates, women hold fewer than 2% of administrative and managerial positions and receive only 7% of earned income.

Several countries in East and South-East Asia that have followed an East Asian development model have low GEM values. These include Japan, the Republic of Korea and Singapore—which rank much higher in real GDP per capita than in the GEM. The Republic of Korea, for example, ranks 28 in GDP per capita but 90 in the GEM. The common problem among these countries is that economic and political participation by women is still low.

Some developing countries do comparatively better in the GEM than in the GDI. China, Costa Rica and Cuba have higher GEM values than Japan or France. Nicaragua and the Philippines have higher GEM values than Greece. And Zimbabwe and Cape Verde have higher values than Turkey or the Republic of Korea. Invariably, the difference is that the better-performing countries have opened many economic and political opportunities to women, opportunities that remain closed to women in other countries.

Much progress remains to be made in gender equality in almost every country. And in equality of choice in economic and political participation, industrial countries are not necessarily taking the lead. The areas showing the least progress are parliamentary representation and percentage share of administrators and managers.

The clear policy message from this simple exercise is this: In most countries, industrial or developing, women are not yet allowed into the corridors of economic and political power. In exercising real power or decision-making authority, women are a distinct minority throughout the world.





## Valuing women's work

Much of women's work remains unrecognized and unvalued. This has an impact on the status of women in society, their opportunities in public life and the gender-blindness of development policy. In an attempt to understand the critical dimensions of women's work, this chapter sets out to measure the scale and nature of their economic contribution. A survey of time-use data from a range of countries highlights the contribution by women to household and community work. The chapter concludes that if the unpaid contributions by both women and men were recognized, there would be far-reaching consequences for social and economic policy and for social norms and institutions.

Women's work is greatly undervalued in economic terms. This is due in part to the restricted definition of economic activity. But part of the problem is the notion of value itself.

For the purposes of economic valuation, value is synonymous with market value. National income statistics were originally derived by adding the market value of all the goods produced and sold and all the services provided for hire. But many goods and services with economic value are not marketed. In theory, this problem is resolvable if these items could be sold, for a market value could then be imputed to them on this basis—as is done for subsistence crops consumed by the producers themselves. A rental value can be imputed to owner-occupied housing. And the 1993 revision of the System of National Accounts (SNA) imputes market value to some goods produced and consumed within the household. Yet much household and community work remains unvalued. The total product of

society is thus underestimated—and the economic contributions of many people, especially women, are unrecognized and unrewarded.

The general problem of unpaid or non-market work has long been noted. At the start of this century, Arthur Cecil Pigou, the pioneer of welfare economics, wrote that if a woman employed as a housekeeper by a bachelor were to marry him, national income would fall, since her previously paid work would now be performed unpaid. But unpaid work goes far beyond housekeeping, and its omission leaves a major gap in national income accounting.

An additional consideration is that the value of much household and community work transcends market value. This activity has an intrinsic use value or human value that is not captured by its value for exchange. At the heart of human development is the expansion of human choices by developing human capabilities. Income becomes one of the means to ensure the development of capabilities, but it is not an end in itself. The pursuit of good health, the acquisition of knowledge, the time devoted to fostering social relationships, the hours spent in the company of relatives and friends—all are worthwhile activities, yet they carry no price tag.

Human value is not an attribute solely of activity pursued for its own sake—for the benefit of the individual. Much of such activity is imbued with human value precisely because it is interactive—relational. Some of it may even have by-products that are useful and for which a market value can be imputed. But that is not its driving purpose. Take preparing meals as an example. This naturally involves work, but sharing a

*Much of women's work remains unrecognized and unvalued*

meal with other members of the household is also a way of enjoying and reproducing a relationship. A by-product, of course, is nourishment and building the capacity for work.

These comments are not made as a criticism of national income accounting but as a recognition of its limitations. The System of National Accounts was never designed to measure human well-being—only output, income and expenditures. But to accomplish this limited goal, the SNA should become more comprehensive, more encompassing in how it defines economic activity. The reason: much of the work of society remains “invisible”, and the people performing it do not get their proper economic reward or recognition.

The question of value is simplified by assuming that an hour of market work and

an hour of non-market work have the same value. This implies that productivity differences between market and non-market work are not an issue. While this may be a simplifying assumption for measuring economic output, it is not for measuring human well-being. When the real concern is with human development, it is difficult to argue that time spent producing goods and services for the market has greater value than time spent creating, nurturing and sustaining human life.

For this year's *Human Development Report*, extensive research was undertaken on the amount of time women and men spend on market and non-market activities. Spanning industrial and developing countries, the data generated by this research are used here to provide estimates of the value of household and other unpaid work.

A review of the 31 countries in the sample tells a fairly dramatic story:

- Women work longer hours than men in nearly every country (figure 4.1). Of the total burden of work, women carry on average 53% in developing countries and 51% in industrial countries.
- Of men's total work time in industrial countries, roughly two-thirds is spent in paid SNA activities and one-third in unpaid non-SNA activities. For women, these shares are reversed. In developing countries, more than three-fourths of men's work is in SNA activities. So, men receive the lion's share of income and recognition for their economic contribution—while most of women's work remains unpaid, unrecognized and undervalued (figure 4.2).

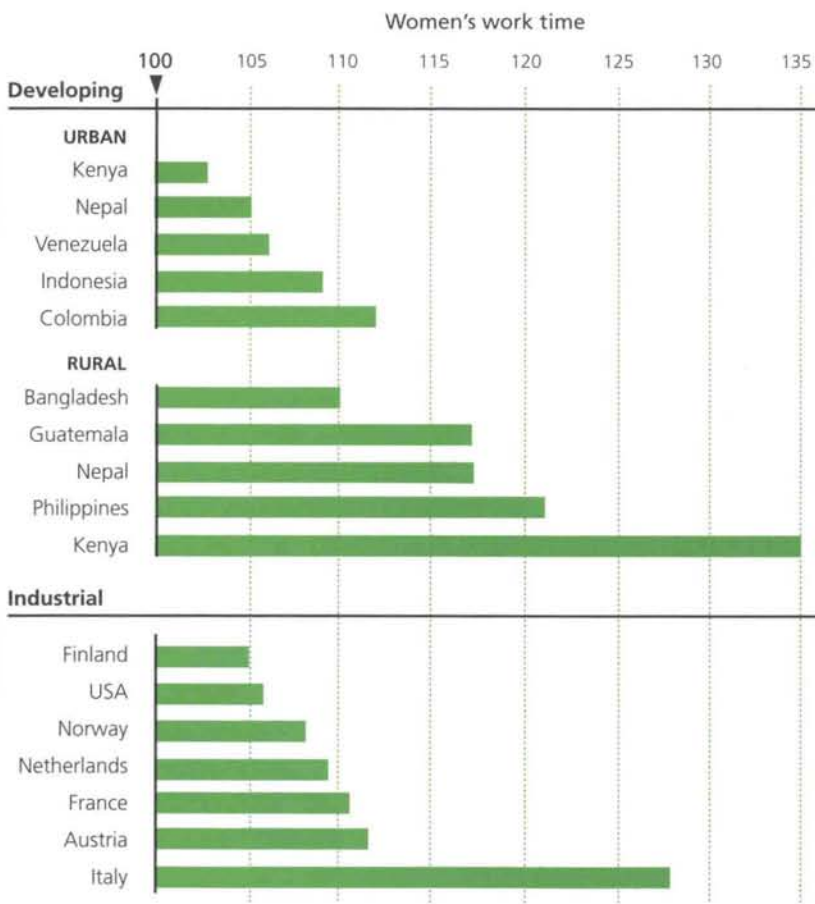
### The evidence of time use

Time-use studies have been collected for 14 industrial countries, 9 developing countries and 8 countries in Eastern Europe and the Commonwealth of Independent States (CIS). For four industrial countries—Canada, Norway, Sweden and the United Kingdom—data are available to trace historical trends as well. Two developing countries, Kenya and Venezuela, are studied in detail. The data also allow an interesting comparison of an Eastern European country, Bulgaria, with a Nordic one, Finland.

FIGURE 4.1

### Women work more hours than men

(men's work time = 100)



Source: Githinji 1995, Goldschmidt-Clermont and Aligisakis 1995, Harvey 1995 and Urdaneta-Ferrán 1994a, 1994b and 1994c.

All countries in the sample have been selected on the basis of the availability and reliability of time-use data. Originally, data were collected for a much larger set of developing countries, but the quality of the data did not permit a sizable selection to be included in the final analysis. The conclusions rely on the sample of countries studied.

The studies vary in data collection methods (diaries, yesterday recall or other), in representativeness of samples and the handling of non-response, in age groups covered, in time units defined and in treatments of seasonal variations. These small methodological differences should be kept in mind in interpreting the data. Variations based on urban and rural data, available for a few countries, can be highlighted. Trends can be discussed for the four countries for which there is historical information. But beyond that, only the broadest conclusions are valid across countries.

Time is measured in hours and minutes per day, after averaging it over the week or month, and then divided in two ways. The first division is between the category of personal (non-economic) activities and that of productive (economic) activities. The criterion here is that personal activities cannot be delegated to third parties. No one else can eat your breakfast on your behalf or catch up on your sleep. You must do it yourself. Others could, however, cook a meal for you if you were to hire them. This third-person rule is standard in time-use studies for allocating time between economic and non-economic activities.

The second division is between productive activities that are market-oriented—and therefore qualify for entry in national income accounts—and those that are not. Market-oriented activities include production of the self-consumed products of subsistence agriculture, since they could be marketed. The boundary between these two categories corresponds roughly to the production boundary defined by the UN System of National Accounts (1968 SNA). The 1993 revision of the SNA will lead to the addition of a few items to the national accounts, such as producing household goods for own-consumption and carrying water. But the bulk of household work and

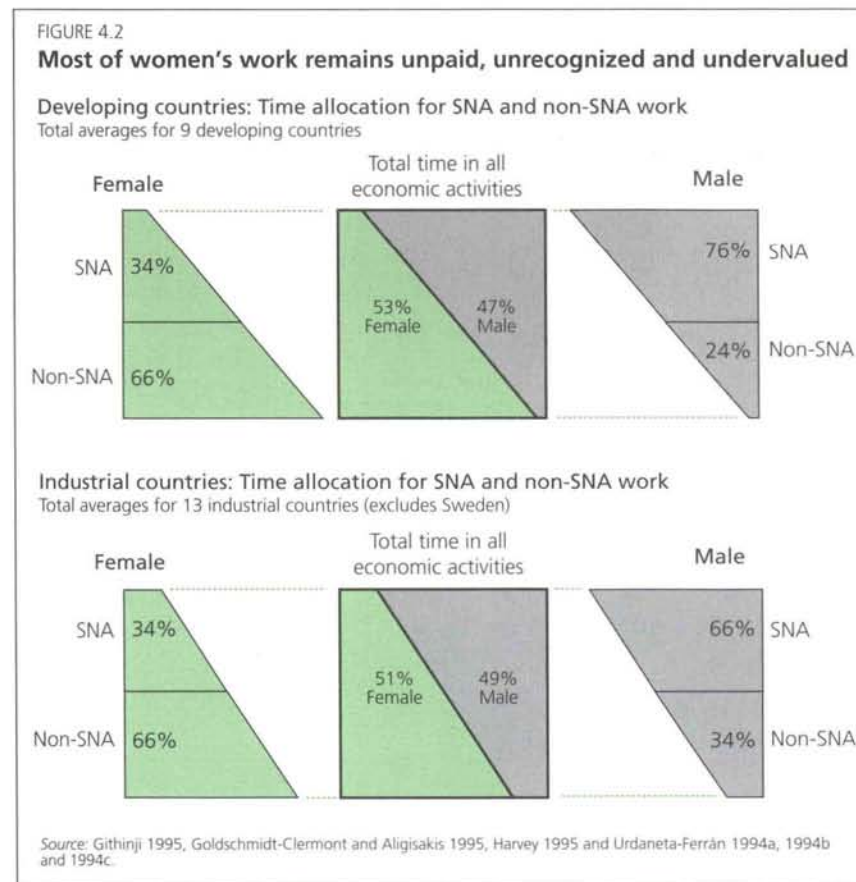
voluntary community work will remain excluded. Also excluded will be education, which should be considered an economic activity and a critical investment.

The question in valuing women's work is the amount and value of non-SNA time spent by women as well as men relative to the amount and value of time spent in SNA activities.

#### Hours in SNA activities

A large study was undertaken of the share of total market hours worked by women and men in developing countries and in some Eastern European and CIS countries. Using the number of hours women and men spend in market work is preferable to the standard method of merely counting the number of participants in the labour force (figure 4.3). In many sectors, women work fewer hours on average than men, but this underemployment usually is not captured by official statistics.

In Africa, women's economic contribution is higher than in other regions. They



*Women's greater work burden—more hours, more concurrent tasks*

work almost 44% of all market hours, mainly because of their work in agriculture and services. They contribute only 17% of the hours in industry.

In Latin America, women's relative contribution is much smaller, at only 28% of all market hours, with the highest share in services.

In Asia, women contribute 36% of all market hours, with fairly even shares in industry, services and agriculture. What is noteworthy is that women participate in industry much more in Asia than in Africa or Latin America.

In Eastern Europe and the CIS countries, women may well contribute more hours than men to market work, based on a very limited sample. They are active in agriculture and participate much more in industry than do women in the developing regions. They are most active, however, in services.

*Intensity of work*

Most time-use research regards people's activities as individual tasks that occur one after the other. In reality, many activities—especially household tasks—are simultaneous. Women in particular have developed a facility for juggling many activities at once, such as carrying a child while sweeping up or washing clothes while cooking food.

A time-use study in the United States in the 1980s revealed that performing simultaneous tasks is more common among women than men, particularly in household chores. And a study of rural women in Saint Lucia

showed that more than three-quarters of household activities involved multiple tasks.

In many developing countries, production activities outside the household are difficult to separate from household work, and women's multiple tasks often combine the two. In other words, the distinction between SNA and non-SNA work is often blurred. Non-marketed output and the corresponding labour input are thus both underestimated.

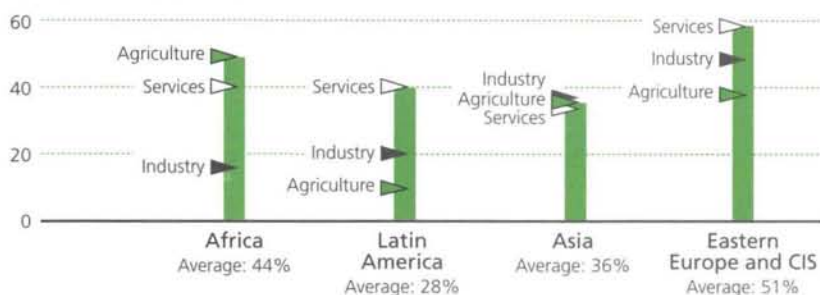
Many household tasks are unrelenting. Meals must be prepared three times a day. Child care cannot be delayed until there is free time. This becomes clear on weekends. During weekdays, men and women may have relatively equal total workloads, but data from 18 industrial countries show that on Saturday women work almost two more hours than men and on Sunday an hour and three-quarters more—a difference that widens if the family has young children.

The nature of work, especially household work, is very different in developing countries and industrial countries. Women in industrial countries have appliances to ease heavy work. And they can buy consumer goods and services that already incorporate many of the earlier stages of preparation that women in developing countries must perform themselves. Women in developing countries must carry water from a distance, collect firewood and clean and grind food grains. So, it is not only the quantity of time but the intensity of effort (and its drudgery) that are also important—though missing—dimensions.

There are only 24 hours in a day. With time a scarce resource relative to the tasks that need to be done, the frequent alternative is to heighten the intensity of work. This is a particular problem among poor women. They cannot rely on modern appliances. As their economic conditions deteriorate, they cope by increasing the output of their one productive resource—their labour. They produce more goods at home rather than purchase them. They take on contract work at home that they can do at the same time as household work. Or they choose informal employment, such as street vending, because it allows them to take their children along.

FIGURE 4.3  
**Women's share of economic time varies by sector and region**

Women's hours as a percentage of total hours worked in each economic sector



Source: Urdaneta-Ferrán 1994b.

Hours for leisure activities or even sleep are reduced. Conventional measures of well-being, which focus on the production of goods and services, neglect this debilitating aspect of intense work. A human development perspective cannot afford to overlook it.

### Time use in developing countries

Time-use data are available from 13 surveys in nine developing countries. Four surveys are available from Nepal, one urban and three from different rural areas. General urban and rural surveys are available from Kenya. And the survey of the Republic of Korea is nationwide.

There are general problems in comparing the results of time-use studies because of a lack of uniformity in the design of surveys, the sample taken, the method of collection or the year of the survey. Surveys that examine only the allocation of time by women and men *during workdays* tend to underestimate the contribution of women to economic activity because their work continues unabated during "days off". The same is true with surveys of economic activities *during the day*, since a significant portion of women's work occurs at night.

Despite these problems—and in the absence of better data—the studies assembled here give a valuable glimpse of the general pattern of time use by women and men in developing countries (tables 4.1 and 4.2). Because of the limited selection of countries, simple arithmetic averages, unweighted by population, are used to present summary results.

Several features of the total time women and men spend in market and non-market activities are worth noting from the 13 surveys:

- The overall burden of work varies greatly from one country to another. It ranges from about 6.25 hours a day in Colombia to 10.5 hours in Guatemala. But such cross-country comparisons must be handled cautiously because of the different coverage of surveys.
- More important, women work longer hours than men in all countries. The difference ranges from as little as eight minutes a

day in the Republic of Korea to almost two hours in the mountainous regions of Nepal to almost three hours in rural Kenya (box 4.1 and figure 4.4). On average, women put in 13% more time than men do in market

TABLE 4.1  
Burden of work by gender, selected developing countries

Country	Year	Work time (minutes a day)			Women's work burden compared with men's (% difference)
		Average	Women	Men	
<i>Urban</i>					
Colombia	1983	378	399	356	12
Indonesia	1992	382	398	366	9
Kenya	1986	581	590	572	3
Nepal	1978	567	579	554	5
Venezuela	1983	428	440	416	6
<b>Average</b>		471	481	453	6
Percentage share			51	49	
<i>Rural</i>					
Bangladesh	1990	521	545	496	10
Guatemala	1977	629	678	579	17
Kenya	1988	588	676	500	35
Nepal	1978	594	641	547	17
Highlands	1978	639	692	586	18
Mountains	1978	592	649	534	22
Rural hills	1978	552	583	520	12
Philippines	1975-77	499	546	452	21
<b>Average</b>		566	617	515	20
Percentage share			55	45	
<i>National</i>					
Korea, Rep. of	1990	479	488	480	2
<b>Average for sample countries</b>		514	544	483	13
Percentage share			53	47	

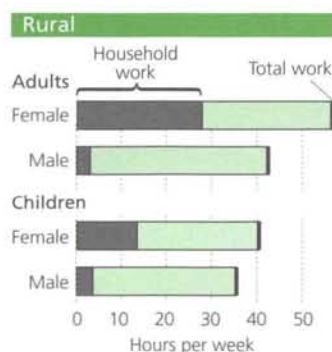
Source: Harvey 1995.

TABLE 4.2  
Time allocation by women and men, selected developing countries (as a percentage of total work time)

Country	Year	Total work time		Female		Male	
		SNA	Non-SNA	SNA	Non-SNA	SNA	Non-SNA
<i>Urban</i>							
Colombia	1983	49	51	24	76	77	23
Indonesia	1992	60	40	35	65	86	14
Kenya	1986	46	54	41	59	79	21
Nepal	1978	58	42	25	75	67	33
Venezuela	1983	59	41	30	70	87	13
<b>Average</b>		54	46	31	69	79	21
<i>Rural</i>							
Bangladesh	1990	52	48	35	65	70	30
Guatemala	1977	59	41	37	63	84	16
Kenya	1988	56	44	42	58	76	24
Nepal	1978	56	44	46	54	67	33
Highlands	1978	59	41	52	48	66	34
Mountains	1978	56	44	48	52	65	35
Rural hills	1978	52	48	37	63	70	30
Philippines	1975-77	73	27	29	71	84	16
<b>Average</b>		59	41	38	62	76	24
<i>National</i>							
Korea, Rep. of	1990	45	55	34	66	56	44
<b>Average for sample countries</b>		54	46	34	66	76	24

Source: Harvey 1995.

FIGURE 4.4  
Allocation of work in Kenya



Source: Githinji 1995.

activities and unpaid work taken together.

- Of the total burden of work, women carry 53%, men 47%. In rural areas, this widens to 55% and 45%. In urban areas, it is 51% and 49% (figure 4.5).

- The disparity between rural and urban areas is startling. Normally, the total work time for both women and men is much longer (about 20% longer) in rural areas than in urban areas. Women spend an average of 20% more time than men working in rural areas, 6% more in urban areas.

- In Nepal, as life moves from the placid urban areas to the more rugged mountains and hills, men do not increase their hours of work appreciably—in fact, they work fewer hours. It is women who take on the extra burden of work, including working for a worthwhile livelihood in inhospitable conditions.

How much of this total work is in market-related economic activities and how much in unpaid activities? From the 13 surveys, the main conclusions are these:

- The proportion of daily time spent by women in paid economic activities varies enormously—from about a quarter in Colombia and urban Nepal to more than 40% in rural Kenya to more than half in the highlands of Nepal. Obviously, women adjust their work patterns to different eco-

nomic environments and different family needs.

- The allocation of time by women and men to market-oriented and household activities differs greatly between urban and rural areas. In urban areas, women spend an average of 31% of their total work time in paid economic activities—in rural areas, 38%. The difference often arises because women carry a large burden of work in agriculture, generally in family-owned farms, and there are greater barriers to their entry in the more organized urban labour market. On average, women in all areas spend 34% of their work time in paid economic activities.

- Men normally spend no more than a quarter of their work time in unpaid activities—though there are large variations, from 13% in Venezuela to 44% in the Republic of Korea. In Korea, those surveyed spend a significant share of their economic time in educational activities.

- In the ratio of market work to non-market work, the Republic of Korea shows the least inequality. For men it is 1.3:1, and for women 0.5:1. For Venezuelan men the ratio is 6.7:1 (box 4.2).

#### *Women's work affected by the environment*

Many time-use studies show that women's work is affected much more than men's by environmental degradation. Men receive most of the benefit from the timber and livestock industries because they get the jobs or own the productive assets. But the deforestation and overgrazing of pastureland that often ensue cause soil erosion, loss of fuel wood and depletion of water resources. And that increases the time and energy that women must devote to collecting water and wood.

When land and water are depleted, much more labour—usually women's labour—is required to maintain the same output. The workload of children also rises, for girls more than boys.

A study of Kenya shows that women are much more involved than men in such activities as farming, collecting fuel wood and water, cooking and cleaning—spending almost 45 hours a week on them, men

#### BOX 4.1

#### **Women and girls are Kenya's breadwinners**

Women in rural Kenya work on average about 56 hours a week, men only about 42 (figure 4.4). Children between the ages of 8 and 16 also work many hours. If time for education is counted, girls spend about 41 hours a week in economic activity, boys 35 hours.

Women shoulder the heaviest burden in household work, including firewood and water collection: 10 times the hours of men! This carries over to girls, whose household work takes about 3.7 times the hours of boys.

Women in households that farm such cash crops as tea and coffee work the most hours of any rural women—62 total hours a week. As Kenya's farming becomes more cash-oriented, women tend to shoulder more work, not less.

The average workload for urban men and women is more equal: 49.2 hours a week for women, and 47.7 for men.

Almost 80% of men's work, but only 41% of women's, is income-earning. But girls, not boys, are the "breadwinners" for the family—spending 10 times the hours of boys in work outside the household.

Self-employed women and men work a lot, but their workload is unequal—more than 75 hours for women and more than 61 hours for men. Urban self-employed women are clearly worse off than other urban women and even worse off than rural women. Among urban men and women who are not self-employed, the hours per week are nearly the same—about 46.

Source: Githinji 1995.

only 20 hours. And girls spend more hours in these activities than boys.

Most immediately and directly affected by deforestation and overgrazing are fuel wood and water collection, activities to which women devote more than 10 times as many hours as men—9.7 hours compared with 0.9 hours. Girls spend more than 7 times as many hours as adult males in these activities and 3.5 times as many hours as boys.

The story is much the same elsewhere:

- In Peru, women must spend about 2.5 hours a day solely in gathering and cutting wood, and in Gujarat, India, 3 hours a day.
- In the Himalayas, gathering firewood took no more than 2 hours a day in the foothills a generation ago. Now, with deforestation, it takes a full day of trudging further up the mountains.
- In the Sudan, the time spent gathering fuel wood has increased fourfold in a decade.
- In Mozambique, women spend more than 15 hours a week collecting water, and in Senegal, about 17.5 hours. Where desertification is a problem, women may spend up to 4 hours a day retrieving water.

### Time use in industrial countries

Unrecorded economic activity is as large as recorded economic activity. Comparisons across 13 industrial countries suggest important differences—but again, definitive cross-national conclusions should be avoided. An effort was made to minimize differences in time units, age groups under observation and categorizations of activities. Hours and minutes per day are used as time units. In most cases, data are provided for the population aged 15 and above. Major differences in categorization are eliminated. Yet important differences remain in data collection methods, the handling of seasonal variations and the representativeness of the survey sample.

- Total work time in industrial countries is about 7 hours a day (averaged over the week), about 20% less than in developing countries. The range is from about 6 hours in the Netherlands to about 7.5 hours in Denmark (table 4.3).

- Women carry 51% of the total work burden, men 49% (table 4.4).
- The longest workday is put in by women in Italy (over 7.75 hours) and men in Denmark (over 7.5 hours), and the shortest by men and women in the Netherlands.
- In Australia, Canada and Germany, there is near-parity in the work burdens of women and men. But women work many more hours than men in Italy (28% more), Austria (12%) and France (11%). In Denmark, men put in more hours than women, but this difference is within the margin of error of the study.
- Slightly less than half the total work time is spent in paid SNA activities, and slightly more than half in unpaid non-SNA activities.
- Of men's total work time, about two-thirds is spent in paid SNA activities and one-third in unpaid non-SNA activities. For women, these shares are reversed. As a result, men receive the lion's share of income and recognition in society for their economic contribution.
- There are significant variations in these shares. The male share in SNA activities

FIGURE 4.5  
Burden of work in developing countries



### Women do 56% of the work in Venezuela

BOX 4.2

In Venezuela, women are a minority in the labour force, but they work more total hours than men, according to a study of urban time use by the central bank. Time is divided into five categories: income-earning activities, household activities, personal care, studying, and social activities and leisure.

As expected, men have a distinct advantage over women in income-earning activities: 6 hours a day, compared with only 2.25. But women's time in household work is a striking 11.5 multiple of men's time. Men's overall advantage shows up in about 10% more time enjoyed in social activities and leisure.

In the economically active population, men's time in household work stays at half an hour, but women's contracts from 4.5 to about 3 hours, still six times the amount of time devoted by men. So, economically active women have considerably less time for social activities and leisure. In this sense, they

are worse off, relative to men, than women not involved in market work.

Economically active men spend only about 30 minutes a day in household work, whether married or not. But when single economically active women get married, their daily household work increases by about 30%—from 162 minutes to 211 minutes. With children under 13, women's daily household work increases further—to 246 minutes, or well over four hours.

What are the overall contributions of women and men to the Venezuelan economy? In 1988, women and men spent 12.3 billion hours in SNA-defined activity—men 8.9 billion hours, women 3.4 billion. But if all working hours are included, market and non-market, the total rises to 22.1 billion.

Of this, women contribute 12.4 billion hours, men 9.7 billion. So, 56% of all work in Venezuela is done by women, only 44% by men.

Source: Urdaneta-Ferrán 1994c.

ranges from 58% in Denmark to 73% in Italy. Women's share in non-SNA activities ranges from 64% in Canada, Finland and Germany to 81% in Italy.

- Men spend more time in unpaid activities in the industrial world (more than a third of their total work time) than in the developing world (nearly a quarter). Men in Australia and Germany spend nearly 40% of their time in unpaid activities, and men in the Netherlands 48%.
- In the ratio of market work to non-market work, Denmark shows the least inequality, and Italy the most.

Non-SNA activities include not only household labour but also unpaid work for

the community. Among the 13 industrial countries, people in the Netherlands devote the highest proportion of their total non-market work to the community—11%. The next highest share is 8% in both Canada and the United States. The lowest shares are 2% in the United Kingdom and 1% in France. There are no clear gender trends in the amount of time people spend in community work. In about half the countries, men spend more time than women in this work—in the other half, women do. In the Netherlands, for example, men's average time per day is twice that of women's—34 minutes compared with 17 minutes. In the United States, it is the opposite—20 minutes for women compared with 15 minutes for men.

Just as total work time varies across industrial countries, so does total personal or non-economic time. The average daily amount of personal time in a country could be considered an important aspect of human development. Averaging 17 hours or more for the population aged 15 and above are Finland, France, Italy and the United Kingdom. In contrast, Australia, Canada and the United States have averages below 17 hours—showing that these societies have less time available for leisure than other industrial nations. These results should be interpreted with caution, however, because of important differences in the surveys.

TABLE 4.3  
Burden of work by gender, selected industrial countries

Country	Year	Work time (minutes a day)			Women's work burden compared with men's (% difference)
		Average	Women	Men	
Australia	1992	443	443	443	0.0
Austria	1992	416	438	393	11.5
Canada	1992	430	429	430	-0.2
Denmark	1987	454	449	458	-2.0
Finland	1987/88	420	430	410	4.9
France	1985/86	409	429	388	10.6
Germany	1991/92	441	440	441	-0.2
Israel	1991/92	376	375	377	-0.5
Italy	1988/89	419	470	367	28.1
Netherlands	1987	361	377	345	9.3
Norway	1990/91	429	445	412	8.0
United Kingdom	1985	412	413	411	0.5
USA	1985	441	453	428	5.8
<b>Average for sample countries</b>		419	430	408	5.8
Percentage share			51	49	

Source: Goldschmidt-Clermont and Aligisakis 1995.

TABLE 4.4  
Time allocation by women and men, selected industrial countries (as a percentage of total work time)

Country	Year	Total work time		Female		Male	
		SNA	Non-SNA	SNA	Non-SNA	SNA	Non-SNA
Australia	1992	44	56	28	72	61	39
Austria	1992	49	51	31	69	71	29
Canada	1992	52	48	39	61	65	35
Denmark	1987	68	32	58	42	79	21
Finland	1987/88	51	49	39	61	64	36
France	1985/86	45	55	30	70	62	38
Germany	1991/92	44	56	30	70	61	39
Israel	1991/92	51	49	29	71	74	26
Italy	1988/89	45	55	22	78	77	23
Netherlands	1987	35	65	19	81	52	48
Norway	1990/91	50	50	38	62	64	36
United Kingdom	1985	51	49	37	63	68	32
USA	1985	50	50	37	63	63	37
<b>Average</b>		49	51	34	66	66	34

Source: Goldschmidt-Clermont and Aligisakis 1995.

### Historical trends

Three major historical trends in time use emerge clearly from data for Norway and the United Kingdom:

- There has been a decrease in total work for the population as a whole as well as for both women and men.
- Men's and women's contributions to total work are becoming more equal. In the United Kingdom, both women and men now spend about 29% of their day in work.
- There is also a tendency towards equalization of men's and women's contributions to both SNA and non-SNA work, more so for SNA work.

Time-series data from Canada, Norway and the United Kingdom show that women have decreased their work in traditional



### Leisure time rises in Sweden

A recent study shows that total work is becoming more equal between women and men in Sweden: in 1984, women worked 4 more hours a week than men, and in 1993, 1.75 more hours. Women now work more than 46.5 hours a week, men less than 45. The main reason for the greater equality is a decrease in women's household work.

Men have taken up about an hour's more household work but still spend 10.5 fewer hours on it than women do. Women spend 3.5 fewer hours than before—mainly because of less cooking and dishwashing—but their total household work is still about 21.5 hours a week.

Men still avoid doing laundry, spending about 20 minutes a week at this task. Women spend 2 hours a week taking care of laundry—others' as well as their own. Women also devote about twice as much time as men to child care. While women in their twenties devote almost

2 more hours to child care than before, men of the same age have reduced their time at this task by more than half an hour.

Leisure has increased for both women and men by about 2%, but the biggest increase, 10%, is among men in their twenties. Among women, it is mainly those in older age groups who enjoy increased leisure. In general, women are taking on more market work. Men's hours in market work have stayed about the same, with younger men affected more by unemployment.

More leisure means mainly more time watching TV and videos. Women spend 14.5 hours a week, and men 17.5, watching the screen. Reading time is down—by 26% for men, 12% for women. With people increasingly flicking on the TV rather than reading a newspaper or book, Sweden may have to find a more valuable use for its increased leisure time.

Source: Goldschmidt-Clermont and Aligisakis 1995.

women's activities, such as cooking and washing. In general, non-SNA time devoted to preparing food, caring for clothes and maintaining the home has dropped, while that devoted to household management and shopping has risen. Men have increased their share of child care and shopping, but taken over little cooking, cleaning or general housework.

A separate study in Sweden found that leisure is on the rise, but how it is being used poses interesting questions (box 4.3).

### Time use in Eastern Europe and the CIS

The trend in industrial countries towards equalization of work between men and women for both SNA and non-SNA activities is reversed for several countries undergoing economic restructuring in Eastern Europe and the Commonwealth of Independent States.

In Bulgaria, men's total work burden was 15% less than that of women in 1977, but 17% less in 1988. Women increased their participation in SNA activities—and their share of household work. In 1977, men did 52% as much household work as women, but in 1988, only 48% as much. So women's workload relative to men's increased on all counts—total time, SNA time and non-SNA time.

Women and men work much more in Bulgaria than in Finland—for the market as well as in the household, according to a comparative study for 1987–88. Finland, of course, is a richer country.

Women's work burden is 21% greater than men's in Bulgaria—and about 8% greater in Finland. Even Bulgarian men work more than Finnish women—29% of their day, compared with 28% (figure 4.6).

Appliances such as dishwashers and washing machines are less common in Bulgaria. So, women there spend more time than Finnish women washing up, doing laundry and preserving food. They are also more likely to grow their own food and make their own clothes. And they do many typically male tasks, such as household maintenance and repairs. This means more equality, but also more total work.

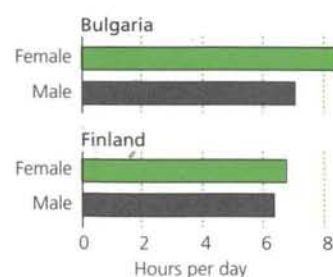
Other Eastern European countries and countries that are now in the CIS show similar results for the 1980s. Both women and men in Hungary, Latvia, Lithuania, Poland and the CIS countries work long hours, but women work on average about 5.5 more hours a week. The average difference in work burden between women and men is 9%, higher than in Western Europe, with the biggest difference, 15%, in Poland.

In many of the CIS countries, women appear worse off than those in Eastern Europe. There are sharp differences in time use, for example, between Bulgaria and the Republic of Moldova, which is poorer and more agricultural.

In Bulgaria, women work on average about 59 hours a week, and in Moldova, 73.5 hours a week. One reason: the majority of Moldovan workers are women, so they carry a heavy double burden of paid work and household work. Moldovan men work 51 hours a week, with only 11 hours of household work.

In Kyrgyzstan, the work burden is even heavier, with women working 76.3 hours a week, and men 59.4 hours. And the total

FIGURE 4.6  
Work time in Bulgaria and Finland



Source: Goldschmidt-Clermont and Aligisakis 1995.

### *Time use varies by region and historical period*

work of employed women increased 1.5% from 1980 to 1990, because of the increase in household work as economic conditions worsened. Because of the problems in buying food products and the short supply of semi-prepared products, time for food preparation increased by 12% from 1980 to 1990.

#### **Explaining variations in time use**

Time use varies by region and historical period. And within a country, the time use of particular groups can be affected by the kind of household (number of adults and children) and the employment status of its members.

Survey data for 18 industrial countries from the early 1960s to the early 1990s show that the unpaid work burden of women is highest in Eastern Europe—Bulgaria, the former Czechoslovakia, the former East Germany, Hungary, Poland and the former Yugoslavia. It is also higher in Western Europe than in Nordic countries, North America, Australia and Israel. Compared with the average for all 18 countries, women spend 25 more minutes a day on household work in Eastern Europe and 18 more minutes in Western Europe.

Once a woman has a child, she can expect to devote 3.3 more hours a day to unpaid household work—while her paid work declines by only about one hour. And a woman with a child under five can expect to put in 9.6 hours of total work every day. Many women would probably consider this an underestimate.

Women who work full-time still do a lot of unpaid work. So, the mere fact of getting a job increases a woman's total work burden, both paid and unpaid, by almost an hour a day on average.

Married women who are employed and have children under 15 carry the heaviest work burden of any group—almost 11 hours a day. A man in the same situation works about 10.5 hours a day.

Men contribute most to household work in North America and Eastern Europe—about 12 more minutes a day than the average. Men's total work burden

is lowest in Nordic countries and Western Europe—highest in Eastern Europe.

Since the early 1980s, there has been a clear increase in the time men spend in household work—and a clear decrease in their market-oriented work. The total work burden of men decreased noticeably in the 1970s and early 1980s, but by the late 1980s the trend flattened.

Since the early 1960s, the total work burden of women has declined by a little more than one hour. Most of the decrease, however, took place before the early 1980s.

#### **The valuation of non-SNA output in industrial countries**

To aggregate the output of household goods and services and compare it with the aggregates of conventional national accounts, such as gross domestic product, it is necessary to express its value in monetary units. The method chosen in the study of 13 industrial countries is to value household production at the cost of inputs—labour and capital. For unpaid labour, a market wage is imputed to the labour time needed to produce household goods and services.

The market wage selected is that of a substitute household worker—a worker who can perform, within the household, most of the economic activities carried out by unpaid household members. Because such workers tend in industrial countries to be women with low pay, using their wage as a yardstick gives a conservative estimate of the value of household labour. After selecting this wage, the choice is among using net wages (after taxes), gross wages (before taxes) or extra gross wages, which include employers' social security contributions. The choice here is extra gross wages, because it is most comprehensive.

With extra gross wages as the yardstick, a conservative estimate of the value of non-SNA production is about half the value of gross domestic product. A 1992 study of Australia estimates this production to be 86% of GDP, and a study of Germany in the same year gives an estimate of 55%. The

lowest estimate of non-SNA output is 46% in Finland. Most of the value of non-SNA output is attributable to labour. Labour valued at extra gross wages accounts for 72% of GDP in Australia, 53% in Germany and 45% in Finland.

What is the contribution of unpaid household production to private consumption? To determine this requires accounting for the value of marketed goods and services privately consumed plus the value of the goods and services the household produces for its own consumption. The value of the household inputs used to produce these goods and services is then subtracted—to give the value of what can be called extended private consumption. For three industrial countries—Bulgaria, Finland and Germany—non-SNA production contributes some 60% of extended private consumption.

Clearly, the value of non-SNA production in industrial countries is considerable, whatever the standard. *It is at least half of gross domestic product, and it accounts for more than half of private consumption.*

### **The invisible contribution**

The undervaluation of women's work is reflected in the lack of recognition of their contribution. The debate therefore must cover equality of rewards as well as equality of opportunity.

Is there any reason that only work for the market-place should be valued and that work must have an exchange value, not just a human value, to be recognized in economic terms?

The idea should be resisted that, to be valued, human activity must always be assigned a market price. Many of the things that make life worth living carry no price. We do not advocate that all activities within a family or a community must be monetized to be given adequate recognition. Most of these activities have a value that extends far beyond any economic valuation.

Yet, we face the dilemma that not giving an economic valuation to these activities risks seriously underestimating the contribution of women. There is no adequate

reward or recognition for the burden of work that women carry. In fact, the failure to value most of their work reduces women to virtual non-entities in most economic transactions—such as property ownership or offering collateral for bank loans. Because status in contemporary society is so often equated with income-earning power, women suffer a major undervaluation of their economic status. This is so despite their larger share of the total work burden and notwithstanding the reality that men's paid work in the market-place is often the result of "joint production", much of which might not be possible if women did not stay at home looking after the children and the household.

How can we recognize this reality without advocating an exchange value for all non-monetized activities and without arguing for a radical shift in the way families organize their work? Some countries are dealing with this issue by developing "satellite accounts" to register non-monetized work, particularly by women. On a global level, some rough estimates can also be made to highlight the problem. If these unpaid activities were treated as market transactions at the prevailing wages, they would yield huge monetary valuations—a staggering \$16 trillion, or about 70% more than the officially estimated \$23 trillion of global output. This estimate includes the value of the *unpaid* work performed by women and men as well as the value of the *underpayment* of women's work in the market at prevailing wages. Of this \$16 trillion, \$11 trillion is the non-monetized, "invisible" contribution of women.

This estimate is not meant to imply that this is the amount that would have to be paid for non-market work—since the entire wage structure would change if all activities entered the market. What it shows, however, is that the unpaid and unrecognized work is substantial.

The monetization of the non-market work of women is more than a question of justice. It concerns the economic status of women in society. If women's unpaid work were properly valued, it is quite possible that women would emerge in most societies

*\$16 trillion of global output is "invisible", \$11 trillion produced by women*

*The fruits of society's total labour should be more equitably shared*

as the main breadwinners—or at least equal breadwinners—since they put in more hours of work than men.

### **Policy implications**

The research for this chapter confirms the findings of many other studies that document the heavier work burden of women. The division of labour in many societies, particularly in rural areas of developing countries, leads to long hours of drudgery for women in fetching water and firewood, tilling and weeding fields for food crops and processing food for consumption—often while simultaneously looking after young children. This Report goes a step further by systematically reviewing available data for a larger number of countries—and attempting to quantify non-market work and the disparities between men and women in the burden of work and in the income earned. The research for this chapter represents a modest contribution. Much more needs to be done.

If the results here are further substantiated at the country level and if full recognition is given to the need to reward non-market work, the implications for the way that society is structured are revolutionary.

In almost every country, women contribute as much total labour as men—and in many, they contribute more. But they receive a much smaller share of the goods and services produced by total labour.

The inescapable implication is that the fruits of society's total labour should be more equitably shared. Whether a family member works outside the household is a matter of choice. But each working member of a family is entitled to a share of the income generated by market work proportional to her or his total labour contribution—including unpaid labour. For husbands to share income with their wives will become an act of entitlement rather than benevolence.

On this basis, the entitlement to income and wealth would change radically, and the legal system would be overhauled accordingly. Rights to property and inheritance would change, as would access to credit based on collateral, direct entitlement to social security benefits, tax incentives for child care and terms of divorce settlements.

Women's vital social functions for maintaining families and communities—which become only too visible when juvenile delinquency rates rise, the elderly are left to die alone or cultural traditions wither—would gain full recognition. Now considered largely women's responsibility in many societies, these functions would be recognized as the responsibility of both men and women as well as of society. For public policy, this implies incentives, investments and other measures to provide quality child care and care for the elderly, to do community work and so on. It means taking measures to ensure that men share more equally in the burden of family life and community service.

Such restructuring is unavoidable to liberate both women and men from artificial and restrictive social roles. But the needed changes in policy require relevant data and more refined analysis. As an essential first step, labour force surveys should incorporate all economic time use by household members. These surveys should include questions on the simultaneous performance of tasks and the intensity of labour.

It should always be clear, however, that a monetary value is imputed to unpaid work to make economic valuation more accurate and comprehensive, not because this is the only way to value these activities. In fact, in valuing much unpaid work, especially such household activities as the care of children or the sick, the human perspective of valuation should always supersede the economic perspective.



## Towards equality

Upholding the equality of rights is not an act of benevolence by those in power. It is needed for the progress of every society. Such equality has been enshrined in global and national commitments from the Universal Declaration of Human Rights (1945) and the Vienna Human Rights Declaration (1993) to various national constitutions. The reality, however, is that women do not share equally with men in the opportunities, benefits and responsibilities of citizenship and development.

The Universal Declaration of Human Rights recognized several dimensions of human rights for all people. Some are tangible and quantifiable, such as access to education, health and a decent standard of living and ability to take part in the government of the country. Others are intangible, such as freedom, dignity, security of person and participation in the cultural life of the community. Inequality between men and women is universal in all these dimensions.

The goals of gender equality differ from one country to another, depending on the social, cultural and economic contexts. So, in the struggle for equality, different countries may set different priorities, ranging from more education for girls, to better maternal health, to equal pay for equal work, to more seats in parliament, to removal of discrimination in employment, to protection against violence in the home, to changes in family law, to having men take more responsibility for family life. Fundamental to all these priorities are the equality of access to means of developing basic human capabilities, the equality of opportunity to participate in all aspects of economic, social and political decision-making, and the equality of reward.

Equality is not a technocratic goal—it is a wholesale political commitment. Achieving it requires a long-term process in which all cultural, social, political and economic norms undergo fundamental change. It also requires an entirely new way of thinking—in which the stereotyping of women and men no longer limits their choices, but gives way to a new philosophy that regards all people as essential agents of change and that views development as a process of enlarging the choices of both sexes, not just one. Providing equal rights and equal access to resources and opportunities to women and girls—as well as to men and boys—is crucial to the goal of reducing poverty, illiteracy and disease among all people. Gender equality is an essential aspect of human development.

This chapter addresses ways to overcome the barriers that have perpetuated inequality in women's and men's rights and rewards—barriers that would not be broken if left to the free market and established political processes. Both government intervention and political activism are needed. And concerted policy action, national and international, can accelerate the process.

The pace of progress on gender issues has been very different in different nations. The chapter discusses some issues that cut across all nations and require a strong agenda for policy action:

- Setting a firm timetable to end legal discrimination and establishing a framework for the promotion of legal equality.
- Taking concrete action to restructure social and institutional norms.
- Fixing certain threshold targets to gain momentum for complete gender equality.
- Implementing key programmes for universal female education, improved reproductive health and more credit for women.

*Equality is not a technocratic goal—it is a wholesale political commitment*

*Women's movements in the past century have broken through many barriers*

- Mobilizing national and international efforts to target programmes that enable people, particularly women, to gain greater access to economic and political opportunities.

**A broad-based movement for gender equality**

Enormous strides have been made towards gender equality in the past century, particularly in the past few decades. And it is women who have led the struggle to achieve these results.

Women's movements in the past century have broken through many barriers, transforming the way women live and contributing to broader social and political changes. These movements may have varied in content, pace and scale from country to country, but they have shared a common concern for the advancement of women and the progress of society.

The early politicization of women took place in the context of broader social and political movements. In the 19th century, women were active in the antislavery movement in the United States and in the campaign for improved working conditions in the United Kingdom. Since the end of the 19th century, women have been active in national liberation struggles in colonized countries. Participation in these broader political movements helped shape an understanding of women's situation and fuelled the growth of a more explicitly feminist movement.

The first phase of the women's movement centred on gaining rights that men had already won—right of citizenship, right to vote, right of access to such social services as education and health. Early feminists in the United States included in "The Declaration of Sentiments" (1848) a call for immediate voting rights for women. A constitutional amendment granted national suffrage to women in 1920—72 years later. In newly independent developing countries, these rights were not separate platforms but were won with national liberation. Women had been active participants in the freedom struggles, and all leaders of national movements recognized

the need to integrate women into their platforms of national transformation. In 1945, a commitment to equality of men and women was included in the UN Charter adopted at the founding session.

A common theme in all the movements continued to be a struggle for equality in areas where men had already made progress. Women fought for equal employment opportunities by actively campaigning against laws that limited work and pay and by supporting the unionization of female workers. By 1914, the membership of the Socialist Democratic Party in Germany included about 175,000 women. In the Philippines, in India and in other countries, women were active in peasant organizations from the 1930s on and in workers' movements during these decades. Norway enacted equal pay legislation during the 1970s as a result of intense lobbying by the national women's movement and the women's caucus in the Labour Party.

Women's movements have pressed for equal access to economic opportunities. Access to assets and services has been considered critical—including land, raw materials, credit and financial and technical support services. As women have increased their economic participation, they have drawn attention to the persistent "glass ceiling" excluding them from economic decision-making.

The emergence of a vocal women's movement has made a difference. In many countries, women have pressed for social recognition of public and private rights, particularly reproductive rights and equal rights in divorce, inheritance and wages.

In all societies, women have been alert to threats to their resource base and have often been the first to respond. The Chipko movement against the deforestation of mountain tracts in northern India began in the mid-1970s to prevent the destruction of forests by timber contractors. It was largely a women's movement—with women clinging to trees to prevent them from being felled. They succeeded—the government banned all green felling in the Himalayas for 15 years.

The Green Belt Movement of Kenya tackles the intertwined problems of pov-

erty and environmental degradation. As a result of this movement, involving 50,000 women, millions of trees have been planted in Kenya. Also responsive to the problems of low-income people, particularly women, the movement established Green Belt Training Centres in several areas to create training and employment opportunities for people in agriculture.

In many countries, women's traditional public invisibility allowed them to become political actors in peace movements at times—as during the military dictatorships in Latin America during the 1970s—when it was extremely dangerous to be vocal. The roots of the present Chilean women's movement can be traced to women's advocacy of human rights and peace in the late 1970s.

In Europe, it has been estimated that the majority of participants in the peace marches and demonstrations during the 1970s and 1980s were women. The anti-nuclear movement has provided a focus for the movement against weapons of mass destruction. Many women's groups in Europe and elsewhere have emphasized that peace is not only the absence of war but a period to unleash progress and creativity.

Women have increasingly sought to influence policy in recent political transitions. In new South Africa in February 1994, the Women's National Coalition (a broad coalition of women's organizations) drafted a Women's Charter for Effective Equality. And it was responsible for ensuring that 30% of the African National Congress candidates for parliament were women. Similarly, Palestinian women drafted a bill of rights to advance women's rights.

By the third international women's conference in Nairobi, women's organizations had come of age. The growing demand for national and intergovernmental institutions for the advancement of women led to the creation of ministries and commissions dealing specifically with this issue in many countries—and the United Nations Development Fund for Women (UNIFEM) and the United Nations International Research and Training Institute for the Advancement of Women (INSTRAW) at the international level.

Since then, networking among women's movements and women's studies institutes has exploded—with many examples across the North-South divide, including Development Alternatives with Women for a New Era (DAWN). NGO women's caucuses organized by the Women's Environment and Development Organization during preparation for the United Nations Conference on Environment and Development, the International Conference on Population and Development and the World Summit for Social Development have proved to be highly effective North-South advocacy mechanisms.

Similarly, women have become increasingly active in regional networks. The Encuentros Feministas have created strong bonds among Latin American and Caribbean women's groups. There are similar regional organizations in Asia, Africa and the Arab States. Support of reproductive freedom and human rights and combating fundamentalism and trafficking in women are some of the issues that have attracted the attention of women's networks across many lands.

### **Towards an engendered development paradigm**

During the 1950s and 1960s, women's concerns were often subsumed in a development paradigm obsessed with modernization and industrialization, with economic growth the central issue. Equality was not forgotten, but rapid growth was supposed to achieve equality as well.

The 1970s saw a questioning of this growth model, since rising average GNPs in many societies still left many people in absolute poverty. The rising tide of production was failing to lift all boats. It was argued that the objective of increasing overall productivity in a society had to be made consistent with the goals of increasing the productivity of the poorest sections of society and distributing income and assets more equitably.

Similar analysis was being applied to the situation of women. The pioneering work of Ester Boserup (*Women's Role in Economic Development*, 1970) marked a watershed.

*Rising average GNPs in many societies still leave many people in absolute poverty*

*There should be no attempt to offer a universal model of gender equality*

Boserup drew attention to the sexual division of labour and underlined the different impact of development on women and men. She challenged the implicit thesis of the modernization school that development was a gender-neutral process. Her study pointed to evidence that many development projects not only ignored women but in fact undermined their economic opportunities and independence.

The fierce questioning of the dominant development paradigm initiated several stages of intellectual evolution. First was an approach that looked at women principally as beneficiaries of development and focused on improving their economic and social status—without full consideration of the sociopolitical context that produced inequality.

In the 1980s, women in development (WID) components were set up in most development projects—and WID units in most development agencies. Donors proceeded on the same assumption implicit in all national programmes—women's problems could be isolated and dealt with project by project. Many of these projects were concerned with vocational education, reproductive health, credit for microenterprises and other schemes for small-scale income generation. These undoubtedly made an important difference in the lives of the women in the project areas. But it was soon realized that a project could not attack a country-wide issue.

As women pressed for equal treatment and broader choices in education, health, occupations, remuneration and legal rights, they recognized that their goals could not be reached within existing social structures. The structures themselves needed to be challenged. The prevailing sexual division of labour—emphasizing the role of women in the home and restricting their access to public life—could not be accepted as natural. Long-held stereotypes had to be questioned. An exclusive focus on the impact of socio-economic development programmes on women was not enough. The underlying power relations that defined the status of women and men in society had to be understood and challenged.

Conceptually, gender and the complex of social relations between women and men came to be recognized as more important than the impact of development on women. And the process of questioning extended the debate on equal rights for women from the public domain to the private. As a result, an important step in many societies was to create a legal framework that helped protect equality in both the public and the private sphere.

The premises became clear. People must enjoy equal rights and free choices, irrespective of gender—not only in law, but in practice. The ultimate aim is to increase women's autonomy through greater control over material and non-material resources—and thus to influence the choices and directions of their lives.

The free workings of economic and political processes normally do not deliver such equality of opportunities because of the prevailing inequalities in power structures. Because of these structural barriers, government intervention is needed on the side of the disenfranchised—both through comprehensive policy reforms and through a series of affirmative actions.

There should be no attempt to offer a universal model of gender equality. The interpretation of some rights will differ in different societies, depending on religions or cultures or traditions. So will the actual preferences of societies, and how people wish to exercise their free choices. Each society—and the vibrant movements within it—must debate whether the outcome is what the society really desires or a reflection of structural barriers that ought to be removed. Goals and timetables for achieving those goals must be set accordingly.

The human development paradigm, putting people at the centre of its concerns, would have little meaning if it were not fully gender-sensitive. But few comprehensive attempts have been made to build awareness of gender consistently into the new development paradigms. Any such attempt must embrace at least three principles:

- Equality of rights between women and men must be enshrined as a fundamental principle. Institutional barriers—legal,



economic, political or cultural—that prevent the exercise of equal rights should be identified and removed through comprehensive policy reform and strong affirmative action.

- The goal of development must be justice, not charity. Women must be regarded as agents and beneficiaries of change. Investing in women's capabilities and empowering them to exercise their choices is the surest way to contribute to economic development.

- The engendered development model, though aiming to widen choices for both women and men, should not predetermine how different cultures and different societies exercise these choices. What is important is that equal choices exist for women.

This chapter presents the visions of seven women heads of state on the challenges they face and the means they propose to attain gender equality in their countries. Their statements show the diversity—and commonality—of challenges in different countries. Among the issues they raise are legal reform, combating violence, and affirmative action for employment and political participation.

### **A five-point strategy**

This Report has analysed in earlier chapters the progress made so far in reducing gender inequality and what remains to be done. It is necessary to identify a concrete strategy now to equalize gender opportunities. In this spirit, a five-point agenda is offered. This should not be misinterpreted as an interventionist or benevolent approach to gender relations. It should be seen as a strategy to accelerate the pace of change—a means for public action to support the momentum towards equality. So much needs to be done on so many fronts in each society to improve gender equality that it becomes vital to set priorities, though the emphasis on each component would naturally differ from one country to the next.

Commitments to gender equality are hard to gauge. Unless these commitments are explicitly stated and monitored—with quantitative and qualitative benchmarks of

progress—they will not be translated into real achievements. A national plan of action is required, with quantitative targets combining the elements of measures to overcome legal discrimination and specific policy measures to restructure social and institutional norms. Also needed are innovative ways to move towards and beyond the 30% threshold in economic and political decision-making and participation—and to implement key programmes enabling women to gain more equal access to opportunities. The plan of action would provide a timetable for action and the basis for national debate and public accountability. It would, moreover, underpin international support for achieving gender equality.

### *A timetable to eliminate legal discrimination*

In 1979, the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) was adopted at the United Nations. A unique and path-breaking global charter of the human rights of women, it upholds the right to equality in the public domain and in the private—by focusing on equality in marriage, in the family and in the care of children. Civil and political rights and economic and social rights are recognized as having equal importance.

As chapter 2 discussed, 139 countries have ratified the convention, 43 have ratified with reservations and 6 have signed without ratification. Forty-one other UN member states have not signed the convention. In other words, 90 countries have not yet accepted all the tenets of legal equality between women and men. By and large, developing countries were the first to ratify the convention. Only four industrial countries ratified the convention in the first two years.

Reservations relate primarily to customs and traditions. Six countries cite a contradiction between the provisions of CEDAW and their religious laws on marriage and divorce rights and obligations.

Several countries have reservations about employment, deeming it necessary to have legislation protecting the health and

*Ninety countries have not yet accepted all the tenets of legal equality between women and men*

safety of women. Other reservations relate to granting family names and acquiring property through inheritance.

CEDAW recognizes in principle the power of custom and tradition in determining the rights of women in different societies—and distinguishes between *de jure* and *de facto* discrimination. It recognizes the need for affirmative action policy to redress past inequalities and encourages equality of both opportunity and outcome.

The campaign to extend the ratification of CEDAW must be driven by public pressure. Societies themselves will need to undertake a public debate among women and men on the interpretation of tradition and custom in a manner that will best uphold the rights of women. It is critical

that sustained efforts be mobilized to win legal equality within a defined time period—say, in the next ten years.

Means should be found to convince the non-signatories of CEDAW to accept and ratify the convention—and those with reservations to withdraw them. The reporting and monitoring system of the Commission on the Status of Women must be strengthened by more timely national reporting and the setting of a concrete timetable within each country to end legal discrimination. In other intergovernmental human rights bodies, steps also need to be taken, such as the recent appointment of a special rapporteur on violence against women by the Human Rights Commission. The Fourth World Conference on

#### SPECIAL CONTRIBUTION

*Khaleda Zia*

### Bangladesh: 10% of top civil service jobs reserved for women

Our constitution guarantees equal rights and status for man and woman. We believe that there can be no real development of the society without the participation of women at all stages and all levels. Bangladesh actively supported the strategies and plans of action sponsored by the United Nations through the World Conferences on Women. We have also endorsed the recommendations adopted through the Convention on the Elimination of All Forms of Discrimination Against Women.

Over the past two decades of planned development in Bangladesh, our emphasis in women's programmes has gradually shifted from a consumption-oriented approach to a development-oriented approach. We wish to see our women as productive contributors to the national economy. Methods for realizing these objectives include providing women with access to and control over productive resources and with appropriate training for human resources development.

Because education holds the key to community progress, the government has launched programmes to enhance the level of literacy through compulsory primary education for boys and girls. We have introduced special stipends to encourage female education and reduce the drop-out rate of girl students. Secondary education for girls

up to class 10 has been made free in the rural areas. The success of government efforts in this direction is already evident in the rise in the literacy rate for women from 16% in 1990 to 24% in 1993.

An integral part of our national health policy is to ensure health for all by the year 2000. The successful implementation of the national health policy is perceptible in the reduction of the population growth rate to 1.88% a year, from 2.04% at the beginning of 1990. The life expectancy at birth of women in Bangladesh increased from 54.6 years in 1985 to 56.6 years in 1992. The maternal mortality rate was reduced from 6.5 per thousand in 1986 to 4.7 in 1992. The child mortality rate was reduced from 113 per thousand live births in 1987 to 88 in 1992.

Bangladesh attaches high priority to the advancement of women in the administrative hierarchy: 10% of the posts of higher civil servants have been reserved for them. And 60% of the vacant posts of primary school teachers are also reserved for women.

Legal measures to improve the status of women and protect their rights include the Muslim Family Laws Ordinance, the Dowry Prohibition Act, the Cruelties to Women (Deterrent Punishment) Ordinance, the Family Courts Ordinance, the Child Marriage Restraint Act and the Mus-

lim Marriage and Divorces (Registration) Act. My Government is fully aware that mere existence of laws does not provide protection to women and their rights, unless effective implementation of those laws is ensured.

All development ministries have been asked to formulate Women in Development (WID) projects. Focal points in 30 relevant ministries have been identified to ensure inclusion of WID components in their multisectoral projects. To this end, the "National Council for Women's Development", chaired by the head of government, has been formed. The main tasks of the Council will be policy formulation, inter-sectoral coordination and evaluation.

The time has come for women of the world to focus on how the objectives of equality, development and peace can be translated into reality. We hope that the Fourth World Conference on Women in Beijing in 1995 will be successful in a real sense of the term. We further hope that it will present us a World Platform for Action to inspire a new generation of women and men to work together for equality, enlightenment, development and peace.

**Khaleda Zia**

*Prime Minister of Bangladesh*

Women in Beijing will offer a major opportunity to advance beyond CEDAW and to identify concrete steps towards its implementation by as large a group of countries as possible.

There is one area in which it is imperative to move beyond existing international treaties. It is intolerable that the use of mass violence against women as a weapon of war, especially by the organs of state, is not considered a war crime. Mass rape and torture of women have been documented in many recent conflict situations. The international community must bring these actions to public scrutiny and treat them as war crimes punishable by an international tribunal.

Greater transparency and accountability can help. People—including women—often do not know all the facts about legal discrimination. They certainly have limited information about practices and progress in other countries. And they often have few avenues available for organized pressure.

In such an environment, the role of civil society needs to be strengthened. An international NGO—say, a World Women's Watch (WWW)—could fill an important gap within nations and globally. Its reporting could be based on information from a network of national NGOs.

Although global in scope, a WWW would need a strong country base and a sharp focus on a few priorities. For example, it could:

- Focus on key instances of unequal laws, unequal wage rates for equal work and social or legal indifference to violence against women.
- Prepare a country-by-country inventory of the most important gender disparities and comparisons among countries at similar stages of development.
- Compile a list of gender-related targets fixed by national governments and international forums and publish regular reports on their implementation.
- Assist pressure groups and political lobbies through dissemination of relevant information to build strong alliances for change.

These efforts could certainly help make women's concerns more visible and national practices more transparent.

Along with ratifying and implementing CEDAW and increasing transparency and accountability within societies, there are several ways to expedite the goal of attaining equality before the law and in access to legal redress by 2005:

- Legal literacy campaigns could be organized to make women fully aware of their legal rights—and to mobilize broad national support for attaining these rights. Access to legal redress, especially for low-income women, must be assured through affirmative action by government.
- Pools of legal professionals in each country and at the global level, supported both by governments and through external assistance, could offer legal advice for winning equality before the law. More women should be encouraged to study law through special scholarship programmes.
- To facilitate women's access to legal systems, it may be desirable to appoint legal ombudswomen at national and global levels.

#### *Changes in social and institutional norms*

More equal sharing of responsibilities in the home between women and men is fundamental to ensuring equal opportunities for women to participate in paid employment and in politics. Today's behavioural and institutional norms, based on gender roles rooted deep in history, make it difficult for women to participate in the public sphere. They restrict women's opportunities and choices in political participation and in employment. And they inhibit men from taking greater responsibility for social reproduction, such as caring for children, the sick and the old.

As chapter 4 showed, women are already busy at home in unpaid but valuable work. Time-use studies have documented how more "employment" for women might just mean more drudgery and even longer hours—or the sacrifice of their careers for the family and community—unless corresponding changes are made to reduce women's burden of unpaid work.

- *Encouraging men to participate in family care.* Women cannot play an important role in the economic sphere unless men's life patterns also change. Some countries are

*A World Women's Watch could fill an important gap within nations and globally*

beginning to introduce policies that give incentives to men to increase their participation in family care. In the 1980s, in most industrial countries, the aim of maternity leave was changed from protecting mothers' health after birth to providing parents with legal rights for parental care. The concept of paternity leave supplemented maternity leave. Japan introduced parental leave in 1992—for both mother and father. The United States in 1994 endorsed limited parental leave, but without pay.

The Nordic countries have perhaps traveled furthest. In Finland, starting in 1990, parents could choose between two alternatives: after a 12-month maternity leave, either parent can stay at home until the child is three years old, with monetary compensation and job guarantees. Or the community must arrange for child care while parents work outside the home. In 1990, more than a third of Finnish children age six

and under were cared for by parents who had chosen this form of child-care arrangement or were on parental leave. Norway recently made it a requirement that the father take a specified number of weeks of parental leave. Some Nordic countries have legislation that allows parents to reduce their daily working hours to take care of family commitments: since 1976, Finland has allowed parents of children under age four—and Sweden parents of children under age ten—the right to shorten their workday by two hours.

• *Permitting flexible work schedules.* If workers were able to stagger their working hours, they would be in a better position to combine paid work with other responsibilities, such as child care. Sweden already allows interim part-time work, with the option to return to full-time hours, so that women and men can combine a career with family commitments. Germany and Japan

#### SPECIAL CONTRIBUTION

Mary Robinson

### Ireland: annual reporting mechanisms for implementation of equal opportunity initiatives

In recent decades, there has been an enormous advance in the *de jure* and *de facto* position of women in Ireland. A Minister has been assigned responsibility for ensuring that equality becomes a reality, through institutional, administrative and legal reform. In many respects, however, we must admit frankly that there is still great scope for improvement.

One way in which the government has been able to advance the cause of equality has been through the introduction of reforms recognizing the potential contribution of women to decision-making in the public sector. To this end, a programme of affirmative action in appointing women to the boards of state-controlled bodies has been put in place. Also, annual reporting mechanisms have been introduced whereby state-sponsored bodies are required to report on the implementation of equal opportunity initiatives.

Women still participate in paid employment to a lesser extent than men. Around one-third of Irish women participate in the labour force, compared with 70% of men. In addition, women's employment tends to

be concentrated in the lower end of the jobs hierarchy, often in part-time work, where job security and pay are poorer. Because of traditional structures of labour markets and because society has made unpaid housework mainly the responsibility of women, they have not yet secured a proportionate share of the full-time, well-paid, prestigious jobs most valued in our economy.

But the situation is improving. The participation rate for married women in our labour force is now about 30% as against 8% two decades ago. There is evidence that women are increasingly setting up their own businesses, often in the services sector, and that this untapped entrepreneurial potential is being developed to some extent. Following our most recent general election, there has been a significant increase in the number of women representatives in the Dail (House of Representatives). Increasingly, these women occupy key positions of authority within both their political parties and the Government.

The Beijing conference will be the culmination of a series of international conferences under the auspices of the United

Nations, each of which recognized gender equality as a priority. The World Conference on Human Rights in 1993 declared that the rights of women and the girl child are an inalienable, integral and indivisible part of universal human rights. It called for the full and equal participation of women in all aspects of life, national and international, and the eradication of gender-based discrimination, violence and exploitation. Similar concerns were articulated in the Programme of Action of the International Conference on Population and Development in 1994 and in the conclusions of the World Summit for Social Development in March 1995.

As we approach the new millennium, the human community must aim to secure for the female half of its members an equality of status with men in the home and outside it, in the enjoyment of their human rights and in their access to economic life and to participation in all areas of decision-making.

Mary Robinson  
President of Ireland

have devised “flextime” practices to enable workers to combine family needs with production schedules. And increasingly, employers are allowing workers to work out of their home or to bring their home to work (by providing child care at the workplace).

- *Expanding the concept of public services.* Some countries have expanded public services beyond education and health to child care, such as public day-care centres and school lunches. Such services often are indispensable in enabling men and women to pursue employment opportunities while also ensuring the care of their children.

- *Changing tax and social security incentives.* Some countries have revised their tax and social security systems to accommodate family structures different from the one-breadwinner, two-adult family norm. To increase after-tax earnings for part-time work, Sweden has established separate taxation for part-time and full-time work. In Zambia, an income tax amendment introduced in 1987 allows women to claim child allowances and deductions on their insurance contributions—and removes some tax discrimination against women.

- *Changing laws on property, inheritance and divorce.* Once women are recognized as the main or equal “breadwinners” in most families, as documented in chapter 4, a convincing basis exists for a more equitable sharing of rights in property, inheritance and divorce. The distribution of land during agrarian reform would require joint landholding, with women having equal access to assets. Current restrictions on women’s collateral for bank loans would no longer hold.

- *Improving information on women’s work, including the valuation of unpaid work.* Because women’s work does not always enter national statistics, their contribution is “invisible” and hence ignored. A more detailed accounting of how women and men spend their time is needed, an accounting that recognizes the enormous contribution women make to economic and social life. Such recognition is necessary to restore a proper role for women in all economic transactions—including property rights and access to bank loans. At the same time, such an assessment of women’s contribution should go far beyond this economic

contribution: it must embrace a recognition of their vital contribution in creating and nurturing life and in sustaining social relationships. In valuing much unpaid work, especially such activities as caring for children or the sick and maintaining the community, the human perspective of valuation should always supersede the economic perspective.

Many other measures could broaden the choices of women outside the household. For example, guarantees of fully paid parental leave could be given for the first two years of a child’s life so that one or both parents could care for the child. Special credit or training facilities could be established for the mothers of dependent children to enable these women to set up their own businesses. Already, divorce settlements are beginning to go beyond payment of alimony or maintenance to recognizing the woman’s share of household earnings and assets even while she worked at home.

People in each country naturally will choose specific arrangements in the light of their cultural and social norms. The choices in the developing countries—with extended families and child care by grandparents—are likely to differ from those in the industrial nations, with nuclear family norms and increasing commercialization of child care. But the point is this: if women are to combine their family and public roles and if there is to be increased gender equality in economic and political arenas, some institutional arrangements, tax incentives and social security systems will have to change.

These changes cannot all originate from the state. Many will start from movements in civil society. And some must come from changes in the business community. Since the private sector generates most jobs and investments, socially responsible business practices can make an enormous difference.

An innovative way to encourage such social responsibility is to establish a system of company scorecards to reflect gender equality practices in the manufacture of products. Such scorecards are already being kept for the environmental impact of products. Grading for gender equality will generate pressure on businesses to improve

*Establishing a system of company scorecards to reflect gender equality practices in the manufacture of products can encourage social responsibility*

their practices—and give consumers a choice to patronize only businesses that conform to their own value system. Although essential, legislation alone cannot create more responsible businesses. Organized political movements, by increasing consumer awareness and making businesses more responsible, can create changes in demand.

*A critical threshold of 30% for accelerating progress*

Women should have equal access to all economic and political opportunities—a goal

each nation must set. Women are still far from sharing equally in decision-making positions. Previous chapters documented that top decision-making positions remain largely the exclusive preserve of men, with only a few women in parliaments and cabinets or as chief executive officers of major corporations, top administrators and managers, under-secretaries-general in the UN system, and so on. Establishing a minimum threshold and a concrete timetable for reaching that threshold can quicken the pace of progress towards equality.

The UN Commission on the Status of Women recommended in 1990 that a criti-

#### SPECIAL CONTRIBUTION

*Violeta Barrios de Chamorro*

### Nicaragua: women benefiting directly from titles to agrarian land

The Fourth World Conference on Women in September 1995 in Beijing, China, represents a historic opportunity to develop a truly gender-sensitive social, political, economic and cultural agenda.

All the early planning must take into account the close relationship—and interdependency—among democracy, sustainable development and social justice. For unless women participate equally in society, the full significance of these concepts will be invalidated.

Democracy demands real equality of opportunity for every citizen of either sex: the chance to be represented and to participate in the political process and in decision-making. It is essential to ensure women equal access both to positions where major political decisions are made and to leadership roles within the private sector and civil society.

We must work to eradicate forever all forms of discrimination against women, particularly in the areas of education, employment and access to positions of public responsibility—and to guarantee women the right to fully exercise their citizenship.

The issue of violence against women must be a priority concern. Violence, like discrimination, is an infringement of human rights, which are integral to any truly democratic system. All states must agree upon and apply the conventions intended to eliminate both discrimination and violence.

Real commitment to democracy and the values on which it is based can be demon-

strated by eliminating the discriminatory clauses that still exist in civil, penal and labour laws.

The number of women who have been elected to office remains very small despite our high degree of participation in the electoral process. We need to participate in the political arena even more intensively.

In societies in transition, as in Nicaragua, which has a history marked by polarization and confrontation, women have played a central role in the reconciliation of society and in stabilizing the family unit.

Long-standing discrimination against women's participation in development and exclusion from its benefits make us vulnerable to poverty. It is vital to meet the basic needs of the most vulnerable women, thus reducing poverty and social inequality.

We must invest more in human capital—our greatest resource—to improve productive capacities and raise our standard of living.

Reducing the equality gap between men and women in the human development process will mean addressing the concerns of women in education and training, providing for equal participation in the labour market, including in leadership positions, as well as access to land, housing, services and the means of production. All this will make it possible to achieve the goal of truly sustainable development.

During my government's tenure in Nicaragua, we have promoted an inte-

grated approach to gender-equitable development, with the aim of doing away with discriminatory gender stereotypes.

In the field of health care, we have adopted a model of integrated care for mothers and children. We are working to reorganize health care services, to deal with violence as a public health problem and to overhaul statistical registers so that information disaggregated by gender can be obtained, revealing a more accurate picture of women's health.

In rural development, we have made an effort to improve the lot of peasant women through the National Real Estate and Title Agrarian Property Registry Programme. We achieved a substantial increase in the number of women benefiting directly from titles to agrarian land, a threefold increase in 1994 over previous years.

We have also implemented a gender-sensitive training process for community leaders, municipal development committees, union organizations and financial agencies. As a result, more Nicaraguan women are being granted various forms of title to property.

This entire process has enabled us to formulate gender-sensitive policies, plans, programmes and projects. Increased gender-sensitivity in strategic planning will encourage women's participation in the sustainable development of our country.

**Violeta Barrios de Chamorro**  
*President of Nicaragua*

cal 30% participation threshold be regarded as the minimum for decision-making positions at the national level. Reaching such a threshold was considered essential to women's ability to influence key decisions and be taken seriously as equal participants in these decisions. It was recognized that when women's representation is small, their voices are not heard, they are often obliged to make compromises, and they are rarely in a position to influence decision-making.

Few countries have yet crossed this critical 30% threshold—or even approached it. In parliamentary representation, only Denmark, Finland, Norway and Sweden have crossed the 30% threshold, and the global average is still only 10%. In ministerial representation, only five countries are above the 30% threshold—Finland, the Netherlands, Norway, Seychelles and Sweden—with the global average at 6%. Women fare somewhat better in administrative and managerial positions (15 countries have crossed the 30% threshold) and in municipal government (8 countries). But most countries are still far from the threshold in many of the key decision-making areas.

Opinions differ widely on whether the state should take affirmative action to advance towards the minimum threshold of 30%, so that a target of 50% ultimately can be reached—or whether real progress can be made not through specific targets but only through a fundamental change in economic and political systems. Many states have nevertheless taken steps to increase women's participation in economic and political arenas:

- Argentina's electoral law established a quota of 30% for female candidates for elective posts in 1991—but women's representation in the parliament is still only 9%.
- The Philippines' constitution of 1987 established a combined quota of 20% for gender, indigenous, age group and other categories.
- Bangladesh, Nepal, Pakistan and Tanzania have reserved seats for women in their legislatures at different times.
- Forty-four countries appoint women to their representative bodies to make sure of their presence. In five countries—

Dominica, Indonesia, Mexico, Saint Lucia and Uganda—women first gained a presence in the representative body only through appointment.

- Political parties in 34 countries have binding quotas for women in governing bodies and in legislative elections.
- Thailand set fairly specific goals in 1985 for women's participation in many areas: 30% in local development committees and administration as well as in national executive and policy-making offices.
- Viet Nam has established a target of 20% for women's representation in popularly elected bodies, 10% at different levels of administration and 15–20% in party executive committees at different levels.
- India has reserved 30% of the seats in *panchayats* (local councils) for women, and 30% of the quota for socially and economically disadvantaged groups.
- Some political parties in Germany, in a move first instituted by the Green Party, have committed themselves to including equal numbers of women and men in their slates of candidates.

Special reservations and appointments to representative bodies have been criticized as tokenism and subject to manipulation. But some women have used the positions gained in these ways to advance women's agendas and pave the way for electoral gains.

Broad-based political and economic changes in society are the best means of protecting women's rights and moving women into policy-making offices and positions. But numerical goals and timetables and affirmative action by states can provide a critical take-off point for accelerated progress.

#### *Key programmes for increasing women's opportunities*

Three areas are critical for women's advance: female education, reproductive health rights and access to credit.

*Female education.* The returns to educating girls are rarely matched by any other investment—because of the measurable benefits for women themselves, for their families and communities and for society.

*Returns to educating girls are rarely matched by any other investment*

Education increases a woman's ability to participate in society and to improve her quality of life and standard of living. It enables her to raise her productivity in both market and non-market work and improves her access to paid employment and higher earnings. An additional year of schooling has been shown to raise a woman's wages by 20% in Pakistan. And a study of developing countries (including Côte d'Ivoire, India, Indonesia and Thailand) reveals that it can increase a woman's future earnings by about 15%, compared with 11% for a man.

Educated women have more control over the time they spend in child-bearing

and child-rearing—and thus have more time for productive work outside the home and for leisure. They are more likely to use contraceptives and to have smaller families. Cross-country econometric studies have shown that an extra year of schooling for girls reduces fertility rates by about 5–10%.

Educated women have fewer children who die in infancy—and their surviving children are healthier and better educated. In India, providing a thousand girls with an extra year of primary schooling is estimated to avert two maternal deaths, 43 infant deaths and 300 births at a cost of only



SPECIAL CONTRIBUTION

## Norway: securing equality through quota systems and equal opportunity legislation

It pays to invest in women—not just for them, but for children and men as well. This has been found in many countries, including my own. Nevertheless, strengthening the position of women in society is an uphill task. Codes of behaviour that stand in the way of equal opportunities are firmly rooted in many societies.

Gender equality has had a relatively short history. Even in today's most progressive countries, discrimination based on gender was the rule only a few decades ago. Women were neither equal to men under the law nor did they have the same access to education, job opportunities or income levels. Equal opportunity legislation and an active highlighting of women's needs have brought about substantial improvements in many women's lives. Real and lasting equality can only be achieved, however, when gender equality is generally accepted as being morally right as well as economically sound.

The greatest step towards equality between the sexes in my own country was probably not women's suffrage, introduced in 1913, but the entry of thousands of married women of the postwar generation into the paid labour market during the 1970s. This "silent revolution" was followed by legislation guaranteeing equal status for women and men as well as numerous political measures to make it easier to combine family responsibilities with work outside the home.

Norway spearheaded the use of quota

systems in political and public life, and quotas are now a generally accepted means of securing women's political influence and thereby promoting gender equality. Today, about 40% of the Storting (the national assembly), and 8 of 19 cabinet ministers, are women. Almost half the total workforce consists of women, although they tend to work part-time more than men.

However, much still remains to be done. In spite of the growing number of women with higher levels of education and training and in spite of their increasing participation in the workforce, the gender-segregated labour market means that women's work is frequently undervalued. Another barrier to genuine equality is the reluctance of many men to take on their full share of household and family responsibilities. Taking gender equality a further step forward requires a combination of political will, economic incentives and the alteration of old-fashioned attitudes. We also need to focus more strongly on how men meet their obligations as fathers, husbands and family members.

It is about time that we all realize that investment in women is the single most important path to higher productivity for society as a whole—in industrial as well as in developing countries. The economic returns on investment in women's education are generally comparable to those for men, but the social returns in health and fertility regulation by far exceed what we achieve by educating men. Experience shows that women-oriented development

projects are often highly successful in terms of social benefits. We are therefore clearly in need of a feminization of our development policies.

If we are to succeed in strengthening the position of women in society, changes will have to be made at the global as well as national level. The 20:20 initiative, adopted on a voluntary basis at the Social Summit in Copenhagen, represents a new and challenging concept based on a mutual commitment from donors and recipients alike. We clearly cannot meet the social aspirations of our people if we do not earmark at least 20% of our national budgets to basic social services. Most of the social measures will in practice be to the benefit of women.

The International Conference on Population and Development in Cairo gave us hope that we might be able to stabilize the world population before it is too late through educating and empowering our people, particularly women. The World Summit for Social Development in Copenhagen represented a further step towards raising the status of women. The Fourth World Conference on Women in Beijing should build on the results from Cairo and Copenhagen, so that we can proceed towards a world where women and men take part on an equal basis in shaping a society distinguished by tolerance and mutual respect.

**Gro Harlem Brundtland**  
*Prime Minister of Norway*



\$32,000. The infant mortality rate of Indian children whose mothers have a primary education is half that of children whose mothers are illiterate.

Educated women also make better use of their time. A study in urban south India found that higher education among women led to a reduction in the time they spend in all non-market activities except teaching children.

To ensure universal enrolment for girls at primary and secondary levels over the next 15 years would require an additional investment of \$5–6 billion a year. Of course, money is only one component in this package. Much more important are proper curricula, trained teachers and good incentives. But if a spirited effort is made, universal enrolment can be accomplished in the next 10–15 years. It may take somewhat longer in some countries—particularly in the least developed countries, where the present enrolment ratios are only 47% at the primary level and 12% at the secondary level—but completing this task in the next 15 years is not impossible, with political will and a determined effort. What is essential is to formulate national and global strategies to achieve universal female education over the next 15 years—and to earmark enough resources in national budgets and aid allocations to meet that target.

*Reproductive health rights.* At the International Conference on Population and Development in Cairo in 1994, the world community called for a new global commitment to making women full partners with men in the social, economic and political lives of communities. At the core of equal participation is the recognition that access to primary health care facilities—including reproductive health services—is indispensable to well-being.

One major achievement of recent decades is the increased control that women are exercising over reproduction and their own bodies. Choice in the number and spacing of children enables women to control their life choices. It means more control over how their time is spent, releases them from continuous child-bearing and child-rearing and enables them to participate more freely in public life.

Yet in too many countries, women are not assured health care, their reproductive health is not protected, and their reproductive rights are not guaranteed. Reproductive health problems account for more than a third (36.6%) of the total burden of disease of women aged 14–44, compared with only 12% for men. Maternal disability, estimated to affect about 20 million women a year, and pregnancy-related complications, estimated to kill half a million women a year, are the sharpest indications of women's unequal access to health care.

Reproductive health is not merely the absence of disease or disability. It signifies a state of physical, mental and social well-being linked to the functions and processes of reproduction. Effective reproductive health services must combine the prevention and cure of health problems while enhancing personal relations and choices.

It was recognized as a principle for the Programme of Action adopted at the International Conference on Population and Development in Cairo that “advancing gender equality and equity, eliminating all kinds of violence against women and ensuring women's ability to control their fertility are cornerstones of population and development-related programmes”. Reproductive rights must include the ability to make decisions without coercion by government or by individuals. Health education and equitable gender relations are essential to women's ability to make voluntary decisions.

The global community has estimated the costs of the basic elements of reproductive health care—primary health care, family planning and a full complement of reproductive health services—at about \$17 billion a year. The global community has agreed on a Safe Motherhood Initiative—coordinated by the World Health Organization, the UN Fund for Population Activities, UNDP, UNICEF, the World Bank and other partners—to reach the goal of halving the maternal mortality rate by 2000 and halving the rate again by 2015.

With the international community supporting national efforts, these goals are

*Several countries are designing alternative credit schemes to reach low-income women*

within reach. The challenge is not only to provide services but to ensure that policies and services enable women to make free choices on their own.

*Access to credit.* Access to financial resources by low-income women is a key factor in human development. Most of the world's people are poor, and most of the world's poor are women. Most low-income women are self-employed or operate micro or small businesses. And yet, while more than 300 million low-income women run microbusinesses, only about five million have access to credit from sources other than moneylenders. In most countries, banks provide next to no financing for this group, and non-traditional specialized intermediaries, including NGOs, reach less than 2%.

Experience shows that when female entrepreneurs and producers gain access to responsive financial services at market rates, they save, repay their loans and use the proceeds to invest in the health, education and housing of their families. With access to productive resources, low-income women gain more and broader

choices and increased capacity to reshape society.

Over the past ten years, business NGOs, specialized financial institutions and some traditional banks have demonstrated that financial and business development services can be provided to low-income women in responsive and sustainable ways.

Experience shows that to be responsive to the needs of low-income women, financial services need to provide an informal banking atmosphere; small, short-term loans; non-traditional collateral requirements; simple application procedures with rapid turnaround; flexible loan requirements; ownership and mutual accountability; convenient mechanisms for small savings accounts; participatory lending and savings structures; and participatory management of institutions.

A well-known success is Grameen Bank in Bangladesh. Begun in the late 1970s as a credit programme mainly for low-income women, Grameen now reaches nearly one million rural clients, of which more than 90% are women. Loans typically are

SPECIAL CONTRIBUTION

*Benazir Bhutto*

## Pakistan: women judges appointed to the superior courts for the first time

Women, who constitute half the global population, deserve a better deal. More so in developing countries of the Third World, where our plight is compounded by centuries-old prejudices.

Of all the cultures and societies in the world, it is the culture of Islam that not only first acknowledged the exalted status of women but also placed them on a higher pedestal in society than heretofore. Islam conferred on women rights unheard of before. These include the right to child custody, the right to alimony, the right of inheritance, the right to equal status and even the right to divorce. Islam conferred such rights on women over 1,400 years ago. Yet, unfortunately, it is in some of these very Muslim societies that women have lagged far behind in social development. This backwardness of women is rooted in male prejudice and non-religious cultural taboos.

I am happy to say that a realization is now dawning, and women in Pakistan are awakening. My election twice as prime minister of the country is a demonstration of this assertiveness and awakening. Women are on the march. Lately, women have won seats in the parliament by defeating their male rivals in general elections. Prominent Pakistani women play a role in education, medicine, engineering, banking, public law, judiciary and even flying.

In Pakistan, a Law Commission has been appointed to look into the laws discriminatory to women. We will take its recommendations to the legislature for remedial action. Fortunately, our task has been made easier because the unanimously adopted Constitution of 1973 guarantees women fundamental rights and protection. The Constitution brooks no discrimination on account of gender.

On a practical plane, we have taken some

concrete measures. Five percent of jobs have been earmarked for women in all government and government-controlled organizations. For the first time in the country's history, women judges have been appointed to superior courts and exclusive women police stations set up. Necessary actions are in hand to restore special women's seats in our legislatures. A comprehensive Social Action Programme has been launched to improve literacy and health care in the rural areas. Women will be the main beneficiaries of this programme.

I believe that, slowly but surely, the women of Pakistan will soon attain a position of honour and dignity in our society. The trend we have set in gender equality through the emancipation of women is now irreversible.

**Benazir Bhutto**

*Prime Minister of Pakistan*

\$25–250, and recovery rates are about 95%. Grameen Bank has used standardized group lending approaches to expand operations rapidly and is now able to cover its costs with interest income from clients. Such credit programmes for women are beginning to gain acceptance throughout the world—in such places as Burkina Faso, Ecuador, Ghana, Indonesia, Peru, Thailand and the United States, to name a few.

SEWA Cooperative Bank in India was founded by a trade union of low-income, self-employed women when they found that commercial banks were unwilling to make the small loans that they needed. SEWA Bank now has more than 35,000 depositors, 12,000 borrowers and 15,000 shareholding members, and it makes all loans from the savings base of the low-income women who are its members. The bank has enabled women to end their indebtedness to moneylenders, encouraging them to save and to develop skills to interact with the formal financial system.

The KUPEDES-SIMPEDES programmes of Bank Rakyat Indonesia (BRI) are the largest rural savings and microloan programmes in the world. In 1993, BRI KUPEDES made about 1.6 million microloans, totalling more than \$1 billion. KUPEDES has been a leader in demonstrating the viability of very small, market-based loans to low-income people in rural areas. The savings operation, SIMPEDES, mobilizes nearly three times the amount lent, demonstrating the large, untapped savings capacities of low-income people in rural areas. Although only about 30% of BRI microenterprise clients are women, the expansive reach of BRI operations means that nearly one million women are clients.

Global and regional networks play major roles in expanding low-income women's access to financial and business development services. Women's World Banking (WWB) has joined local affiliates together in a global network that now includes more than 50 affiliates in 42 countries of Africa, Asia, Europe, Latin America and North America. WWB has initiated the use of loan guarantees to mobilize funds from local commercial banks to low-income

women directly and through affiliates. The affiliates have provided direct credit, savings and business development services to more than 500,000 women.

Other successful examples of networks are ACCION International, FINCA and the World Council of Credit Unions. ACCION, operating with about 50 affiliates in Latin America, uses approaches similar to those of WWB, although with a greater focus on group lending. It has recently moved to help strong affiliates become formal financial institutions. FINCA uses a village banking approach, in which about 30 women come together to form borrowing and savings groups. The World Council of Credit Unions has a vast network that is giving increased attention to women's economic participation and enterprise lending. These regional and global institutions have been a force in focusing the world's attention on low-income women's access to credit.

The organizations that have succeeded in increasing low-income women's access to financial services have markedly different structures and lending practices. Each, however, has shown that low-income women are excellent savers and borrowers when financial services respond to their needs. The organizations have also shown that it is possible to provide sustainable financial services to large and growing numbers of women if interest rates are set high enough to cover the high costs of making small loans. And low-income women have demonstrated that they want rapid and permanent access to credit, not temporary subsidies under projects that fail.

The policy challenge in many countries is to support effective grass-roots credit schemes and intermediaries and to ensure that low-income women have assured access to credit from the mainstream financial system. National policy-makers could help by fixing annual targets for credit to women, designing special mechanisms to disburse such credit and setting up monitoring systems to measure the progress each year.

International support may be needed to complement such national efforts. In some cases, donors can help subsidize special

*Low-income women are excellent savers and borrowers*

credit institutions for women in the first phase of their development.

### *Efforts to increase access to economic and political opportunities*

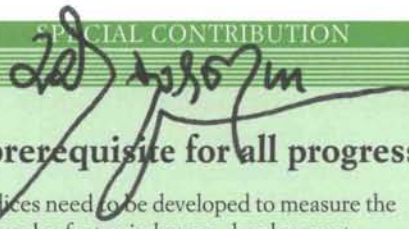
National and international efforts should target programmes that enable people, particularly women, to gain greater access to economic and political opportunities. Some elements in such a package:

- *Basic social services for all.* As endorsed by the Social Summit in Copenhagen, interested developing countries should move progressively towards earmarking at least 20% of their budgets—and interested donor nations 20% of their aid budgets—to human priority concerns, including basic education, primary health care, safe drinking water, family planning services and nutrition programmes for the most deprived people.
- *Reproductive health care.* Although primary health care and essential family planning services are already included in the 20:20 compact, they need to be supplemented by another \$5–10 billion to ensure reproductive health care services. These additional sums should be priority

items in the enlarged effort.

- *Credit for poor people.* As argued above, access to credit is one of the key elements in empowering people and in enabling them to participate in market opportunities. Since formal credit institutions rarely lend to the poor, special institutional arrangements may become necessary to extend credit to those who have no collateral to offer but their enterprise.
- *Sustainable livelihood for all.* Remunerative employment opportunities are the key to the attack on poverty. But not all of them need to be in the formal, organized sectors of the economy. What is essential is to encourage self-employment schemes, microenterprises and opportunities for the poor to enter the market.
- *Targeted programmes for poverty reduction.* Poverty reduction requires an overall national strategy on many fronts. But it also demands some targeted programmes and affirmative action for the poorest groups—among them landless peasants, urban slum dwellers, deprived ethnic minorities, economically disenfranchised women.
- *Capacity building and empowerment.* Considerable decentralized capacity will

### SPECIAL CONTRIBUTION



## **Sri Lanka: peace is a prerequisite for all progress, including women's**

More women are being heard and seen in the international arena today than ever before. Yet the basic question is how minute their number is when compared with their male colleagues at the same levels. It is not a reflection of the disparities in the capacities of women and men, but more the result of the non-realization of the full potential of women.

While the international community is pledging stronger commitment to equality and social justice, adequate significance does not seem to be attached to the universal responsibility for the elimination of gender inequities.

"Human development" should mean the development of both women and men, ideally on a basis of equality while eliminating the existing gender disparities in all areas of human endeavour. Specific in-

dices need to be developed to measure the gender factor in human development.

It is known that socio-economic disparities, poverty and deprivation accentuate the gender inequities in all societies. Therefore, our major concern should be to address poverty with special sensitivity to gender issues.

Peace is essential to sustainable development and to the free and full development of the community as well as the individual. Absence of peace not only impedes development but also promotes violence, particularly violence against women and children. Just as much as Sri Lanka is committed to the achievement of peace for all of its citizens, I do hope that there will be global commitment to the maintenance of peace and non-violence. Peace is a prerequisite for any

kind of progress and development.

I believe that women should occupy centre stage with men to decide the destinies of humanity. Women should be empowered to share equal roles with men in holding positions of power, in participating in the decision-making processes, in controlling and managing scarce resources and also in sharing the incomes and benefits. We should envisage a state where women will be in the mainstream of the development process, side by side with men, contributing their efforts and enjoying the benefits of peace.

**Chandrika Bandaranaike  
Kumaratunga**  
*President of Sri Lanka*

have to be built in each country—in the public sector and among grass-roots organizations—so that disenfranchised groups can participate in designing and implementing projects and programmes.

These elements of the proposed package are merely illustrative, to emphasize that a poverty reduction strategy must go beyond the provision of basic social services for all. It must, in addition, include many other components vital for enabling the poor to participate in economic and political opportunities. Women also need such a package with all the necessary political and financial backing.

The restructuring of priorities that such objectives involve is enormous. Military

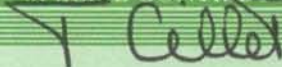
budgets, loss-making public enterprises, projects for the well-to-do, inefficient development programmes—all will experience a major squeeze. But it is time to move not only because resources are tight and much better use must be made of them, but also because these are issues of central importance.

### A vision for the 21st century

What vision should inspire gender relations in the 21st century? Certainly, we should build a world order that:

- Embraces full equality of opportunity between women and men as a fundamental concept.

#### SPECIAL CONTRIBUTION



## Turkey: legal measures for eliminating violence against women

The reference point of the Government of Turkey on women's issues is granting women all human rights and basic freedoms in every sphere of life and building a society where women are recognized as equal human beings.

The establishment of a national mechanism in 1990 was a reflection of political commitment and a response both to the growing demands of the women's movements and to the obligations arising from the ratification of CEDAW and the European Social Charter.

The General Directorate on the Status and Problems of Women was first established under the Ministry of Labour and Social Security, and later a separate Ministry of State for Women was established. Its main goals are promoting women's rights, strengthening their role in economic, social, political and cultural life and providing an equal share of the benefits of development through full integration into the development process.

A legal review commission set up by the Ministry has reviewed the Civil Code and suggested a number of amendments in the Labour Code, Criminal Code and Nationality Law. Draft legislation has been prepared that contains non-discriminatory provisions on the property rights of women, custody of children, domicile and so on.

Legal measures are being adopted

towards the elimination of violence against women. Women living in shanty towns and holding marginal jobs are particularly vulnerable. The establishment of special courts to deal with violence is envisaged. Re-integration would be easier if psychological treatment is provided and women's shelters are spread throughout Turkey. Specially trained female police officers could provide assistance to victims of violence. Regulating the media's treatment of violence and their manipulation of the female body is another effective way of eliminating such behaviour in everyday life.

Although still far behind the targets on women's issues in education, health and employment, remarkable results have been achieved in Turkey, a rapidly developing country with a young population. In recent years, the participation of women in social life and their contribution to economic development have significantly increased.

Education is a *sine qua non* for participation of women in every sphere of life. The schooling rate of girls increased twofold in 1992–93 at the primary school level. The ratio of schooling of the girls in 1993–94 school years is 101.7% in primary school, 38.6% in high school and 17% at the university level.

The number of women working in medicine, pharmacy, engineering, law and management has increased considerably,

and the ratio in some fields is higher than in some industrial countries. Integration of women has increased parallel to the demand created by industrialization and urbanization.

Within the framework of employment, encouragement of entrepreneurship is given great importance. In 1993–94, two credit ventures especially for women were put into effect. And projects on women's integration into development, women's employment promotion and microenterprises are being funded with support from UNDP, the World Bank and the Japanese Grant Fund.

The most important step is to allow women to participate on an equal footing in the decision-making process. Unfortunately, the ratio of women in senior public administration posts was only 0.3% in 1993. Only eight women succeeded in entering the Parliament in the 1991 elections. Some political parties, recognizing the importance of women's political participation, have advocated the introduction of a quota system.

In order to create a more democratic and equal society, women must make their voices heard in every sphere of life.

**Tansu Ciller**

*Prime Minister of Turkey*

- Eliminates the prevailing disparities between men and women and creates an enabling environment for the full flowering of the productive and creative potential of both sexes.
- Promotes more sharing of work and experience between women and men in the workplace as well as in the household.
- Regards women as essential agents of change and development and opens many more doors to women to participate more equally in economic and political opportunities.
- Values the work and contribution of women in all fields on a par with those of

men, solely on merit, without making any distinction.

- Puts people—both women and men—clearly at the centre of all development processes.

Such a vision has guided the analysis in this Report. The Report offers a detailed analysis of gender inequality and a concrete action programme to accelerate the march towards equality. It is hoped that the analysis and proposals in this Report will be useful to national and international policy-makers in designing their own strategies for gender equality.



# The human development debate

The first *Human Development Report* in 1990 started with a simple but far-reaching statement: “People are the real wealth of a nation. The basic objective of development is to create an enabling environment for people to enjoy long, healthy and creative lives. . . . Human development is a process of enlarging people’s choices.”

During the past five years, a major debate has been going on in national and global forums on the concept of human development—and on its practical policy implications. The successive *Human Development Reports* have contributed to this debate, though the real analysis is now conducted in numerous intellectual forums all over the world—as it should be. Today’s debate in the field of human development shows the logical evolution of a concept. Although this dialogue is likely to proceed in many forums under its own momentum, the past five years have given enough perspective to review the debate and to see where we stand in the evolution of ideas. This chapter gives a five-year review of the debate on human development and of the contribution of the human development concept to the broader development dialogue—and identifies future directions.

## Human development and the debate

The publication of the first *Human Development Report* in 1990 met a deeply felt need. The 1980s were years of economic crises—years when attention was paid first and foremost to economic reform and growth through macroeconomic policy instruments. Whether policy-makers were seeking to accelerate growth in Asia, foster recovery in Latin America or stabilize economies in the face of falling commodity

prices and negative capital flows in Africa, they gave little attention to the probable adverse impacts of these reforms and policies on people.

The 1980s were thus years when budgets were balanced at the cost of unbalancing people’s lives. Human lives shriveled in many regions, and among those most affected were women. Even in countries where adjustment worked, people felt that their lives had not improved significantly.

But the 1980s were also years of major mobilization of people in search of freedom—to participate in the events and processes that shape their lives. People’s movements all over the world led to the dismantling of centrally planned economic systems and the spread of multiparty democratic systems. In such times, there was a frantic search for an appropriate vision of society—a vision that would put people at the very centre. Human development approaches met this need.

The concept of human development has struck a responsive chord. It reinforces the belief that people should participate in the development process and benefit from it. It reiterates that concerted efforts can make a difference in the quality of life. It establishes alternatives to conventional wisdom. Going beyond stabilization and economic growth, this broader vision of development has significantly influenced the development policy debates and dialogues, both nationally and internationally.

### *National policy debate*

At the national level, the emergence of the human development concept has led in many instances to national debate on what development has meant for people during

*In the 1980s, budgets were balanced at the cost of unbalancing people’s lives*

*What is the meaning of growth if it is not translated into the lives of people?*

the past 30 years. In the Philippines, a Human Development Network was created that set out to examine the state of human development, including poverty and regional disparities in the country. In Guinea, which found itself at the bottom of the global HDI ranking for the second successive year in *Human Development Report 1994*, the first official reaction was, "it isn't true." But one thing was certain: the ranking could not be ignored, and a public debate ensued. The press and television devoted considerable time to discussions of how to achieve and sustain human development. In public seminars on human development, people from all walks of life asked questions about the tenets of social and economic policy—past and present. Why does a country so blessed with natural resources find itself in this position? What can we do about it now?

Guinea had gone through several years of major structural reform under its economic recovery programme. At the end of it, the national consensus was that the programme was one-legged and that a second

leg was needed to address human development. Guinea is now moving in that direction.

Such national soul-searching has moved human development concerns to the centre of national policy debates in many countries. What is the meaning of growth if it is not translated into the lives of people? In the era of opening markets and globalization of trade, does the comparative advantage of developing countries not rest on an intelligent investment in their people? Can development be sustainable if people do not take part in the processes that influence their lives? Are there not alternatives to conventional wisdom in setting development priorities, managing the process and distributing the outcome?

Most countries felt the need to diagnose the situation first, launching the preparation of country human development reports. Such reports have been completed in Bangladesh, Egypt, Ghana, Pakistan, the Philippines and the Pacific Island countries. There have been human development situation analyses in such countries as Bhutan, Cameroon and Nepal. All the Eastern European and CIS countries (22 in total) are in the process of producing their national human development reports, the largest initiative in any region (box 6.1). The Ukraine report came out in March 1995.

Some countries have progressed beyond diagnosis and have begun preparing comprehensive national human development strategies—as in Botswana, Pakistan and Colombia. Botswana is adopting the recommendations of the Strategy for Accumulated Human Development in formulating its Eighth National Development Plan (1997–2003), preparing key national policies and a poverty alleviation framework. In Pakistan, the human development debate led first to the publication of "Balanced Development: An Approach to Social Action in Pakistan" and then the definition of priorities in "Towards a Social Action Programme". In Colombia, national human development initiatives contributed to its four-year national development plan, the "Social Deal" (box 6.2). And Bolivia and several other countries are preparing sustainable human development strategies.

BOX 6.1

**National human development reports in transition economies**

Faced with the extreme social costs of transition, countries in Eastern Europe and the CIS see national human development reports as the best entry points to reverse the process. With support from UNDP, 22 started preparing their first reports. The Ukraine report came out in March 1995, and the others were expected to be published in May 1995.

Preparing the reports has forced the stakeholders to discuss social issues of common concern. Each country is creating its own mechanism to accomplish the task, all based on national teamwork. The teams include national experts and participants from government institutions, academic institutions and NGOs.

These exercises have gained wide public support:

- In Armenia, the steering committee organized a nationwide competition inviting the public to write about different social issues.

- In Kyrgyzstan, local papers have written articles about the purpose and preparation of the report—one entitled "They have started energetically", another "The human factor in capitalism".

- In Latvia, the main contributors and commentators represent different political persuasions, ethnic backgrounds and professional interests and include government officials and legislators.

- In Uzbekistan, the report's preparation was the driving force in the government's development of a comprehensive programme for data collection.

The reports are helping the transition economies get a clear picture of the social costs of the transition and the governments' intentions to correct them. They also identify areas where assistance is needed. And they help the countries conceptualize their development strategies and articulate their needs to donors, NGOs and others.

Source: UNDP Regional Bureau of Europe and the CIS countries.



The human development index (HDI) has significantly contributed to the human development debate. Its rankings opened healthy competition among countries to improve their human development status. It also reflected national priorities—initiating policy debates, highlighting disparities, measuring progress and stimulating aid policy dialogue. Many countries have found that a disaggregated HDI (by region, gender, ethnic group, income class and several other classifications) offers them their best opportunity to study the human profile of their societies, to identify the areas needing policy attention and to take timely action. In Egypt, regionally disaggregated HDIs contributed to high-level discussions among governorates about reallocating resources to disadvantaged regions.

In Bolivia, the national human development initiative was associated with the establishment of a super-ministry of human development and a super-ministry of sustainable development, and the president has instructed all ministries to take their lead from a people-centred development model. In Tunisia, a new division of human development has been created in the ministry of planning. These initiatives may have far-reaching implications for the development directions of these countries.

All of these national actions are basically translations of different aspects of the human development concept into action. Thus, the participation and partnership of institutions of civil society are the main elements in the Botswana initiative, redirected decentralization and regional planning are the outcomes of the Egypt report, budget restructuring in favour of social sectors is a major theme of the Pakistani and Colombian initiatives, and a main aspect of the first Bangladesh report was its use as an instrument for aid policy dialogue.

There are also human development initiatives to improve social data—to facilitate policy-making and increase the transparency and dissemination of information (box 6.3).

An element often bypassed in the human development dialogue, however, has been the issue of gender and development. References to women's concerns and

policy recommendations to address them were partial and isolated in the country human development reports and strategies. Only the 1994 national human development report of Bangladesh, on the empowerment of women, has focused exclusively on women. And even the few studies that included HDIs disaggregated by gender did not come out strongly with policy conclusions. Gender was not a centre-piece. This year's Report moves gender to the centre of the human development debate.

### *Global policy dialogue*

The human development concept has been particularly useful in shaping the global policy dialogue. With the accelerated global integration of markets, communication and technology, more people are being pushed to the periphery—and the markets are not taking care of those who lose. Globally, there is an increasing urgency to ensure a fair quality of life for everybody—and new roles are being defined for the state, the markets and the international community.

*HDI rankings opened healthy competition among countries to improve their human development status*

### **The Social Deal in Colombia**

BOX 6.2

In August 1994, Colombia initiated a four-year national development plan, "El Salto Social", the Social Deal. The plan contains strong and explicit commitments to the concept of sustainable human development—not only through attention to environmental aspects, but through the government's intention to extend the benefits of economic development to everyone in society.

Four basic concepts form the core of the plan:

- Equity and solidarity are the essential objectives of economic and social policy and the basic sources of social peace and stability.
- Economic growth does not depend as much on investment in individual agents or sectors as on accumulation of "social capital".
- Since competitive advantages are created rather than given, economic dynamism is not the automatic result of free market forces.
- To reach the objectives of the plan,

the entire society must be mobilized.

The plan aims at increasing social spending from 5.8% of GNP to 8.9% between 1994 and 1998. During these years, the resources allocated to science and technology would increase from 0.5% of GNP to 1% in support of the strategy for competitiveness. Investment in environmental development would rise from 0.36% of GNP in 1995 to 0.52% in 1998. And the country is expected to achieve a growth rate of 5.6% a year, which should create an additional 1.5 million jobs.

The goal is to create the New Citizen—to "form a new Colombian citizen, more economically productive, more socially conscious, more politically tolerant and participatory, more respectful of human and minority rights, and more peaceful in social relations; more conscious of Colombian natural value, less predatory, more culturally integrated, and thus more proud of being Colombian."

*Source:* UNDP Country Office in Colombia.

*Several policy proposals in the Human Development Report have stimulated global policy dialogue*

Development problems also are becoming increasingly global. Poverty is no longer a problem of the South only—but of the North as well. Drugs, HIV/AIDS and migration cannot be solved through isolated efforts of single nations. And human insecurity anywhere now threatens human survival everywhere. Forging global compacts and mobilizing joint efforts, the United Nations Conference on Environment and Development in Rio in 1992, the World Conference on Human Rights in Vienna in 1993, the International Conference on Population and Development in Cairo in 1994 and the World Summit for Social Development in Copenhagen in 1995 are outcomes of such concerns (box 6.4).

The global human development debate addresses some of these issues. And it has led to concrete policy proposals. Among them: earmarking the peace dividend for human development, forging a 20:20 global compact to provide basic social services to all the deprived people of the world and finding new sources of funding for global

human security, such as the “Tobin tax” on international speculative movements of currency or internationally tradable permits for global emissions. At the recent World Summit for Social Development, proposals such as the 20:20 compact and the Tobin tax attracted widespread interest from many quarters.

Several concrete policy proposals in the *Human Development Report* have stimulated a great deal of global policy dialogue—though they have not yet resulted in much concrete action. These proposals include establishing an Economic Security Council in the United Nations, restructuring the Bretton Woods institutions, searching for socially responsible adjustment programmes and cancelling the debt of the poorest nations.

*Academic critiques*

In recasting development concerns to focus on people, the human development concept has also stimulated considerable academic debate on basic development concepts and processes. Some academics praise the concept as a new development paradigm and an alternative to GNP growth theories (Singer 1994). Others criticize the concept as recycling old wine in new bottles (Srinivasan 1994). But many academics take an intermediate position: that the concept adds a much-needed dimension to the development debate but that its underlying assumptions require more rigorous professional analysis.

Considerable research has been underway on various aspects of the human development paradigm—and, for some time, on a new growth theory based on human capital (Behrman 1990, Grossman and Helpman 1994, Kurz and Salvadori 1994, Pack 1994 and Romer 1990 and 1994). The link between economic growth and human development has been the subject of several scholarly theses.

The analytical and statistical basis for the construction of the HDI has also drawn considerable controversy, criticism and constructive suggestions for improvement. The main thrust of the debate:

**BOX 6.3**

**District-level profiles in India**

India's Eighth Five-Year Plan for 1991–96 has human development as its “ultimate goal”. The Indian Planning Commission, drawing inspiration from the human development index and the country human development profiles, gave the National Council of Applied Economic Research (NCAER) the task of developing and monitoring human development data.

The goals are to review data and to generate state and district-wide human development profiles, disaggregated by socio-economic group and based on a national survey of about 40,000 households. The survey is also to cover traditionally disadvantaged social groups—such as scheduled castes and tribes—and vulnerable groups—such as agricultural labourers, rural artisans and urban daily-wage earners. Indicators of progress and human development profiles for many population groups—classified by location, occupation, ethnicity

and gender—will be available this year.

Meanwhile, the central state of Madhya Pradesh has decided to compile district-wide human development profiles, an initiative other states are expected to emulate.

The data should prove useful in formulating regional plans and developing and fine-tuning policies and programmes to benefit disadvantaged groups. Covering education, health, nutrition and material well-being, the disaggregated social databases will complement a Ministry of Finance project, Strategies and Financing of Human Development. The project focuses on access to and pricing of health and education, on social protection for vulnerable groups and on the relationship between human development and demographic transition. The results of the project will make it possible to formulate policy recommendations as part of a national human development strategy.

*Source:* UNDP Country Office in India.

- *Choice of dimensions.* Several critics have pointed out that some critical dimensions are missing from the HDI: political freedom, cultural values, environmental sustainability. The criticism is valid. The *Human Development Report* tried to measure political freedom in 1991, but then left the task to academic institutions because of the controversy over the precise method or even the mandate for constructing such a political freedom index. Attempts are under way to “green” the HDI. Cultural values, however, are more difficult to measure quantitatively, and any attempt risks diminishing the concept itself.

The overall assessment: the HDI—though much broader than GNP—should still be regarded as a partial measure of human progress. It should thus be supplemented by other qualitative and quantitative studies of aspects of human progress—for example, political freedom, cultural progress or improved physical environment—until a way is found to incorporate these dimensions into the HDI.

- *Choice of variables.* Some critics suggest that more—or different—variables should be included to measure each of the three dimensions in the HDI. For example, it has been proposed that besides life expectancy, infant mortality and food security indices should be included to yield a better profile of a nation’s health. As it happens, infant mortality is almost perfectly correlated with life expectancy. And to measure food security, the only data available are average national figures for calories per capita—averages that can conceal considerable human deprivation.

The main point is that adding more variables is not likely to make the HDI better or more sensitive. If the gradual improvement of social and human data permits the inclusion of more variables in the HDI, they should be added over time and on their own merit. Meanwhile, the HDI should be kept simple and manageable.

- *Quality of data.* There has been intense scrutiny of the data underlying the HDI because these data determine the ranking of countries. The HDI estimates are based mainly on standardized numbers from UN

agencies and international organizations—with provisional estimates used only when standardized data are lacking. Sometimes, there is a time lag between the data becoming available at the national level and the reporting of the data to the concerned international organizations. The HDI has been able to generate tremendous pressure for timely reporting, for better estimation and for improvement of the underlying data.

Some critics suggest that the construction of the HDI should be postponed until the data are improved. This view would throw the baby out with the bathwater. Instead, data must be improved steadily, and the deficiencies of statistical series

BOX 6.4

### Human development in global conferences

In recent times, the concept of human development has assumed centre stage in a number of world summits and global conferences. Recognition of human development concerns and the global commitment to human development issues emerged prominently at the United Nations Conference on Environment and Development in Rio in 1992, the World Conference on Human Rights in Vienna in 1993, the International Conference on Population and Development in Cairo in 1994 and the World Summit for Social Development in Copenhagen in 1995.

The Rio declaration proclaimed that all human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature. It emphasized that the developmental and environmental needs of present and future generations must be met equitably. The Rio declaration called for establishing a new and equitable global partnership through cooperation and proposed to work towards global agreements on sustainable development.

The Vienna conference reiterated the importance of fundamental human rights of all people, emphasized the concept of human development and asked the international community to jointly work towards the goal of universal human rights. It particularly urged the

eradication of all forms of discrimination against women.

The programme of action adopted at Cairo maintained that people are the most valuable resources of a nation and the human person is the central subject of development. It stressed equal opportunities for all and called for advancing gender equality and equity and empowerment of women. International cooperation and universal solidarity were considered crucial to improve the quality of life of all people.

The Copenhagen declaration called for placing people at the centre of development and directed economies to meet human needs more effectively. It also expressed commitment to fulfilling the responsibility to present and future generations by ensuring equity among generations and the integrity and sustainable use of the environment. The plan of action set a number of quantitative targets in different areas of human development and identified the nature and the role of international cooperation in each area of commitment. It also made reference to the need for global compacts—such as the 20:20 compact between interested industrial and developing country partners to allocate, on average, 20% of official development assistance (ODA) and 20% of national budgets to basic human priorities.

Source: UN 1992e, 1993d, 1994f, 1995a and 1995b.

*Growth is not the end of development—but the absence of growth is*

highlighted openly and transparently. This year's Report makes such an attempt—with extensive footnoting of data sources and a comprehensive note on areas needing substantial improvement.

- *Treatment of income.* Several objections have been raised about the way income is treated in the HDI. Some critics believe that income should not even be in the index—since it is only a means, not an end. But that belief is based on a conceptual misunderstanding, for income in the HDI is merely a proxy for a decent standard of living. Indeed, the merger of economic and social indicators is one of the distinctive features and chief strengths of the HDI.

Other critics object to the precise discount point selected or the rate of discount chosen to reflect diminishing utility of income beyond the discount point. These matters will always raise some controversy, for there is no scientific way of establishing either the precise discount point or the rate of discount. What is important is that most analysts agree with the underlying premise of emphasizing sufficiency rather than satiety. The HDI does not treat income as a means but reinterprets it in terms of the ends it serves.

Other technical points also have been raised. The weighting of variables in the composite index, the reduced weighting of income above the poverty line and the predictive validity of the HDI have been questioned. But the HDI has been found to be a robust measure: even when different weights are tried, the country HDI values do not change significantly. And although no index is perfect, the HDI has been found useful because it is broader than the GNP measure, measuring several human choices besides income.

### **Controversies and misconceptions**

Agreement is fairly broad on some aspects of the human development concept:

- Development must put people at the centre of its concerns.
- The purpose of development is to enlarge all human choices, not just income, so the human development concept focuses on the entire society, not just the economy.

- Human development is concerned both with expanding human capabilities (through investment in people) and with ensuring the full use of these capabilities (through an enabling framework).

- Human development is erected on four essential pillars—productivity, equity, sustainability and empowerment. It regards economic growth as essential but emphasizes the need to pay attention to its quality and distribution and analyses at length its link with human lives. And it addresses sustainable choices from one generation to the next.

- The human development approach defines the ends of development—and analyses the options for achieving them.

Despite this broad agreement, several controversies remain—often based on some misunderstanding about the concept itself, particularly in two areas: whether human development is antigrowth and whether it deals only with social sector development. Since such misconceptions about human development are widespread, they deserve careful examination.

### *Antigrowth?*

One of the most pervasive controversies is over the link between economic growth and human development. Some critics argue that the human development concept is antigrowth. This contradicts clear statements in each *Human Development Report*. For example, from the 1991 Report: "It is wrong to suggest that economic growth is unnecessary for human development. No sustained improvement in human well-being is possible without growth. But it is even more wrong to suggest that high economic growth rates will automatically translate into higher levels of human development. They may, or they may not. It all depends on the policy choices the countries make."

The human development concept consistently asserts that growth is not the end of development—but that the absence of growth often is. Economic growth is essential for human development. But to fully exploit the opportunities for improved well-being that growth offers, it must be prop-

erly managed, for there is no automatic link between economic growth and human progress. Some countries have been extremely successful in managing their economic growth to improve the human condition, others less so. One of the most pertinent policy issues is how growth translates, or fails to translate, into human development under different conditions.

The link between economic growth and human development was analysed at length in chapter 3 of the first Report in 1990. The main policy conclusion was that "economic growth, if it is to enrich human development, requires effective policy management. Conversely, if human development is to be durable, it must be continuously nourished by economic growth. Excessive emphasis on either economic growth or human development will lead to developmental imbalances that, in due course, will hamper further progress."

A desirable link can be created between economic growth and human development in four ways:

First, emphasis on investment in the education, health and skills of people can enable them to participate in growth and to share its benefits, principally through remunerative employment. That is the growth model adopted by China, Hong Kong, Japan, Malaysia, the Republic of Korea, Singapore, Thailand and many other newly industrializing countries. And it is the kind of human investment strategy so much in favour in many industrial and developing countries today.

Second, more equitable distribution of income and assets is critical for a close link between economic growth and human development. Wherever the distribution of income and assets is very uneven—as in Brazil, Nigeria and Pakistan—high GNP growth rates have failed to translate into people's lives.

Third, some countries have significantly improved human development even without good growth or good income distribution. They have achieved this through well-structured social expenditures by government. Cuba, Jamaica, Sri Lanka and Zimbabwe, among others, achieved fairly impressive results through the generous

provision of social services by the state. So did many countries in Eastern Europe and the CIS. But such experiments generally are not sustainable unless the economic base expands enough to support the social base.

Fourth, empowering people—particularly women—is a sure way to link growth and human development. If people can exercise their choices in the political, social and economic spheres, there is a good prospect that growth will be strong, democratic, participatory and durable.

#### *Only social sector development?*

Another misconception—closely related to the alleged antigrowth bias of human development models—suggests that human development strategies have only social content, no hard economic analysis. This misconception has been strengthened by the fact that the *Human Development Report* emphasizes the importance of increased social sector investment to build human capabilities. So, the impression has grown that human development strategies are concerned mainly with social development expenditures—particularly in education and health.

Some analysts go further and confuse the paradigm of human development with only human resource development—that is, social development expenditure for strengthening human capabilities. Others insist that human development strategies are concerned only with human welfare aspects—or even more narrowly, just with basic human needs—and that they have little to say about economic growth, production and consumption, saving and investment, trade and technology or any other aspects of a macroeconomic framework. These analyses do scant justice to the basic concept of human development as a holistic development paradigm embracing both ends and means, both productivity and equity, both economic and social development, both material goods and human welfare.

The real point of departure of human development strategies is to approach every issue in the traditional growth models from the vantage point of people. Do people

*Empowering people—particularly women—is a sure way to link growth and human development*

*Every issue in the traditional growth models must be approached from the vantage point of people*

participate in economic growth as well as benefit from it? Do they have full access to the opportunities of expanded trade? Are human choices enlarged or narrowed by new technologies? Is economic expansion leading to job-led growth or job-less growth? Are budgets being balanced without unbalancing the lives of future generations? Are "free" markets open to all the people? Are the options of only the present generations being widened, or also those of the future generations?

None of the economic issues is ignored, but all are related to the ultimate objective of development: people. And people are analysed not merely as the beneficiaries of economic growth but also as the real agents of every change in society—whether economic, political, social or cultural. To establish the supremacy of people in the process of development—as the classical writers always did—is not to denigrate economic growth. It is to rediscover its real purpose.

These controversies point to one clear conclusion. There is a need to integrate economic growth more fully within the ambit of the human development concept and strategy—a theme to be addressed by *Human Development Report 1996*.

### **The way forward—future priorities**

The first *Human Development Report* developed the concept of human development and its measurement. It also explored the relationship between economic growth and human development, showing that:

- Economic growth is necessary but not sufficient for human development. The

right kind of economic environment and policies are required to translate the benefits of growth into the lives of people.

- Commitment and political will, not always resources, are often the main constraints to taking care of economic growth and human development simultaneously.
- Sustainable development strategies should meet the needs of the present generations without compromising the ability of future generations to meet their needs.

Successive *Human Development Reports* focused on specific issues of human development in the larger perspective set forth in the first Report. The issues have varied from financing human development to people's participation. The international perspective and human security have also been addressed. This year's Report has focused on gender and development—to explore ways to empower women in social, political and economic life.

Entering the 21st century, all nations face the challenge of properly integrating economic growth with human development. The time has come to explore in detail the links between economic growth and human development. What will determine rapid growth in the competitive and expanding global markets of the 21st century? How can growth be generated that is job-led, that ensures equal opportunities and that is sustainable from one generation to the next? More important, how can it be ensured that the growth generated is engendered? *Human Development Report 1996* will advance such an integrated analysis of human development and economic growth.

# Technical notes

## 1. Computing gender-equity-sensitive indicators

Over the past five years, a great deal has been achieved by the *Human Development Report* in shifting the focus of attention of the world community from such mechanical indicators of economic progress as GNP and GDP to indicators that come closer to reflecting the well-being and opportunities actually enjoyed by populations. Although the *Human Development Report* has been widely read primarily because of the extensive and detailed statistical analyses of achievements and limitations in the living conditions of people in different parts of the contemporary world, the aggregative human development index (HDI) also has played some part in bringing about this reorientation. Despite the obvious limitations of the HDI (arising in part from its attempt to capture a complex reality in a summary form with imperfect data), it has served as something of a rival to the other summary indicator—the aggregative GNP, which hitherto had been almost universally used as the premier index of the economic achievement of nations. The HDI clearly has been able to present some aspects of human development that the GNP tends to miss.

From the beginning, the *Human Development Report* has been concerned with inequalities in the opportunities and predicaments of women and men. Although this perspective has received some attention in past Reports, there is a strong case at this time for concentrating specifically on that issue for a more comprehensive investigation of gender inequality in economic and social arrangements in the contemporary world.

In performing this task, there is need for fresh economic and social analyses as well as careful and probing empirical research. Women and men share many aspects of living together, collaborate with each other in complex and ubiquitous ways, and yet end up—often enough—with very different rewards and deprivations. This note is specifically concerned with developing a framework for “gender-equity-sensitive indicators” of achievements and freedoms. The methodology for this is explored in the sections that follow.

### Group inequality and aggregation: the basic structure

We may begin by examining the inequality between women and men in a dimension in which the “potentials”

of the two groups do not differ. Literacy is an obvious example. In contrast, in the case of life expectancy, we must take note of the evident biological advantage in survival of females over males (see Waldron 1983, Sen 1992b, Anand 1993 and the references cited there). Given symmetric treatment in nutrition, health care and other conditions of living (including the duration and intensity of work), women have systematically lower age-specific mortality rates than men, resulting in a life expectancy for women that is significantly higher than that for men—possibly by some five years or more. There is no corresponding difference in the potential for adult literacy (that is, in the percentage of the population aged 15 and above that is literate).

The assessment of relative inequality in achievement can be reasonably clear when there are only two groups—as in the case of gender. The larger the gender gap, holding the overall mean constant, the larger is inequality as measured by any index in the Lorenz class (see Anand 1983, appendix D); this class includes most commonly used inequality measures, such as the Gini coefficient, the two Theil indices, the Atkinson index and the squared coefficient of variation. A bigger gender gap, with the same overall mean (and the same population proportions of the two groups), is equivalent to a simple *mean-preserving regressive transfer*. (In terms of Lorenz curves, this would correspond to an unambiguously lower curve.) In the special two-group case, disparity ratios or gaps will clearly reflect the inequality in achievement between the two groups. Given equality preference and the same overall mean, more relative inequality will indicate a worse social state of affairs, and this evaluative feature must be reflected in the gender-equity-sensitive indicators.

This simple recognition still leaves open the question of what would be appropriate standards of comparison when the overall or mean levels of achievement are different. In particular, how might we think about “trading off” more relative equality against a higher absolute achievement? Haiti, for example, has a total literacy rate of 43%—40% for females and 46% for males. Should this social outcome be judged worse or better than that of Chad, which has a total literacy rate of 45%, with a rate

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Technical note 1 is based on the *Human Development Report 1995* background paper by Sudhir Anand and Amartya Sen, “Gender Inequality in Human Development: Theories and Measurement” (forthcoming as Human Development Report Office Occasional Paper 19, UNDP, New York). The note omits several technical issues discussed in that paper (in appendices A.1–A.3).

of 31% for females and 59% for males? Haiti has less gender inequality in literacy than Chad, but it also has a lower overall rate of literacy. A comparison between the two countries now calls for some way of assessing the comparative claims of more relative equality against higher absolute achievement. An explicit evaluative exercise on this "trade-off" is required.

We begin with the approach explored by A. B. Atkinson (1970) for measuring relative income inequality and extend this analysis to fit our task (see also Kolm 1969, Sen 1973, Osmani 1982, Anand 1983 and Blackorby and Donaldson 1984). Let  $X$  be the indicator of achievement, and let  $X_f$  and  $X_m$  refer to the corresponding female and male achievements. If  $n_f$  and  $n_m$  are the numbers of females and males in the population, the overall or mean achievement  $\bar{X}$  is given by

$$\bar{X} = (n_f X_f + n_m X_m) / (n_f + n_m).$$

We posit a social valuation function for achievement that is additively separable, symmetric and of constant elasticity marginal valuation form

$$V(X) = \begin{cases} \frac{1}{1-\epsilon} X^{1-\epsilon} & \epsilon \geq 0, \epsilon \neq 1 \\ \log X & \epsilon = 1 \end{cases}$$

up to a positive affine transformation. Only values of  $\epsilon \geq 0$  are considered so as to reflect a preference for equality in the social valuation function.

For any pair  $(X_f, X_m)$  of female and male achievements, we can construct an "equally distributed equivalent achievement"  $X_{ede}$ . This is defined to be the level of achievement that, if attained equally by women and men, as  $(X_{ede}, X_{ede})$ , would be judged to be exactly as valuable socially as the actually observed achievements  $(X_f, X_m)$ . According to the formula for social valuation, for a given  $\epsilon$ ,  $X_{ede}$  is thus defined through the equation

$$(n_f + n_m) \frac{X_{ede}^{1-\epsilon}}{1-\epsilon} = n_f \frac{X_f^{1-\epsilon}}{1-\epsilon} + n_m \frac{X_m^{1-\epsilon}}{1-\epsilon},$$

which implies that

$$\begin{aligned} X_{ede} &= (n_f X_f^{1-\epsilon} + n_m X_m^{1-\epsilon})^{1/(1-\epsilon)} / (n_f + n_m)^{1/(1-\epsilon)} \\ &= (p_f X_f^{1-\epsilon} + p_m X_m^{1-\epsilon})^{1/(1-\epsilon)}, \end{aligned}$$

where we define the proportions  $p_f = n_f / (n_f + n_m)$  and  $p_m = n_m / (n_f + n_m)$ . Hence,  $X_{ede}$  is formed from  $(X_f, X_m)$  by taking what we shall call a " $(1-\epsilon)$  average" of  $X_f$  and  $X_m$  rather than a simple arithmetic average of the female and male achievements.<sup>1</sup> When  $\epsilon = 0$ ,  $X_{ede}$  reduces to  $\bar{X}$ , the simple arithmetic average; here there is no concern for equality, and the arithmetic mean indicates the social achievement. But when  $\epsilon > 0$ , there is a social preference for equality (or an aversion to inequality) that is measured by the magnitude of the parameter  $\epsilon$ .

Assuming that female achievement falls short of male achievement—that is,  $(0 \leq) X_f < X_m$ —the following results can be demonstrated for  $(1-\epsilon)$  averaging:

1.  $X_f \leq X_{ede} \leq X_m$ .
2. The larger  $\epsilon$  is, the smaller is  $X_{ede}$  (given  $X_f, X_m > 0$ ).

3.  $X_{ede} \leq \bar{X}$  for  $\epsilon \geq 0$  (with equality holding when  $\epsilon = 0$ ).
4.  $X_{ede} \rightarrow X_f$  as  $\epsilon \rightarrow \infty$ .

Result 4 corresponds to the Rawlsian maximin situation in which social achievement is judged purely by the achievement of the worst-off group, which in the case of gender typically refers to women.<sup>2</sup> If  $X_f < X_m$  in every country and if  $\epsilon \rightarrow \infty$  (equity preference tending to infinity), social achievement across countries will be measured by female achievement alone: in the averaging, the weight given to male achievement in excess of female achievement will tend to zero. In this case, the equally distributed equivalent achievement index  $X_{ede}$  reduces to the index for the relatively deprived group (typically women), and countries are ranked according to the absolute achievement of women in those countries.

As mentioned earlier,  $X_{ede}$  is a  $(1-\epsilon)$  average of  $X_f$  and  $X_m$ . When  $\epsilon = 0$ ,  $X_{ede} = \bar{X}$ , the arithmetic average of  $X_f$  and  $X_m$ . When  $\epsilon = 1$ ,  $X_{ede}$  is the geometric average; and when  $\epsilon = 2$ ,  $X_{ede}$  is the harmonic mean of  $X_f$  and  $X_m$ .<sup>3</sup> When  $\epsilon \rightarrow \infty$ ,  $X_{ede} \rightarrow \min\{X_f, X_m\}$ . The equally distributed equivalent achievement  $X_{ede}$  can be calculated for each country for different values of  $\epsilon$ , the parameter of equity preference. Thus, if the preference for equity is very small ( $\epsilon$  close to 0), Chad's literacy rate of 31% for females and 59% for males, corresponding to an overall literacy rate of 45%, will be judged to be better than Haiti's rate of 40% for females and 46% for males, corresponding to an overall rate of 43%. As the equity preference parameter  $\epsilon$  is raised, Haiti's achievement will overtake that of Chad's; in the limit, as  $\epsilon$  tends to infinity, Haiti's equally distributed equivalent achievement will be 40% and Chad's 31%. For all values of  $\epsilon$  above the critical cut-off of 1.2, at which the two countries' achievements are the same, Haiti's achievement will be judged to be better than Chad's.

The equally distributed equivalent achievement  $X_{ede}$ , applied to gender differences, yields a measure that is, in fact, a gender-equity-sensitive indicator (GESI). This is, of course, an index of overall achievement taking note of inequality, rather than a measure of gender equality. But it uses—explicitly or by implication—equity-sensitive weights on the achievements of the two groups, rather than the unweighted mean of the two sets of achievements that is more commonly used (including, hitherto, in the *Human Development Report*). It incorporates implicitly something like a gender equality index. The index of relative equality  $E$  that underlies  $X_{ede}$  can be defined simply as

$$E = X_{ede} / \bar{X}.$$

This can vary from 0 to 1 as equality is increased.<sup>4</sup> Hence, the measure of social achievement  $X_{ede} = E \cdot \bar{X}$  is simply the relative equality index  $E$  multiplied by the overall or mean achievement measure  $\bar{X}$ . Relative equality and mean absolute achievement are thus integrated into the gender-equity-sensitive indicators.

#### Equity-sensitive aggregation and life expectancy

So far, the analysis has been confined to achievements in which the "potentials" of women and men do not differ (for example, each group has the same range of achiev-



able literacy, from 0% to 100%). The situation is different, however, when it comes to mortality rates and life expectancy, as was mentioned earlier. Given the evidence of biological differences in survival rates favouring women (with comparable care), we are forced to address the question of the appropriate comparable scales of achievement in life expectancy for women and men. And we have to integrate that differential scaling into the general evaluative scheme of gender-equity-sensitive indices.

There is indeed strong evidence that the maximum potential life expectancy for women is greater than that for men—given similar care, including health care and nutritional opportunities (see Holden 1987, Waldron 1983 and the references cited there). Indeed, in most industrial countries, women typically outlive men by six to eight years. Women's higher potential life expectancy is anticipated in demographic projections as well. For the year 2050, for example, life expectancy in industrial countries is projected at 87.5 years for women and 82.5 years for men, averaging to 85 years (see UNDP 1993c).

In considering the disaggregation of the human development index by gender, the *Human Development Report* has used separate goal posts for maximum life expectancy for females and males of 87.5 years and 82.5 years, reflecting a five-year gender gap. Minimum life expectancy has been taken to be 27.5 years for women and 22.5 years for men, giving the same range of variation (60 years) for both sexes. When no adjustment is made for gender inequality, a unit increase in longevity for either sex will contribute the same increment to the overall HDI.

In the disaggregation of the HDI in the *Human Development Report*, female and male achievements in life expectancy,  $X_f$  and  $X_m$ , have been assessed through

$$X_f = (L_f - 27.5)/60, \\ \text{and } X_m = (L_m - 22.5)/60.$$

The simple arithmetic average  $\bar{X}$  of  $X_f$  and  $X_m$ , assuming female and male population shares of one-half each, is then calculated as

$$\bar{X} = \frac{1}{2} X_m + \frac{1}{2} X_f \\ = (\bar{L} - 25)/60,$$

where  $\bar{L} = (L_f + L_m)/2$  is the average life expectancy attained in the population.

Equality between persons can be defined in two quite distinct ways: in terms of *attainments*, or in terms of the *shortfalls* from the maximum values that each can attain. For "attainment equality" of achievement, we have to compare the absolute levels of achievement. For "shortfall equality", what must be compared are the shortfalls of actual achievement from the maximum achievements of each group. Each of the two approaches has considerable interest (see Sen 1992a, chapter 6). Shortfall equality takes us in the direction of equal use (relative or absolute) of the respective potentials. In contrast, attainment equality is concerned with equal absolute levels of achievement (irrespective of the maximum potentials).

In those cases in which human diversity is so powerful that it is impossible to equalize the maximum levels that are potentially achievable, there is a basic ambiguity in assessing achievement and in judging equality of achievement (or of the freedom to achieve). If the maximum achievement of person 1—under the most favourable circumstances—is, say,  $x$ , and that for person 2 is  $2x$ , equality of attainment would invariably leave person 2 below her potential achievement. Partly as a response to such issues, Aristotle incorporated, in his *Politics*, a parametric consideration of what a person's "circumstances admit" and saw his "distributive conception" in that light. "For it is appropriate, if people are governed best that they should do best, *in so far as their circumstances admit*—unless something catastrophic happens."<sup>5</sup> It is possible to question this Aristotelian view in terms of the more rough-and-ready rationale of attainment equality, but there is force in the conception of shortfall equality as well, and it is that approach that is used here for assessing gender equality in the context of life expectancy variations. The gender-equity-sensitive indicators can also be made to take note of the logic behind this approach.

Thus, the approach to adjusting for gender inequality in achievement in the case of life expectancy must first involve a rescaling to take note of the potentially greater longevity of women. Such adjustments are, in fact, a part of the methodology already used for the *Human Development Report*, since these rescalings must be done whether or not we wish to take explicit note of gender inequality. But rather than taking a simple arithmetic average  $\bar{X}$  of the female and male achievements  $X_f$  and  $X_m$ , we take a  $(1 - \epsilon)$  average with  $\epsilon > 0$ . As before, we form the average  $X_{ede}$ , given for  $\epsilon \neq 1$  through

$$X_{ede}^{1-\epsilon} = \frac{1}{2} X_f^{1-\epsilon} + \frac{1}{2} X_m^{1-\epsilon},$$

which reduces to  $\bar{X}$  when  $\epsilon = 0$ .<sup>6</sup> Thus, we define  $L_{ede}$  through

$$[(L_{ede} - 25)/60]^{1-\epsilon} = \frac{1}{2} [(L_f - 27.5)/60]^{1-\epsilon} \\ + \frac{1}{2} [(L_m - 22.5)/60]^{1-\epsilon}.$$

When  $\epsilon = 0$ ,  $L_{ede} = \bar{L}$ . For  $\epsilon > 0$ ,  $L_{ede} < \bar{L}$ .

#### Gender differences in earnings and rewarded employment

The human development index for a country consists of the average of three components: life expectancy, educational attainment and adjusted per capita income. For the gender-equity-sensitive HDI, called the gender-related development index (GDI), we simply replace the arithmetic average attainments in each component by the equally distributed equivalent achievements. Thus, the first component,  $(\bar{L} - 25)/60$ , is replaced by  $(L_{ede} - 25)/60$ . Similarly, educational attainment is replaced by the equally distributed equivalent achievement of the educational rates for females and males. No corresponding correction can be made for the third component of the HDI, because gender-specific attributions

of income per head cannot be readily linked to the aggregate GDP per capita used in these calculations, and inequalities within the household are difficult to characterize and assess.

It is important to distinguish between two different aspects of income: *earnings* and *use*. If we wish to concentrate on the *use* aspect, the within-family division of income use between women and men would have to be identified to assess income use by gender. But the empirical and conceptual problems in getting at these divisions within the family are formidable indeed.

In contrast, the earnings aspect looks at women and men not as income users, but as people who *earn* incomes. Total gross national product can then be seen in terms of aggregate earnings of all women and all men, making up something like the total national income. An approximate idea of the income earnings of women and men can be obtained by looking at their employment ratios and at their relative wages.

What significance can be attached to such income earning estimates? Indeed, there is some tension in concentrating on the earnings aspect when the entire approach of the *Human Development Report* has been based on what people get out of the means they can use, rather than on the means they earn—possibly to be used by their families. But the earnings contrasts between men and women do point to an important asymmetry in nearly all societies. While women very often work as hard as—or harder than—men, much of their work is unpaid (see, for example, Goldschmidt-Clermont 1982 and 1993, Folbre 1991 and 1994, Urdaneta-Ferrán 1993 and the references cited there). There is also considerable evidence indicating that earning explicitly recognized “incomes” and working in sectors that are treated as evidence of being “economically active” can significantly and favourably influence the “deal” that women tend to get in the division of benefits and chores in the family.<sup>7</sup>

There is thus a case for gender division even for the real income component of the HDI, to try to note the differences between the earnings of women and men. It would be hard to get anything like the degree of precision for earnings “allocated” between men and women on the basis of rough calculations that gender-specific measures of literacy or life expectancy can offer. But even estimates of the relative earnings of women and men would give the gender-equity-sensitive indicator another component with some bite. For such estimates, the total GDP per capita could be notionally “split” between women and men in the ratio of the products of their employment rates and wage rates per unit of employment. It would then be necessary, however, to explain clearly that (1) this procedure looks at income from the earnings perspective rather than the use perspective (even though gender inequalities seem to link use to earnings), and (2) the evaluations of earnings of women and men are fairly “soft” estimates, which should be interpreted with much caution.

#### Extent of inequality aversion $\epsilon$

As discussed earlier, the values of the parameter  $\epsilon$  can be taken to range from zero to infinity, reflecting the extent of social preference for equality. As a parameter,  $\epsilon$  stands for the elasticity of the marginal social valuation of

achievement, and tells us how quickly the marginal value falls as achievement rises (that is, how strongly diminishing the marginal social returns are).  $\epsilon$  can, in fact, be seen as a reflection of the extent of inequality aversion. When  $\epsilon$  is taken to be zero, there is no decline in marginal values, so the simple arithmetic mean does well enough. At the other extreme, when  $\epsilon$  is taken to be infinity, the sensitivity is so great that we end up picking only the lower of the two numbers in a pair, ignoring the achievement of the better-off. It would be interesting to calculate the GDI, the gender-equity-sensitive adaptation of the HDI, for several parametric values of  $\epsilon$ , such as 0, 1, 2, 3, 5, 10 and  $\infty$ . We typically will use the value  $\epsilon = 2$ .

The implications of different choices of  $\epsilon$  can be gauged by examining the effects on  $X_{ede}$ , the equally distributed equivalent achievement. We can compare the relative increase in  $X_{ede}$  through a unit increase in female achievement  $X_f$  compared with a unit increase in male achievement  $X_m$ . From Anand and Sen (1995, appendix A.1, equation 2), we have

$$\begin{aligned} \frac{\partial X_{ede} / \partial X_f}{\partial X_{ede} / \partial X_m} &= \frac{p_f V'(X_f) / V'(X_{ede})}{p_m V'(X_m) / V'(X_{ede})} \\ &= \frac{V'(X_f)}{V'(X_m)} \text{ assuming } p_f = p_m = \frac{1}{2} \\ &= X_f^{-\epsilon} / X_m^{-\epsilon} = (X_m / X_f)^\epsilon \end{aligned}$$

if the social valuation function  $V(X)$  has a constant elasticity of marginal valuation  $\epsilon$ .

According to this, if male achievement  $X_m$  is *twice* female achievement  $X_f$ —that is,  $X_m/X_f = 2$ —and if  $\epsilon = 1$  (that is, we have the logarithmic form for  $V(X)$ ), a unit increase in female achievement would contribute twice as much to  $X_{ede}$  as a unit increase in male achievement (see technical note table 1.1). If  $X_m/X_f$  remains equal to 2, but  $\epsilon = 2$ , a unit increase in female achievement contributes four times as much as a unit increase in male achievement. Holding  $X_m/X_f$  constant (at any value above 1), as  $\epsilon$  is increased there is an increase in the relative contribution to  $X_{ede}$  from a unit increase in  $X_f$  compared with a unit increase in  $X_m$ . Technical note table 1.1 estimates the relative contribution to  $X_{ede}$  of a unit increase in female achievement compared with a unit increase in male achievement for different values of  $\epsilon$  and for different ratios of male achievement to female achievement ( $X_m/X_f$ ).

How much would the GDI differ from the HDI (bearing in mind that the HDI is, in fact, a special case of the GDI, with  $\epsilon = 0$ )? Clearly, the distributional correction would tend to pull the value of HDI down, and we expect the GDI systematically to be significantly less than the corresponding HDI values, for relatively high values of  $\epsilon$ .

Relative gender equality can be reasonably captured by comparing the values of the gender-equity-sensitive indicator with the uncorrected average measure. That average (gender-blind) measure is based on taking an arithmetic average (as with the HDI) over the entire population, whereas the formula for the GESI permits an

TECHNICAL NOTE TABLE 1.1

Relative contributions to  $X_{ede}$  of unit increases in  $X_f$  and  $X_m$  for alternative values of  $\epsilon$  and  $X_m/X_f$

$X_m/X_f$	Value of $\epsilon$						
	0.0	1.0	2.0	3.0	5.0	10.0	$\infty$
1.0	1	1.0	1.0	1.0	1.0	1.0	1
1.5	1	1.5	2.3	3.4	7.6	57.7	$\infty$
2.0	1	2.0	4.0	8.0	32.0	1,024.0	$\infty$
2.5	1	2.5	6.3	15.6	97.7	9,536.7	$\infty$
3.0	1	3.0	9.0	27.0	243.0	59,049.0	$\infty$
4.0	1	4.0	16.0	64.0	1,024.0	1,048,576.0	$\infty$

Note: The relative contributions to  $X_{ede}$  in this table, that is, the values of  $(\partial X_{ede}/\partial X_f)/(\partial X_{ede}/\partial X_m)$ , are estimated under the assumptions that  $p_f = p_m = 1/2$  and that  $V(X)$  has a constant elasticity of marginal valuation  $\epsilon$ .

entire class of  $(1 - \epsilon)$  averaging to take note of—and to weigh against—inequalities. In the special case in which  $\epsilon$  is taken to be 2, the formulae of the GESI and the GDI correspond to the harmonic mean. The equally distributed equivalent achievement corresponding to  $\epsilon = 2$ , that is,  $X_{ede}(2)$ , is then given (for equal proportions of women and men) by the formula

$$X_{ede}(2)^{-1} = \frac{1}{2} X_f^{-1} + \frac{1}{2} X_m^{-1}.$$

Hence,

$$X_{ede}(2) = 2[(1/X_f) + (1/X_m)]^{-1},$$

which is the harmonic mean of  $X_f$  and  $X_m$ . If we take the ratio of the harmonic mean to the arithmetic mean, we then get a measure of gender equity that has obvious interest.

It must be remembered that the GESI formula can also be applied to other variables chosen to represent differences in gender achievements. We must, in general, distinguish between (1) the GESI formula of  $(1 - \epsilon)$  averaging, and (2) the "space" on which it is applied (that is, the variables for which achievements and gender disparities are scrutinized). Even though the argument in this technical note has been developed in terms of the "classic" components of human development indicators, the GESI formula can be applied generically to any gender disparity.

Notes

1. Considering  $X_{ede}$  as a function of  $\epsilon$ , we can write

$$X_{ede}(\epsilon) = (p_f X_f^{1-\epsilon} + p_m X_m^{1-\epsilon})^{\frac{1}{1-\epsilon}}.$$

For  $X_f, X_m > 0$ ,  $X_{ede}(\epsilon)$  is well defined for all  $\epsilon$  (positive or negative) except  $\epsilon = 1$ . As  $\epsilon \rightarrow 1$ , we can show that  $\log X_{ede}(\epsilon) \rightarrow (p_f \log X_f + p_m \log X_m)$ , that is, the logarithm of the geometric mean of  $X_f$  and  $X_m$ ; hence,  $X_{ede}(\epsilon)$  tends to the geometric mean of  $(X_f, X_m)$ . If one of the  $X_i$ , say  $X_f$ , is equal to 0, then  $X_{ede}(\epsilon)$  is well defined for  $\epsilon < 1$ . But for  $\epsilon > 1$ ,  $X_f^{1-\epsilon} = 1/X_f^{\epsilon-1} \rightarrow \infty$  as  $X_f \rightarrow 0$ . In this case,

$$X_{ede}(\epsilon) = 1 / [(p_f / X_f^{\epsilon-1}) + (p_m / X_m^{\epsilon-1})]^{\frac{1}{\epsilon-1}},$$

so that  $p_f / X_f^{\epsilon-1}$  and the entire denominator of  $X_{ede}(\epsilon)$  tends to infinity as  $X_f \rightarrow 0$ . Therefore, for  $\epsilon > 1$ ,  $X_{ede}(\epsilon) \rightarrow 0$  as  $X_f \rightarrow 0$ . Putting together the cases  $\epsilon = 1$  and  $\epsilon > 1$ , the limiting value of  $X_{ede}(\epsilon)$  for  $\epsilon \geq 1$  is zero, as one of the  $X_i$ , for example,  $X_f$ , tends to zero. Thus, we may simply define  $X_{ede}(\epsilon) = 0$  for  $\epsilon \geq 1$  when  $X_f$  or  $X_m$  is equal to zero.

2. There is some ambiguity about whether this "extreme inequality aversion" leads to simple maximin, or to the lexicographic version of maximin (sometimes called "leximin"), on which see Hammond 1975.

3. By result 2 above, we have the following relationship between the three means when the two numbers  $X_f$  and  $X_m$  are positive and different: the harmonic mean is less than the geometric mean, and the geometric mean is less than the arithmetic mean.

4. The corresponding measure of relative inequality  $I$  is simply the Atkinson index:

$$I = 1 - (X_{ede}/\bar{X}).$$

Under the assumptions made on  $V(X)$  in this note, both  $E$  and  $I$  are mean-independent measures. Indeed, the constant elasticity marginal valuation form is both sufficient and necessary for  $E$  and  $I$  to be homogeneous of degree zero in  $(X_f, X_m)$ .

5. The translation is from Nussbaum (1988), who also discusses the precise role that this qualification plays in Aristotle's "distributive conception" (pp. 146-50; italics added).

6. On the other hand, for  $\epsilon = 1$ ,  $X_{ede}$  is given through the logarithmic functional form. These formulations are based on the presumption that there are the same number of women as of men—hence the half-and-half division. When this does not hold, the gross mean and the gender-equity-sensitive measure involve weighting the achievements of each group by their population shares,  $p_f$  and  $p_m$ .

7. For references to the literature on this, and an analysis of why this relationship is observed in situations of "cooperative conflict" (as family living typically is), see Sen 1990a.

## 2. Computing the GDI and the GEM

### The gender-related development index

The gender-related development index (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 degree of 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,  $\epsilon$ , equal to 2. This is the harmonic mean of the male and female values.

The harmonic mean is calculated by taking the reciprocal of the population-weighted arithmetic mean of the female and male achievement levels (which are themselves expressed in reciprocal form). Although this may sound complicated, the basic principle is straightforward. The harmonic mean will be less than the arithmetic mean to the degree that there is disparity between female and male achievement.

The first step in the calculation of the GDI is to index the variables for life expectancy and educational attainment. Although the range for life expectancy is the same for women and men (60 years), the maximum and minimum values are different. The maximum value (or "fixed goal post") for male life expectancy is 82.5 years and the minimum value is 22.5 years. For female life expectancy, the maximum value is 87.5 years and the minimum 27.5 years. The values for women and men are indexed accordingly.

The variable for educational attainment is a composite index. It includes adult literacy, with a two-thirds weight, and gross combined primary, secondary and tertiary enrolment, with a one-third weight. Each of these subcomponents is indexed separately. Both indices use a maximum value of 100% and a minimum value of 0%. The two indices are added together with the appropriate weights to form the composite index for educational attainment.

### The income variable

The calculation of the index for income is more involved. In calculating the female and male shares of earned income, we use two pieces of information: 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.

The ratio of the average female wage to the average male wage is available for the non-agricultural sector for 55 countries. This ratio is assumed to be the average ratio for the agricultural sector as well. The average ratio of female to male wages (75%) derived for these 55 countries is then applied to the countries among the 130 for which ILO sources lack such data. In fact, the wage ratio is slightly higher for the 24 industrial countries (76.2%) and slightly lower for the 31 developing countries (73%). In view of this small difference, we use the 75% ratio for all countries without data.

This ratio is a crude proxy for gender income differentials in paid work. Some countries have relatively low ratios of female to male wages because, for example, unlike many other countries, they collect data on part-

time work. The wage data for gender comparisons need to be considerably improved, but failing to include this variable in our analysis would lead to women's estimated earned income share being grossly overstated.

We consider our estimates of disparity in earned income between women and men to be conservative. The 75% wage ratio is likely to be an underestimate of actual income differentials between women and men, because it does not take into account, for example, income disparities based on non-labour resources, such as land or physical capital. Since men own most property, the disparity between women and men in non-labour income would tend to be greater than that in labour income.

The second step in calculating gender disparity in income uses available information on the percentage share of men and women in the economically active population aged 15 and above. Because of the lack of data on employment by gender, this procedure makes the simplifying assumption that female employment and male employment are proportional to female and male participation in the labour force. From the ratio of female to male wages we can derive two ratios: the ratio of the female wage to the overall average wage and the ratio of the male wage to the overall average wage.

These two ratios are derived from the following definition of the total wage bill ( $WL$ ):

$$WL = W_f L_f + W_m L_m,$$

where  $W$  is the average wage and  $L$  the total labour force, and the  $f$  subscript denotes female, the  $m$  subscript male.

Dividing this equation through by  $W_m L_m$ , we can solve for  $W/W_m$ :

$$W/W_m = (W_f/W_m)(L_f/L) + (W_m/W_m)(L_m/L).$$

We take the reciprocal of this result to solve for  $W_m/W$ . We can now also solve for  $W_f/W$ :

$$W_f/W = (W_f/W_m)/(W/W_m).$$

A rough estimate of the female share of income can then be derived by multiplying the ratio of the average female wage to the overall average wage by the female share of the economically active population. The male share of income can be calculated in the same way or by subtracting the female share from 1.

The third step in estimating gender disparities in income is to calculate the female and male shares of income as proportions of the female and male shares of the population. The average adjusted real GDP per capita is then discounted on the basis of the gender disparity in proportional income shares. In using adjusted real GDP per capita, we are already taking into account the diminishing marginal importance for human development of additional income above the average world per capita income. Up to this point, the methodology is the same as that used for the human development index.

The discounting for gender disparity is calculated as follows. We form two proportional income shares by dividing the female and male shares of income by the

female and male shares of the population. If there were gender equality, each proportional share would be equal to 1. We then apply the GESI methodology of  $(1 - \epsilon)$  averaging—with  $\epsilon$  equal to 2 in this case—to the two proportional income shares to derive the “equally distributed proportional income share”. The more gender inequality there is, the lower this ratio will be relative to 1. We then multiply the average real adjusted GDP per capita by the equally distributed proportional income share to derive a measure of GDP per capita that, in effect, is now discounted for gender inequality. If there were no gender inequality, the ratio would be equal to 1 and GDP per capita would remain the same. As in the HDI, real adjusted GDP per capita is the proxy for access to the basic resources necessary for human development. Finally, we index the discounted value of GDP per capita with respect to the maximum of \$5,448 and the minimum of \$100. These values are the same as those used in the HDI.

The last step in calculating the GDI is to add the index for income that we have just derived to the indices for life expectancy and educational attainment and divide by 3. That gives each index a one-third weight.

#### Note on income

Income can be seen in two ways: (1) as a resource for the use of the family to meet its needs and wants, and (2) as earnings by individuals that may or may not be aggregated for use by a united family. The “use” measure is hard to disaggregate because the family’s resources are shared in ways that we cannot directly observe. But the “earnings” measures are, in principle, separable because different members of the family would tend to have separately earned incomes. Although we have tried to estimate these earnings figures for women and men, it must be noted that they need not reflect the use that women and men can make of these resources because the resources are pooled for joint use by the family.

The way that income and other resources are shared among members of a household—the intrahousehold distribution of resources—is an important factor in determining the well-being of women. This distribution varies from society to society because it is an important part of the division of labour and responsibilities in society between women and men.

These sociological patterns have been documented in many studies, but because the information is not always quantified or complete, reliable data are not available on women’s access to resources for consumption. The income variable in the measures highlighted in this Report (the GDI and the GEM) therefore does not reflect women’s access to income for consumption or for other uses. Instead, it indicates their capacity to *earn* income, which is a reflection of their economic independence.

#### Note on aggregation

The procedure used for inequality correction—in the GDI and the GEM—involves estimating inequality-corrected achievements in terms of different focus variables, and then putting them together in one aggregate measure of inequality-adjusted performance. In some respects, this procedure is a little deceptive, because the different variables might, in principle, work in somewhat

opposite directions, moderating the influence of one another on the inequality among individuals. For example, if person A has a higher achievement in longevity but person B does better in education, it could be thought that these inequalities must counteract each other to some extent, so that A and B would be less unequal in a weighted aggregate of achievements than in each of the variables. And this case would differ from one in which one of the individuals is better off in both variables. In the procedure used here, we cannot discriminate between these two types of cases, since the aggregation is done by first using specific variables and then putting them together in an index of overall achievement.

This defect is inescapable at the individual level, however, given the data availability. There is no obvious way of relating individual identities in the distribution of one variable with those in the distribution of another. There is thus no serious alternative to the kind of procedure we have used. But this is not an important limitation in this context, in part because deprivations often go together and reinforce—rather than counteract—each other. For example, an educationally deprived person often is also the one with shorter longevity, as we know from statistical studies of development characteristics.

More important, it should be borne in mind that the adjustment for gender equity is being done here at a high level of aggregation, dealing with the mean positions of women and men. At this aggregated level, the inequalities almost always go together, with women in a more deprived position, on average, than men. The exceptions come in a handful of countries—such as the Nordic countries—where in one variable, life expectancy, men seem to have fallen behind women, even after the standard differences are corrected for (with five extra years expected in female life expectancy). In such cases, the inequality in life expectancy may go in a direction opposite to the inequality in education or income earning. If note were to be taken of this connection, these countries would be placed higher in overall achievement, because the inequality adjustments would have counteracted one another to some extent. But because these countries are in any case near or at the top of the international “league tables”, the effect of this correction would be only to reinforce that positional lead.

#### Note on the GDI over time and comparing the GDI and the HDI

In calculating the GDI from 1970 to 1992 for 79 countries, we used a minimum of \$0 for the income variable and, for 1970, an average ratio of female to male wages of 71% for countries that did not provide such data. The 71% ratio was the average for countries that reported wages by gender.

The GDI for 1992 is calculated directly from the values of female and male income, educational attainment and life expectancy. The HDI for 1992 is calculated directly from the average value of each indicator. If GDI values were estimated on the basis of  $\epsilon = 0$ , the GDI and the HDI should be equal, but minor discrepancies can arise because the female and male population weights used for the national average do not always correspond to the population weights for the female and male values that are reported separately.

For life expectancy, the GDI uses a minimum of 27.5 years for women and 22.5 years for men. That is done to maintain consistency with the HDI, which uses a minimum of 25 years for the population as a whole. In the future, we will re-examine this minimum and the five-year differential between women and men.

### Illustration of the GDI methodology

We choose Paraguay to illustrate the methodology of the gender-related development index. The values for the variables used in our calculations are as follows:

#### Life expectancy

Females 71.9 years  
Males 68.1 years

#### Adult literacy

Females 89.50%  
Males 92.91%

#### Primary, secondary and tertiary enrolment

Females 58.0%  
Males 59.3%

#### STEP ONE

##### Computing indices for life expectancy and education

#### Life expectancy

Females  $(71.9 - 27.5)/60 = 0.740$   
Males  $(68.1 - 22.5)/60 = 0.760$

#### Adult literacy

Females  $(89.50 - 0)/(100 - 0) = 0.895$   
Males  $(92.91 - 0)/(100 - 0) = 0.929$

#### Primary, secondary and tertiary enrolment

Females  $(58.0 - 0)/(100 - 0) = 0.580$   
Males  $(59.3 - 0)/(100 - 0) = 0.593$

#### Educational attainment

Females  $1/3(0.580) + 2/3(0.895) = 0.790$   
Males  $1/3(0.593) + 2/3(0.929) = 0.817$

#### STEP TWO

##### Computing proportional income shares

#### Percentage share of the economically active population

Females 20.16  
Males 79.84

#### Percentage share of the total population

Females 0.493  
Males 0.507

Ratio of female non-agricultural wages to male non-agricultural wages: 75.97%

Adjusted real GDP per capita: PPP\$3,390

#### Ratio of the female wage to the average wage ( $W$ ) and the male wage to the average wage ( $W$ )

$W = 0.2016(0.7597) + 0.7984(1) = 0.9516$

Female wage to average wage:  $0.7597/0.9516 = 0.7983$

Male wage to average wage:  $1.0000/0.9516 = 1.0509$

#### 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  $0.7983 \times 0.2016 = 0.1609$   
Males  $1.0509 \times 0.7984 = 0.8391$

#### Female and male proportional income shares

Females  $0.1609/0.493 = 0.3264$   
Males  $0.8391/0.507 = 1.6550$

#### STEP THREE

##### Applying the GESI formula

Note: We assume that  $\epsilon$ , the parameter of inequality aversion, equals 2.

#### The equally distributed income index

$[0.493(0.3264)^{1-\epsilon} + 0.507(1.6550)^{1-\epsilon}]^{1/(1-\epsilon)} = 0.550$   
 $0.550 \times 3,390 = 1,865$   
 $(1,865 - 100)/(5,448 - 100) = 0.330$

#### The equally distributed index of educational attainment

$[0.497(0.790)^{1-\epsilon} + 0.503(0.817)^{1-\epsilon}]^{1/(1-\epsilon)} = 0.804$

#### The equally distributed index of life expectancy

$[0.497(0.740)^{1-\epsilon} + 0.503(0.760)^{1-\epsilon}]^{1/(1-\epsilon)} = 0.750$

#### STEP FOUR

##### Computing the gender-related development index

$1/3(0.330 + 0.804 + 0.750) = 0.628$

### The gender empowerment measure

The gender empowerment measure (GEM) uses variables constructed explicitly to measure the relative empowerment of men and women in political and economic spheres of activity.

The first cluster of variables is chosen to reflect economic participation and decision-making power. It includes women's and men's percentage shares of administrative and managerial positions and percentage shares of professional and technical jobs. These are broad, loosely defined occupational categories. Because the relevant population for each is different, we calculate separate indices for each and then add them together.

For each occupational category, we use the population-weighted  $(1 - \epsilon)$  averaging of the GESI methodology to derive an equally distributed equivalent percentage (EDEP) for both sexes taken together. To be consistent with the methodology for the GDI, we set the value of  $\epsilon$ —the parameter that registers the degree of aversion to inequality—equal to 2. Given society's aversion to inequality, the EDEP would be as socially valued as the actual unequal percentages of men and women. If there were perfect equality between women and men, the EDEP would equal 50%. The greater the disparity between female and male shares, the lower the EDEP will be relative to 50%. Thus, for indexing purposes, 50% is our maximum value and 0% our minimum value. After indexing, we add the two categories of occupations together, giving equal weight to each.

The second variable is chosen to reflect political participation and decision-making power. It is women's and men's percentage shares of parliamentary seats. As before, we do the  $(1 - \epsilon)$  averaging of these two shares to derive the EDEP, and then index it. The maximum value is 50% and the minimum value is 0%, just as for economic

participation and decision-making power. (In fact, any zeroes are set equal to a small fraction so that the computations can be carried out.)

The variable we choose to reflect power over economic resources is unadjusted real GDP per capita (PPP\$). Unlike adjusted real GDP per capita, which is used in both the HDI and the GDI and ranges from \$100 to \$5,448, unadjusted real GDP per capita ranges from \$100 to \$40,000. We follow the same procedure as in the GDI of calculating the proportional income shares of women and men to derive an equally distributed proportional income share through  $(1-\epsilon)$  averaging, and then discounting the average unadjusted real GDP per capita of each country by the degree to which this latter ratio is less than 1. If there were equality between women and men, this ratio would be 1 and average unadjusted income would not be discounted. To index discounted unadjusted income, we use \$100 as the minimum and \$40,000 as the maximum.

As the final step, we simply add the indices for each of our three clusters of variables and divide by 3. This gives us the overall GEM.

Several other indicators could have been chosen to reflect empowerment in political and economic spheres of activity. But many good indicators are not provided by enough countries to allow meaningful international comparisons. More such indicators can be added to the estimate of the GEM in future as countries make them available.

### Illustration of the GEM methodology

The steps to construct the GEM are illustrated using Mexico as an example. Statistics for Mexico show that the greatest disparity between women and men is in the political arena and the least is in skilled and economic leadership positions.

In applying the GESI methodology to GEM variables, we set  $\epsilon$  equal to 2.

#### STEP ONE

*Calculating indices for parliamentary representation and administrative, managerial, professional and technical positions*

*Percentage share of parliamentary representation*

Females 7.27  
Males 92.73

*Percentage share of administrative and managerial positions*

Females 19.37  
Males 80.63

*Percentage share of professional and technical positions*

Females 43.24  
Males 56.76

*Percentage share of total population*

Females 0.501  
Males 0.499

*Calculating the equally distributed equivalent percentage (EDEP)*

*Calculating the EDEP for parliamentary representation*  
 $[0.499(92.73)^{1-\epsilon} + 0.501(7.27)^{1-\epsilon}]^{1/(1-\epsilon)} = 13.46$

*Calculating the EDEP for administrative and managerial positions*

$$[0.499(80.63)^{1-\epsilon} + 0.501(19.37)^{1-\epsilon}]^{1/(1-\epsilon)} = 31.20$$

*Calculating the EDEP for professional and technical positions*

$$[0.499(56.76)^{1-\epsilon} + 0.501(43.24)^{1-\epsilon}]^{1/(1-\epsilon)} = 49.08$$

*Indexing the variables*

*Parliamentary representation*

$$13.46/50 = 0.2692$$

*Administrative and managerial*

$$31.20/50 = 0.6240$$

*Professional and technical*

$$49.08/50 = 0.9816$$

*Computing the combined index for economic participation and decision-making*

$$(0.6240 + 0.9816)/2 = 0.8028$$

#### STEP TWO

*Calculating the index for share of earned income*

*Percentage share of the economically active population*

Females 27.63  
Males 72.37

*Ratio of female non-agricultural wages to male non-agricultural wages: 75%*

*Unadjusted real GDP per capita: PPP\$7,300*

*Ratio of the female wage to the average wage (W) and the male wage to the average wage (W)*

$$W = 0.2763(0.75) + 0.7237(1) = 0.9309$$

$$\text{Female wage to average wage: } 0.75/0.9309 = 0.8057$$

$$\text{Male wage to average wage: } 1.00/0.9309 = 1.0742$$

*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.*

$$\text{Females } 0.8057 \times 0.2763 = 0.2226$$

$$\text{Males } 1.0742 \times 0.7237 = 0.7774$$

*Female and male proportional income shares*

$$\text{Females } 0.2226/0.501 = 0.4443$$

$$\text{Males } 0.7774/0.499 = 1.5579$$

*Calculating the EDEP of the female and male proportional income shares*

$$[0.499(1.5579)^{1-\epsilon} + 0.501(0.4443)^{1-\epsilon}]^{1/(1-\epsilon)} = 0.6910$$

*Computing the income index*

$$0.6910 \times 7,300 = 5,044$$

$$(5,044 - 100)/(40,000 - 100) = 0.1239$$

#### STEP THREE

*Computing the gender empowerment measure*

$$(0.2692 + 0.8028 + 0.1239)/3 = 0.399$$

### 3. 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.

Since *Human Development Report 1994*, two changes have been made in the construction of the HDI relating to variables and minimum and maximum values. First, the variable of mean years of schooling has been replaced by the combined primary, secondary and tertiary enrolment ratios, mainly because the formula for calculating mean years of schooling is complex and has enormous data requirements. Data on mean years of schooling are not provided by any UN agency or international organization. As a result, estimates must sometimes be used, which are not always acceptable. The combined enrolment ratio overcomes both these problems. It shows the stock of literacy quite easily for those under age 24. And it is based on the work of UNESCO.

Second, the minimum value of income has been revised from PPP\$200 to PPP\$100. This revision was made because in the construction of the gender-related development index (GDI) for different countries, the minimum observed value of female income of PPP\$100 is used as the lower goal post. It is necessary to use this fixed minimum for construction of the overall HDI to maintain consistency between the construction of the HDI and that of the GDI and to ensure comparability between the two indices. For the HDI, the revision is only marginal, and it had little effect on HDI values.

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. As explained in chapter 1, the world average income of PPP\$5,120 in 1992 is taken as the threshold level ( $y^*$ ) and any income above this level is discounted using the following formula for the utility of income:

$$\begin{aligned} W(y) &= y^* \text{ for } 0 < y < y^* \\ &= y^* + 2[(y - y^*)^{1/2}] \text{ for } y^* \leq y \leq 2y^* \\ &= y^* + 2(y^*/2)^{1/2} + 3[(y - 2y^*)^{1/3}] \text{ for } 2y^* \leq y \leq 3y^* \end{aligned}$$

To calculate the discounted value of the maximum income of PPP\$40,000, the following formula is used:

$$W(y) = y^* + 2(y^*/2)^{1/2} + 3(y^*/3)^{1/3} + 4(y^*/4)^{1/4} + 5(y^*/5)^{1/5} + 6(y^*/6)^{1/6} + 7(y^*/7)^{1/7} + 8[(40,000 - 7y^*)^{1/8}]$$

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\$5,448.

The actual 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	77.6	93.8	78	8,310
Gabon	53.5	58.9	47	3,913

#### Life expectancy index

$$\text{Greece} = \frac{77.6 - 25}{85 - 25} = \frac{52.6}{60} = 0.876$$

$$\text{Gabon} = \frac{53.5 - 25}{85 - 25} = \frac{28.5}{60} = 0.475$$

#### Adult literacy index

$$\text{Greece} = \frac{93.8 - 0}{100 - 0} = \frac{93.8}{100} = 0.938$$

$$\text{Gabon} = \frac{58.9 - 0}{100 - 0} = \frac{58.9}{100} = 0.589$$

#### 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

$$\text{Greece} = [2(0.938) + 1(0.780)] \div 3 = 0.885$$

$$\text{Gabon} = [2(0.589) + 1(0.470)] \div 3 = 0.549$$

#### Adjusted real GDP per capita (PPP\$) index

Greece's real GDP per capita, at PPP\$8,310, is above—but less than twice—the threshold. Thus, the adjusted

The method of income discounting used in technical note 3 is the same as that used in *Human Development Report 1992*. It draws on the work of Meghnad Desai.



real GDP per capita for Greece would be PPP\$5,233 because  $5,233 = [5,120 + 2(8,310 - 5,120)/2]$ .

Gabon's real GDP per capita income, at PPP\$3,913, is less than the threshold, so it needs no adjustment.

The adjusted real GDP per capita (PPP\$) index for Greece and Gabon would be:

$$\text{Greece} = \frac{5,233 - 100}{5,448 - 100} = \frac{5,133}{5,348} = 0.960$$

$$\text{Gabon} = \frac{3,913 - 100}{5,449 - 100} = \frac{3,813}{5,348} = 0.713$$

### 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 of both Greece and Gabon are calculated using this formula:

Country	Life expectancy index	Educational attainment index	Adjusted real GDP per capita (PPP\$) index	$\Sigma$	HDI
Greece	0.876	0.885	0.960	2.721	0.907
Gabon	0.475	0.549	0.713	1.737	0.579

# References

## Background papers for Human Development Report 1995

- Alarçon-Gonzalez, Diana. 1994. "The Welfare Effects of Structural Adjustment in Mexico and Its Differential Impact by Gender."
- Anand, Sudhir, and Amartya Sen. 1995. "Gender Inequality in Human Development: Theories and Measurement."
- Basu, Amrita. 1995. "Women's Movements in Global Perspective."
- Bunch, Charlotte, Roxanna Carrillo and Rima Shore. 1994. "Gender-Based Violence: A Critical Development Issue."
- Buvinic, Mayra. 1995. "A Retrospective Look at Women's Issues in Development Cooperation: The Past as Prologue."
- Buvinic, Mayra, Rekha Mehra and Anelies Drost-Maasry. 1994. "Gender in Perspective: Trends in Social and Economic Indicators." International Centre for Research on Women.
- CAWTAR (Centre of Arab Women for Training and Research). 1994. "Arab Women: Profile, Challenges and Prospects."
- Chen, Martha Alter. 1994. "Ties that Bind: Single Women and Family Structures."
- Corbett, Jane, and Frances Stewart. 1995. "Putting Gender into Cost Benefit Analysis."
- Ghosh, Jayati. 1994. "Trends in Female Employment in Developing Countries: Emerging Issues."
- Gindling, T.H. 1994. "The Effect of Structural Adjustment on the Structure of Employment and Pay in Costa Rica: The Differential Impact by Gender."
- Githinji, Mwangi wa. 1995. "Time Allocation and Gender in Kenya."
- Goldschmidt-Clermont, Luisella, and Elisabetta Pagnossin Aligisakis. 1995. "Measures of Unrecorded Economic Activities in Fourteen Countries."
- Harvey, Andrew S. 1995. "Market and Non-Market Productive Activity in Less Developed and Developing Countries: Lessons from Time Use."
- Picchio, Antonella. 1994. "The Analytical and Political Visibility of the Work of Social Reproduction."
- Randel, Judith, and Tony German. 1994. "Gender Aspects of Development Cooperation."
- Schuler, Margaret. 1994. "Gender Aspects of Legal Discrimination and New Legal Structures." Institute for Women, Law and Development.
- Smith, Dan. 1995. "Women, War and Peace."
- Staudt, Kathleen. 1994. "Political Representation: Engendering Democracy."
- Urdaneta-Ferrán, Lourdes. 1994a. "Measuring Women's Economic Contribution in the Subsistence Sector."
- . 1994b. "Methodology of Estimates of Women's Contribution to Human Development."
- . 1994c. "Venezuelan Women in Human Development."

## Bibliographic note

**Chapter 1** draws on the following: Adamu 1993, ILO 1993a and 1994a, Institute of Strategic and International Studies 1993, International Foundation for Electoral Systems 1994, Makgetla 1993, Panos 1994, Reid 1995, Sen 1990b, Spindola 1993, UNDP 1993c and 1994b, UNFPA 1991, UNHCR 1993, USCR 1994, World Bank 1991, 1994d and 1994e and WRI 1994.

References for the boxes are as follows: boxes 1.1 and 1.2 and annex boxes A1.1–A1.5, Brown, Kanye and Ayres 1993, FAO 1992, International Foundation for Electoral Systems 1994, Panos 1994, Reid 1995, Sen 1990b, UN 1992f, UNDP 1993a and 1994a, UNFPA 1991, UNHCR 1993, UNICEF 1993, USCR 1994, World Bank 1994d and 1994e and WRI 1994.

**Chapter 2** draws on the following: Bunch, Carrillo

and Shore 1994, Buvinic, Mehra and Drost-Maasry 1994, Carrillo 1992, Dasgupta 1994, Ghosh 1994, ILO 1994a, IPU 1991, 1992 and 1994, Kabeer 1991, Nelson and Chowdhury 1994, Rajuladevi 1992, Schuler 1994, Sen 1990b, Staudt 1984 and 1994, UN 1990, 1991c and 1991e, UNCSDHA 1992, UNESCO 1993a and 1994b and World Bank 1993a and 1994a.

**Chapter 3** draws on the following: Alarçon-Gonzalez 1994, Anand and Sen 1995, Central African Republic 1995, Gindling 1994, ILO 1993a and 1994a, IPU 1994, Psacharopoulos and Tzannatos 1992, Summers and Heston 1991, UN 1991e and UNESCO 1994b.

**Chapter 4** draws on the following: Githinji 1995, Goldschmidt-Clermont and Aligisakis 1995, Harvey

1995 and Urdaneta-Ferrán 1994a, 1994b and 1994c.

**Chapter 5** draws on the following: Agarwal 1994, Ashworth 1992, Basu 1995 and forthcoming, Boserup 1970, Bruce 1989, Bunch, Carrillo and Shore 1994, Buvinic 1995, Chad 1994, Chen 1994, Collas-Monsod 1994, Congo 1994, Cook 1990, Cornwell and Kellough 1994, Davidson and Croke 1978, Gustafsson 1992, India 1994, Indonesia 1994, Leonard 1989, May 1994, OECD 1994b, Psacharopoulos 1994, Randel and German 1994, Republic of Korea 1994, Schuler 1994, Slovenia 1994, Smith 1995, Staudt 1994, Summers 1992, UN 1948, 1994b, 1994c, 1994e, 1994f and 1995a, Women's World Banking 1994a and 1994b, World Bank 1993a and 1994a and WRI 1994.

**Chapter 6** draws on the following: Akder 1990, Anand and Sen 1994a and 1994b, Barro 1991, Barro and Lee 1994, Barro and Sala-i-Martin 1994, Behrman 1990,

Boer and Koekkoek 1993, Botswana, UNDP and UNICEF 1993, Cohen 1989 and 1990, Dalal 1991, Das 1992, Dasgupta and Weale 1992, Desai 1991 and 1994, Egypt 1994, Fundación para la educación superior y el desarrollo 1992, Grossman and Helpman 1994, Hamilton 1994, Hopkins 1991, Kanbur 1990, Kelley 1991, Kurz and Salvadori 1994, Lind 1991, McGillivray 1991, McGillivray and White 1992, Mintcheva-Ivanova 1994 and 1995, Mintcheva-Ivanova, Arcelus and Srinivasan 1994a and 1994b, Murray 1991, Ogwang 1994, Pack 1994, Pyatt 1992, Rao 1991, Romer 1986, 1990 and 1994, Singer 1994, Smith 1992, Srinivasan 1994, Streeten 1992 and 1994, Tatliidi 1992, Trabold-Nubler 1991 and 1992, UNDP 1991a, 1992a, 1992b, 1992d, 1993a, 1993b, 1994a, 1994c, 1994d and 1994e and van der Meer 1993.

## References

- Adamu, Sam O. 1993. "Disaggregated Human Development Index within Nigeria." Background paper for *Human Development Report 1994*. UNDP, New York.
- Agarwal, Bina. 1994. "Gender and Command over Property: A Critical Gap in Economic Analysis and Policy in South Asia." *World Development* 22 (10): 1455-78.
- Akder, Halis. 1990. "Turkey: Country Profile—Human Development Indices for All Turkish Provinces." Middle East Technical University, Department of Economics, and UNDP, Ankara.
- . 1994. "A Means to Closing Gaps: Disaggregated Human Development Index." Human Development Report Office Occasional Paper 18. UNDP, New York.
- Anand, Sudhir. 1977. "Aspects of Poverty in Malaysia." *Review of Income and Wealth*, series 23, no. 1: 1-16.
- . 1983. *Inequality and Poverty in Malaysia: Measurement and Decomposition*. New York: Oxford University Press.
- . 1993. "Inequality Between and Within Nations." Harvard University, Center for Population and Development Studies, Cambridge, Mass.
- Anand, Sudhir, and Amartya Sen. 1994a. "Human Development Index: Methodology and Measurement." Human Development Report Office Occasional Paper 12. UNDP, New York.
- . 1994b. "Sustainable Human Development: Concepts and Priorities." Human Development Report Office Occasional Paper 8. UNDP, New York.
- . Forthcoming. "Gender Inequality in Human Development: Theories and Measurement." Human Development Report Office Occasional Paper 19. UNDP, New York.
- ARF (Addiction Research Foundation). 1994. *Statistical Information, International Profile 1994*. Ontario, Canada.
- Arrow, Kenneth J. 1965. *Aspects of the Theory of Risk-Bearing*. Yrjö Jahnsson Lectures. Helsinki: Yrjö Jahnssonin Säätiö.
- Ashworth, Georgina. 1992. "Women and Human Rights." Background paper for Development Assistance Committee (DAC) Expert Group on Women in Development. OECD, Paris.
- Atkinson, Anthony B. 1970. "On the Measurement of Inequality." *Journal of Economic Theory* 2 (3): 244-63.
- . 1973. "How Progressive Should Income-Tax Be?" In M. Parkin, ed., *Essays on Modern Economics*. Longman. Reprinted in E.S. Phelps, ed., *Economic Justice*. Harmondsworth: Penguin Education.
- Barro, Robert J. 1991. "Economic Growth in a Cross-section of Countries." *Quarterly Journal of Economics* (May): 407-43.
- Barro, Robert J., and Jong-Wha Lee. 1994. "Losers and Winners in Economic Growth." In Michael Bruno and Boris Pleskovic, eds., *Proceedings of the World Bank Annual Conference on Development Economics 1993*. Washington, D.C.: World Bank.
- Barro, Robert J., and Xavier Sala-i-Martin. 1994. *Economic Growth*. New York: McGraw-Hill.
- Basu, Amrita, ed. Forthcoming. *The Challenge of Local Feminisms: Women's Movements in Global Perspective*. Boulder, Colo.: Westview Press for the Ford Foundation.
- Behrman, Jere R. 1990. *Human Resource—Led Development? Review of Issues and Evidence*. New Delhi: International Labour Office—Asian Regional Team for Employment Promotion (ILO-ARTEP).
- Blackorby, C., and D. Donaldson. 1978. "Measures of Relative Equality and Their Meaning in Terms of Social Welfare." *Journal of Economic Theory* 18.
- . 1984. "Ethically Significant Ordinal Indexes of Relative Inequality." *Advances in Econometrics* 3.
- Boer, Leen, and Ad Koekkoek. 1993. "Human Development Report: Fad or Fixture." *Development Review Policy*, no. 11: 427-38.
- Boserup, Ester. 1970. *Women's Role in Economic Development*. London: George Allen and Unwin.
- Botswana, Ministry of Finance and Planning, UNDP and UNICEF. 1993. *Planning for People: A Strategy for Accelerated Human Development in Botswana*. Gaborone: Ministry of Finance and Planning.

- Brown, Lester R., Hal Kanye and Ed Ayres. 1993. *Vital Signs 1993*. New York: Norton.
- Bruce, Judith. 1989. "Homes Divided." *World Development* 17 (7): 979-91.
- Carrillo, Roxanna. 1992. *Battered Dreams: Violence against Women as an Obstacle to Development*. New York: UNIFEM.
- Central African Republic, Government of. 1995. *Enquête prioritaire sur les conditions de vie des ménages 1992*. Planning Ministry. Bangui.
- Chad, Government of. 1994. "National Report for the Fourth World Conference on Women." Ministry of the Status of Women. N'Djamena.
- China, Government of the People's Republic of. 1994. "The Report of the People's Republic of China on the Implementation of the Nairobi Forward-Looking Strategies for the Advancement of Women." Beijing.
- Cohen, C. Desmond. 1989. "Trends in Human Development in the United Kingdom." University of Sussex School of Social Sciences, Brighton, United Kingdom.
- . 1990. "Human Development in Industrial Countries: The UK and the USA." Study prepared for UNDP, New York.
- Collas-Monsod, Solita. 1994. "Engendering Development." The Rafael M. Salas Memorial Lecture, 25 November, Quezon City, Philippines. Mimeo.
- Congo, Government of. 1994. "National Report on the Situation of Congolese Women: Fourth World Conference on Women." Ministry for the Integration of Women in Development. Brazzaville.
- Cook, Rebecca, J. 1990. "International Human Rights Law Concerning Women: Case Notes and Comments." *Vanderbilt Journal of Transnational Law* 23: 779-818.
- Cornwell, Christopher, and J. Edward Kellough. 1994. "Women and Minorities in Federal Government Agencies: Examining New Evidence from Panel Data." *Public Administration Review* 54 (3): 265-70.
- CREDEF (Centre de recherches, de documentation et d'information sur la femme). 1994. "Femmes de Tunisie: Situations et perspectives." Ministry of Women and Family Affairs. Tunis.
- Cuba, Government of. 1994. "National Report for the Fourth World Conference on Women." Havana.
- Dalal, K.L. 1991. *Human Development: An Indian Perspective*. New Delhi: Vikas for UNDP.
- Das, Tarun Kanti. 1992. "UNDP Human Development Index: Some Methodological Issues and Alternative Measures." New Delhi. Mimeo.
- Dasgupta, Partha. 1994. "Population Growth, Poverty, and the Environmental Resource-Base." Cambridge University, Cambridge.
- Dasgupta, Partha, and Martin Weale. 1992. "On Measuring the Quality of Life." *World Development* 20 (1): 119-31.
- Davidson, Nicol, and Margaret Croke. 1978. *The United Nations and Decision-Making: The Role of Women*. New York: United Nations Institute for Training and Research (UNITAR).
- Desai, Meghnad. 1991. "Human Development: Concept and Measurement." *European Economic Review* 35: 350-57.
- . 1994. "Greening of the HDI?" Background paper for *Human Development Report 1994*. UNDP, New York.
- Diamond, Peter A., and Michael Rothschild, eds. 1989. *Uncertainty in Economics: Readings and Exercises*. Revised ed. New York: Academic Press.
- Economist*. 1991. "An Unfinished Chinese Revolution." 16 March, p. 34.
- Egypt, Government of. 1994. *Egypt: Human Development Report 1994*. Ministry of Planning, Institute of National Planning. Cairo.
- End Child Prostitution in Asian Tourism. 1992. "Child Prostitution in Asia." Bangkok.
- FAO (Food and Agriculture Organization of the United Nations). 1992. *Food and Nutrition: Creating a Well-Fed World*. Rome.
- . 1994a. FAOSTAT Version 3.0. Diskette. Rome.
- . 1994b. *1994 Country Tables: Basic Data on the Agricultural Sector*. Economic and Social Policy Department. Rome.
- FLACSO (Latin American Faculty of Social Science). 1994. *Latin American Women in Numbers*. Santiago.
- Folbre, Nancy. 1991. "The Unproductive Housewife: Her Evolution in Nineteenth Century Economic Thought." *Signs: Journal of Women in Culture and Society* 16 (3): 463-84.
- . 1994. *Who Pays for the Kids? Gender and the Structures of Constraint*. London and New York: Routledge.
- Foster, James. 1984. "On Economic Poverty: A Survey of Aggregate Measures." *Advances in Econometrics* 3.
- . 1985. "Inequality Measurement." In H.P. Young, ed., *Fair Allocation*. Providence, R.I.: American Mathematical Society.
- Fundación para la educación superior y el desarrollo. 1992. *Un plan de desarrollo humano de largo plazo para Colombia*. Bogotá.
- Goldschmidt-Clermont, Luisella. 1982. *Unpaid Work in the Household*. Geneva: International Labour Office.
- . 1993. "Monetary Valuation of Unpaid Work." Paper presented at the International Conference on the Measurement and Valuation of Unpaid Work, 28-30 April, Statistics Canada, Ottawa.
- Grossman, Gene M., and Elhanan Helpman. 1994. "Endogenous Innovation in the Theory of Growth." *Journal of Economic Perspectives* 8 (1): 23-44.
- Gustafsson, Siv. 1992. "Separate Taxation and Married Women's Labour Supply: A Comparison of West Germany and Sweden." *Journal of Population Economics* 1 (5): 61-85.
- Hamilton, Kirk. 1994. "Greening the Human Development Index." Statistics Canada, Ottawa.
- Hammond, Peter J. 1975. "A Note on Extreme Inequality Aversion." *Journal of Economic Theory* 11: 465-67.
- Haq, Mahbub ul. Forthcoming. *Reflections on Human Development*. New York: Oxford University Press.
- Haq, Mahbub ul, Richard Jolly, Paul Streeten and Khadija Haq, eds. 1995. *The United Nations and the Bretton Woods Institutions: New Challenges for the Twenty-First Century*. London: Macmillan.
- Hardy, G.H., J.E. Littlewood and G. Pólya. 1952. *Inequalities*. 2d ed. Cambridge: Cambridge University Press.

- Holden, Constance. 1987. "Why Do Women Live Longer than Men?" *Science* 238: 158-60.
- Hopkins, Michael. 1991. "Human Development Revisited: A New UNDP Report." *World Development* 19 (10): 1469-73.
- IISS (International Institute for Strategic Studies). 1993. *The Military Balance 1993-94*. London: Brassey's.
- ILO (International Labour Office). 1992. *World Labour Report 1992*. Geneva.
- . 1993a. *World Labour Report 1993*. Geneva.
- . 1993b. *Yearbook of Labour Statistics 1993*. 52d issue. Geneva.
- . 1994a. *World Labour Report 1994*. Geneva.
- . 1994b. *Yearbook of Labour Statistics 1994*. 53d issue. Geneva.
- India, Government of. 1994. "India Country Paper for the Fourth World Conference on Women." Department of Women and Child Development. New Delhi.
- Indonesia, Government of. 1994. "Indonesia Country Report: Review of the Implementation of the Nairobi Forward-Looking Strategies for the Advancement of Women 1985-1992." Jakarta.
- Institute of Strategic and International Studies. 1993. "Disaggregated Human Development Index in Malaysia." Background paper for *Human Development Report 1994*. UNDP, New York.
- International Colloquium of Mayors for Social Development. 1994. Correspondence on council members and mayors from various local authorities.
- International Foundation for Electoral Systems. 1994. *Elections Today*. Various issues. Washington, D.C.
- IPU (Inter-Parliamentary Union). 1991. "Distribution of Seats between Men and Women in National Parliaments: Statistical Data from 1945 to 30 June 1991." Reports and Documents Series 18. Geneva.
- . 1992. "Women and Political Power." Reports and Documents Series 19. Geneva.
- . 1994. "Distribution of Seats between Men and Women in the 178 National Parliaments Existing as at 30 June 1994." Reports and Documents Series 18. Add.2-rev.2. Geneva.
- Iwao, Sumiko. 1993. *The Japanese Woman: Traditional Image and Changing Reality*. New York: Free Press.
- Japan, Office of the Prime Minister, Office for Gender Equality. 1995. *Women in Japan Today*. Tokyo.
- Kabeer, Naila. 1991. *Gender Production and Wellbeing: Rethinking the Household Economy*. IDS Discussion Paper 288. Sussex, United Kingdom: Institute of Development Studies.
- Kanbur, Ravi. 1990. "Poverty and Development: *Human Development Report* and the *World Development Report 1990*." Pensamiento Iberoamericano. University of Warwick, Department of Economics, Warwick, United Kingdom.
- Kelley, Allen C. 1991. "The Human Development Index: Handle with Care." *Population and Development Review* 17 (2): 315-24.
- Kolm, Serge C. 1969. "The Optimal Production of Social Justice." In J. Margolis and H. Guitton, eds., *Public Economics*. London: Macmillan.
- Kurz, Heinz, and Neri Salvadori. 1994. "What Is New in the 'New' Theories of Economic Growth? Or: Old Wine in New Goatskins." The New School, Department of Economics, New York.
- Kynch, Jocelyn. 1985. "How Many Women Are Enough? Sex Ratios and the Right to Life." In *Third World Affairs 1985*. London: Third World Foundation.
- Lavelly, William, Xiao Zhenyu, Li Bohua and Ronald Freedman. 1990. "The Rise in Female Education in China: National and Regional Patterns." *The China Quarterly*, no. 121: 61-93.
- Leonard, Jonathan. 1989. "Women and Affirmative Action." *Journal of Economic Perspectives* 3 (1): 61-75.
- Lind, Niels C. 1991. "Some Thoughts on the Human Development Index." University of Waterloo, Department of Economics, Waterloo, Ontario.
- Makgetla, Neva Seidman. 1993. "South Africa: Submission on Human Development Index." Background paper for *Human Development Report 1994*. UNDP, New York.
- May, Elisabeth. 1994. "Women the Resource Managers." *Our Planet* 6 (4): 23-24.
- McGillivray, Mark. 1991. "The Human Development Index: Yet Another Redundant Composite Development Indicator." *World Development* 19 (10): 1461-68.
- McGillivray, Mark, and Howard White. 1992. "Measuring Development: The UNDP's Human Development Index." Paper presented at Economic and Social Research Council, Development Economics Study Group Annual Conference, 27-28 March, University of Leicester, Leicester, United Kingdom.
- Mintcheva-Ivanova, Ianita. 1994. "A Quantitative Measure of the Competitive Advantage of Nations." Best MBA Student Paper at the Atlantic Schools of Business Conference 1994, Halifax, Nova Scotia. University of New Brunswick, Department of Business Administration, Fredericton, New Brunswick.
- . 1995. "Human Development and World Competitiveness." Masters thesis. University of New Brunswick, Department of Business Administration, Fredericton, New Brunswick.
- Mintcheva-Ivanova, Ianita, F.J. Arcelus and G.E. Srinivasan. 1994a. "Effects of the Human Development Index's Social and Economic Components on Country Rankings." University of New Brunswick, Faculty of Administration, Fredericton, New Brunswick.
- . 1994b. "Information Validity and Axiomatic Characterization of the Human Development Index." Working Paper 94-010. University of New Brunswick, Faculty of Administration, Fredericton, New Brunswick.
- Morgan, Robin, ed. 1984. *Sisterhood is Global*. New York: Doubleday.
- Murray, Christopher. 1991. "Development Data Constraints and the Human Development Index." Paper presented at the Meeting of Experts on Social Development Indicators, 8-11 April, Rabat, Morocco.
- Nelson, Barbara J., and Najma Chowdhury. 1994. *Women and Politics Worldwide*. New Haven and London: Yale University Press.

- Norway, Government of. n.d. "Women in Politics: Equality and Empowerment." Department of Family Affairs and Child Care. Oslo.
- Nussbaum, Martha C. 1988. "Nature, Function, and Capability: Aristotle on Political Distribution." *Oxford Studies in Ancient Philosophy* (supplementary volume).
- OECD (Organisation for Economic Co-operation and Development). 1993a. *Education at a Glance*. Paris.
- . 1993b. *Efforts and Policies of the Members of the Development Assistance Committee: Development Cooperation—Development Assistance Committee Report, 1993*. Paris.
- . 1993c. *Health Systems, Facts & Trends 1960–1991*. Health Policy Studies 3. Paris.
- . 1993d. *OECD Environmental Data: Compendium 1993*. Paris.
- . 1994a. *Employment Outlook July 1994*. Paris.
- . 1994b. "Equal Opportunities Policies on the Labour Market in the 1980s." In OECD, *Women and Structural Change: New Perspectives*. Paris.
- . 1995. *Development Co-operation: Development Assistance Committee Report, 1994*. Paris.
- Ogwang, Tomson. 1994. "The Choice of Principal Variables for Computing the Human Development Index." *World Development* 22 (12): 2011–14.
- Osmani, Siddiq R. 1982. *Economic Inequality and Group Welfare*. Oxford: Clarendon.
- Pack, Howard. 1994. "Endogenous Growth Theory: Intellectual Appeal and Empirical Shortcomings." *Journal of Economic Perspectives* 8 (1): 55–72.
- Panos. 1994. *AIDS: Towards 2000*. Panos AIDS Media Briefing 1. December. London.
- Pratt, John W. 1964. "Risk Aversion in the Small and in the Large." *Econometrica* 32: 122–36.
- Psacharopoulos, George. 1994. "Returns to Investment in Education: A Global Update." *World Development* 22 (9): 1325–43.
- Psacharopoulos, George, and Zafiris Tzannatos, eds. 1992. *Case Studies on Women's Employment and Pay in Latin America*. Washington, D.C.: World Bank.
- Pyatt, Graham. 1992. "There Is Nothing Wrong with the HDI, but. . . ." University of Warwick, Department of Economics, Warwick, United Kingdom.
- Rajuladevi, A.K. 1992. "How Poor Are Women in Rural India?" *Asia-Pacific Journal of Rural Development* 11 (1): 1–34.
- Randel, Judith, and Tony German. 1993. *The Reality of Aid: An Independent View of Aid*. London: Action Aid.
- Rao, V. V. Bhanoji. 1991. "Human Development Report 1990: Review and Assessment." *World Development* 19 (10): 1451–60.
- Reid, Elizabeth, ed. 1995. *HIV and AIDS: The Global Inter-connection*. West Hartford, Conn.: Kumarian.
- Republic of Korea, Government of. 1994. "Review and Appraisal of Implementation of the Nairobi Forward-Looking Strategies for the Advancement of Women." Seoul.
- Romer, Paul. 1986. "Increasing Returns and Long-Run Growth." *Journal of Political Economy* 94 (1): 1002–37.
- . 1990. "Endogenous Technical Change." *Journal of Political Economy*, special supplement, 98 (5): S71–102.
- . 1994. "The Origins of Endogenous Growth." *Journal of Economic Perspectives* 8 (1): 3–22.
- Rothschild, Michael, and Joseph E. Stiglitz. 1970. "Increasing Risk: I. A Definition." *Journal of Economic Theory* 2 (3): 225–43.
- Rueckert, Sabine, and Wolfgang Gehrmann. 1995. "Die Keimzelle der Gewalt." *Die Zeit*, 14 April, pp. 6–8.
- Saito, Katrine Anderson, Hailu Mekonen and Daphne Spurling. 1994. *Raising the Productivity of Women Farmers in Sub-Saharan Africa*. World Bank Discussion Paper 230. Washington, D.C.
- Sen, Amartya K. 1973. *On Economic Inequality*. Oxford: Clarendon.
- . 1988. "Africa and India: What Do We Have to Learn from Each Other?" C.N. Vakil Memorial Lecture, 8th World Congress of the International Economic Association. In K.J. Arrow, ed., *The Balance between Industry and Agriculture in Economic Development*. London: Macmillan.
- . 1990a. "Gender and Cooperative Conflicts." In Irene Tinker, ed., *Persistent Inequalities: Women and World Development*. New York: Oxford University Press.
- . 1990b. "More Than 100 Million Women Are Missing." *New York Review of Books* 37 (20): 61–66.
- . 1992a. *Inequality Reexamined*. Oxford: Clarendon; and Cambridge, Mass.: Harvard University Press.
- . 1992b. "Missing Women." *British Medical Journal* 304: 587–88.
- . 1993. "Life Expectancy and Inequality: Some Conceptual Issues." In P. Bardhan, M. Datta-Chaudhuri and T.N. Krishnan, eds., *Development and Change*. Bombay: Oxford University Press.
- Siegmán, Gita. 1992. *World of Winners*. 2d ed. Detroit and London: Gale Research International.
- Singer, H.W. 1994. "The Human Development Report 1994." Institute of Development Studies, Sussex, United Kingdom.
- SIPRI (Stockholm International Peace Research Institute). 1993. *SIPRI Yearbook 1993*. New York: Oxford University Press.
- . 1994. *SIPRI Yearbook 1994*. New York: Oxford University Press.
- Slovenia, Government of. 1994. "National Report for the Fourth World Conference on Women." Ljubljana.
- Smith, Peter. 1992. "Measuring Human Development." University of Southampton, Department of Economics, Southampton, United Kingdom.
- Spíndola, Austregésilo Gomes. 1993. "The Human Development Index and Other Development Indicators of Brazil." Background paper for *Human Development Report 1994*. UNDP, New York.
- Srinivasan, T.N. 1994. "Human Development: A Paradigm or Reinvention of the Wheel?" Paper presented at the American Economic Association meeting, 3 January, Boston.
- Staudt, Kathleen. 1984. *Agricultural Policy Implementation: A Case Study from Western Kenya*. West Hartford, Conn.: Kumarian.

- Stern, Nicholas H. 1977. "Welfare Weights and the Elasticity of the Marginal Valuation of Income." In M. Artis and R. Nobay, eds., *Current Economic Problems*. Oxford: Basil Blackwell.
- Streeten, Paul. 1992. "Global Governance for Human Development." Human Development Report Office Occasional Paper 4. UNDP, New York.
- . 1994. "Human Development: Means and Ends." Paper presented at the American Economic Association meeting, 3 January, Boston.
- Streeten, Paul, with Shahid J. Burki, Mahub ul Haq, Norman Hicks and Frances Stewart. 1981. *First Things First: Meeting Basic Human Needs in the Developing Countries*. New York: Oxford University Press.
- Summerfield, Gale. 1994. "Economic Reform and the Employment of Chinese Women." *Journal of Economic Issues* (September): 715–32.
- Summers, Lawrence H. 1992. "Investing in All the People." EDI Seminar Paper 45. World Bank, Washington, D.C.
- Summers, Robert, and Alan Heston. 1991. "Penn World Tables (Mark 5): An Expanded Set of International Comparisons, 1950–1988." *Quarterly Journal of Economics* 106: 327–68.
- Tatlidi, Huseyin. 1992. "A New Approach for Human Development: Human Development Scores." Institute of Development Studies, Sussex, United Kingdom.
- Thailand, Government of. 1995. "The Status of Women and Platform for Action." National Commission on Women's Affairs for the Fourth World Conference on Women. Bangkok.
- Trabold-Nubler, Harald. 1991. "The Human Development Index: A New Development Indicator?" *Intereconomics* (September/October): 236–43.
- . 1992. "Making the Human Development Index Comparable over Time." German Institute for Economic Research, Berlin.
- Tunisia, Government of. 1994. "Rapport National pour la Quatrième Conférence Mondiale sur les Femmes: Lutte pour l'égalité, le développement et la paix." Tunis.
- UN (United Nations). 1948. *Universal Declaration of Human Rights*. New York.
- . 1984. *Consideration of Reports Submitted by States Parties under Article 18 of the Convention: Viet Nam*. Committee on the Elimination of Discrimination against Women. New York. CEDAW/C/5/Add.25.
- . 1988. *Consideration of Reports Submitted by States Parties under Article 18 of the Convention: Sri Lanka*. Committee on the Elimination of Discrimination against Women. New York. CEDAW/C/13/Add.18.
- . 1990. *Equality: Equality in Political Participation and Decision-making*. Report of the Secretary-General. New York. E/CN.6/1990/2.
- . 1991a. *Consideration of Reports Submitted by States Parties under Article 18 of the Convention: Norway*. Committee on the Elimination of Discrimination against Women. New York. CEDAW/C/NOR/3.
- . 1991b. *Consideration of Reports Submitted by States Parties under Article 18 of the Convention: Rwanda*. Committee on the Elimination of Discrimination against Women. New York. CEDAW/C/RWA/3.
- . 1991c. *Women: Challenges to the Year 2000*. New York.
- . 1991d. "Women Heads of State and Government Ministers throughout the World." Division for the Advancement of Women. Paper prepared by Raymond Lloyd for the Expert Group Meeting on the Role of Women in Public Life. Vienna. EGM/RWPL/1991/BP3.
- . 1991e. *The World's Women 1970–1990: Trends and Statistics*. New York.
- . 1992a. *Consideration of Reports Submitted by States Parties under Article 18 of the Convention: Australia*. Committee on the Elimination of Discrimination against Women. New York. CEDAW/C/AUL/2.
- . 1992b. *Consideration of Reports Submitted by States Parties under Article 18 of the Convention: Canada*. Committee on the Elimination of Discrimination against Women. New York. CEDAW/C/CAN/3.
- . 1992c. *Consideration of Reports Submitted by States Parties under Article 18 of the Convention: Cuba*. Committee on the Elimination of Discrimination against Women. New York. CEDAW/C/CUB/2-3.
- . 1992d. *Consideration of Reports Submitted by States Parties under Article 18 of the Convention: Yemen*. Committee on the Elimination of Discrimination against Women. New York. CEDAW/C/YEM/3.
- . 1992e. *The Rio Declaration: United Nations Conference on Environment and Development*. A/CONF.151/26.
- . 1992f. *Second Report on the World Nutrition Situation*, vol. 1, *Global and Regional Results*. Administrative Committee on Coordination, Sub-Committee on Nutrition. Geneva.
- . 1993a. *Consideration of Reports Submitted by States Parties under Article 18 of the Convention: New Zealand*. Committee on the Elimination of Discrimination against Women. New York. CEDAW/C/NZE/2.
- . 1993b. *Second Report on the World Nutrition Situation*, vol. 2, *Country Trends, Methods and Statistics*. Administrative Committee on Coordination, Sub-Committee on Nutrition. New York.
- . 1993c. *Statistical Yearbook 1990/91*. 38th issue. Statistical Division. New York. ST/ESA/STAT/SER.S/14.E/F/93.XVII.1.
- . 1993d. *The Vienna Declaration and Programme of Action: World Conference on Human Rights*. Vienna. A/CONF.157/23.
- . 1994a. *Consideration of Reports Submitted by States Parties under Article 18 of the Convention: Morocco*. Committee on the Elimination of Discrimination against Women. New York. CEDAW/C/MOR/1.

- . 1994b. *Equality in Economic Decision-making*. Report of the Secretary-General Commission on the Status of Women, Thirty-ninth Session, 23 December. New York.
- . 1994c. *Improvement of the Status of Women in the Secretariat*. Report of the Secretary-General. New York. A/49/587.
- . 1994d. *Multilateral Treaties Deposited with the Secretary-General: Status as at 31 December 1993*. New York. ST/LEG/SER.E/12.
- . 1994e. *Report of the Committee on the Elimination of Discrimination against Women, Thirteenth session*. Forty-ninth session of the General Assembly. Supplement 38. New York. A/49/38.
- . 1994f. *Report of the International Conference on Population and Development*. Cairo. A/CONF.171/13.
- . 1994g. *Statistical Yearbook 1992*. 39th issue. Statistical Division. New York. ST/ESA/STAT/SER.S/15. E/F.94.XVII.1.
- . 1994h. "Urbanization Prospects." Database. 1994 revision. Population Division. New York.
- . 1994i. "Women's Indicators and Statistics Database." Version 3. CD-ROM. Statistical Division. New York.
- . 1994j. *World Contraceptive Use 1994*. Population Division. New York. ST/ESA/SER.A/143. E.94. XIII.15.
- . 1994k. "World Population Prospects Database 1950–2050." 1994 Revision. Population Division. New York.
- . 1995a. *Adoption of the Declaration and Programme of Action of the World Summit for Social Development*. Copenhagen. A/CONF.166/L.1.
- . 1995b. *Women in a Changing Global Economy: 1994 World Survey on the Role of Women in Development*. New York. ST/ESA/241.
- . Forthcoming. *The World's Women 1970–1995—Trends and Statistics*. New York.
- UNCSDHA (United Nations Centre for Social Development and Humanitarian Affairs). 1992. *Women in Politics and Decision-Making in the Late Twentieth Century*. Vienna: United Nations.
- . 1995. "Results of the Fourth United Nations Survey of Crime Trends and Operations of the Criminal Justice Systems (1986–1990)—Interim Report by the Secretariat." Vienna.
- UNDP (United Nations Development Programme). 1990. *Human Development Report 1990*. New York: Oxford University Press.
- . 1991a. *Bhutan Human Development Report*. Thimpu, Bhutan.
- . 1991b. *Human Development Report 1991*. New York: Oxford University Press.
- . 1992a. *Balanced Development: An Approach to Social Development*. Islamabad.
- . 1992b. *Human Development in Bangladesh: Local Action under National Constraints*. Dhaka.
- . 1992c. *Human Development Report 1992*. New York: Oxford University Press.
- . 1992d. *Making People Matter: Introductory Comment on a Human Development Strategy for Ghana*. Accra.
- . 1993a. *Human Development in Bangladesh: Decentralization for Local Action*. Dhaka.
- . 1993b. *Human Development in Cameroon: 1993*. Yaoundé.
- . 1993c. *Human Development Report 1993*. New York: Oxford University Press.
- . 1994a. *Human Development in Nepal: A Situation Analysis*. Kathmandu.
- . 1994b. *Human Development Report 1994*. New York: Oxford University Press.
- . 1994c. *Pacific Human Development Report*. Suva, Fiji.
- . 1994d. *Philippine Human Development Report*. Manila.
- . 1994e. *Report on Human Development in Bangladesh: Empowerment of Women*. Dhaka.
- UNESCO (United Nations Educational, Scientific and Cultural Organization). 1993a. *Trends and Projections of Enrolment by Level of Education, by Age and by Sex, 1960–2025 (as assessed in 1993)*. Division of Statistics. Paris.
- . 1993b. *World Education Report 1993*. Paris.
- . 1994a. *Statistical Yearbook 1994*. Paris.
- . 1994b. "Statistics on Illiteracy, 1994 Estimates and Projections." Diskette. Paris.
- . 1994c. Correspondence on combined primary, secondary and tertiary enrolment. Division of Statistics, Section for the Development of Statistical Services. 27 December. Paris.
- UNFPA (United Nations Population Fund). 1991. *Population and the Environment: The Challenges Ahead*. New York.
- UNHCR (Office of the United Nations High Commissioner for Refugees). 1993. *The State of the World's Refugees*. London: Penguin.
- . 1994. *Populations of Concern to UNHCR: A Statistical Overview, 1993*. Food and Statistical Unit, Division of Programmes and Operational Support. Geneva.
- UNICEF (United Nations Children's Fund). 1993. *Progress of Nations*. New York.
- . 1994. *The State of the World's Children 1994*. New York: Oxford University Press.
- . 1995. *The State of the World's Children 1995*. New York: Oxford University Press.
- Urdaneta-Ferrán, Lourdes. 1993. "Measuring Women's and Men's Economic Contribution." In *Proceedings of the ISI 49th Session*. Florence: International Statistical Institute.
- USCR (United States Committee for Refugees). 1994. *World Refugee Survey 1994*. Washington, D.C.
- van der Meer, Esther. 1993. "L'Indicateur de développement humain." Masters thesis. University of Geneva, Department of Econometrics, Geneva.
- Wagner, Nancy. 1995. "A Review of PPP-Adjusted GDP Estimation and Its Potential Use for the Fund's Operational Purposes." International Monetary Fund Working Paper WP/95/18. Washington, D.C.
- Waldron, Ingrid. 1983. "The Role of Genetic and Biological Factors in Sex Differences in Mortality." In A.D. Lopez and L.T. Ruzicka, eds., *Sex Differentials in Mortality: Trends, Determinants and Conse-*



- quences. Canberra: Australian National University, Department of Demography.
- Women's World Banking. 1994a. "United Nations Expert Group on Women and Finance." New York.
- . 1994b. *What Works* (New York) 4(2).
- World Bank. 1991. *World Development Report 1991: The Challenge of Development*. New York: Oxford University Press.
- . 1992. *World Development Report 1992: Development and the Environment*. New York: Oxford University Press.
- . 1993a. *Trends in Developing Economies 1993*. Washington, D.C.
- . 1993b. *World Development Report 1993: Investing in Health*. New York: Oxford University Press.
- . 1994a. *Enhancing Women's Participation in Economic Development*. A World Bank Policy Paper. Washington, D.C.
- . 1994b. *Social Indicators of Development 1994*. Baltimore: Johns Hopkins University Press.
- . 1994c. *World Bank Atlas 1995*. Washington, D.C.
- . 1994d. *World Debt Tables 1994-95*. 2 vols. New York: Oxford University Press.
- . 1994e. *World Development Report 1994: Infrastructure for Development*. New York: Oxford University Press.
- . 1994f. *World Tables 1994*. Baltimore: Johns Hopkins University Press.
- . 1995. Correspondence on unpublished World Bank data on GNP per capita using the GDP/GNP ratio for 1992. International Economics Department. 19 January. Washington, D.C.
- WHO (World Health Organization). 1993a. *Weekly Epidemiological Record*. No. 35. Geneva.
- . 1993b. *World Health Statistics Annual 1993*. Geneva.
- . 1995a. Correspondence on AIDS cases reported to WHO by country and area based on reports received through 29 December 1994. 3 January. Geneva.
- . 1995b. Correspondence on suicides. Mental Disorders Control Unit, Division of Mental Health. Geneva.
- WRI (World Resources Institute). 1994. *World Resources 1994-95*. New York: Oxford University Press.

# Selected definitions

*Administrative and managerial workers* 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.

*CO<sub>2</sub> emissions by source* Anthropogenic (human-originated) carbon dioxide (CO<sub>2</sub>) 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).

*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 chloroflourocarbons), 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 annual average 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 ser-

vices these could pay for at the current level of imports.

*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*.

*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 relied on a relative poverty line (such as share of food in total expenditures) were excluded, as were those that relied 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 observation 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 graduates 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 bene-

fits 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	Saint Kitts and Nevis	Albania	Solomon Islands	Afghanistan
Argentina	Seychelles	Algeria	South Africa	Angola
Australia	Singapore	Armenia	Sri Lanka	Bangladesh
Austria	Slovakia	Azerbaijan	Suriname	Benin
Bahamas	Spain	Bolivia	Swaziland	Bhutan
Bahrain	Sweden	Botswana	Syrian Arab Rep.	Burkina Faso
Barbados	Switzerland	Bulgaria	Tajikistan	Burundi
Belarus	Thailand	Cameroon	Tunisia	Cambodia
Belgium	Trinidad and Tobago	Cape Verde	Turkey	Central African Rep.
Belize	Ukraine	China	Turkmenistan	Chad
Brazil	United Arab Emirates	Congo	Uzbekistan	Comoros
Brunei	United Kingdom	Cuba	Vanuatu	Côte d'Ivoire
Darussalam	Uruguay	Dominica	Viet Nam	Djibouti
Canada	USA	Dominican Rep.	Zimbabwe	Equatorial Guinea
Chile	Venezuela	Ecuador		Ethiopia
Colombia		Egypt		Gambia
Costa Rica		El Salvador		Ghana
Cyprus		Gabon		Guinea
Czech Rep.		Georgia		Guinea-Bissau
Denmark		Grenada		Haiti
Estonia		Guatemala		India
Fiji		Guyana		Kenya
Finland		Honduras		Lao People's Dem. Rep.
France		Indonesia		Lesotho
Germany		Iran, Islamic Rep. of		Liberia
Greece		Iraq		Madagascar
Hong Kong		Jamaica		Malawi
Hungary		Jordan		Mali
Iceland		Kazakhstan		Mauritania
Ireland		Korea, Dem. People's Rep. of		Mozambique
Israel		Kyrgyzstan		Myanmar
Italy		Lebanon		Nepal
Japan		Libyan Arab Jamahiriya		Niger
Korea, Rep. of		Lithuania		Nigeria
Kuwait		Maldives		Pakistan
Latvia		Moldova, Rep. of		Rwanda
Luxembourg		Mongolia		São Tomé and Príncipe
Malaysia		Morocco		Senegal
Malta		Namibia		Sierra Leone
Mauritius		Nicaragua		Somalia
Mexico		Oman		Sudan
Netherlands		Papua New Guinea		Tanzania, U. Rep. of
New Zealand		Paraguay		Togo
Norway		Peru		Uganda
Panama		Philippines		Yemen
Poland		Romania		Zaire
Portugal		Saint Lucia		Zambia
Qatar		Saint Vincent		
Russian Federation		Samoa (Western)		
		Saudi Arabia		



## Countries in the income aggregates

<i>High-income</i> (GNP per capita above \$8,625)	<i>Middle-income</i> (GNP per capita \$696 to \$8,625)	<i>Low-income</i> (GNP per capita \$695 and below)
Australia	Algeria	Moldova, Rep. of
Austria	Angola	Morocco
Bahamas	Antigua and Barbuda	Namibia
Belgium	Argentina	Oman
Brunei Darussalam	Armenia	Panama
Canada	Azerbaijan	Papua New Guinea
Cyprus	Bahrain	Paraguay
Denmark	Barbados	Peru
Finland	Belarus	Philippines
France	Belize	Poland
Germany	Bolivia	Portugal
Hong Kong	Botswana	Romania
Iceland	Brazil	Russian Federation
Ireland	Bulgaria	Saint Kitts and Nevis
Israel	Cameroon	Saint Lucia
Italy	Cape Verde	Saint Vincent
Japan	Chile	Samoa (Western)
Kuwait	Colombia	Saudi Arabia
Luxembourg	Congo	Senegal
Netherlands	Costa Rica	Seychelles
New Zealand	Cuba	Slovakia
Norway	Czech Rep.	Solomon Islands
Qatar	Djibouti	South Africa
Singapore	Dominica	Suriname
Spain	Dominican Rep.	Swaziland
Sweden	Ecuador	Syrian Arab Rep.
Switzerland	El Salvador	Thailand
United Arab Emirates	Estonia	Trinidad and Tobago
United Kingdom	Fiji	Tunisia
USA	Gabon	Turkey
	Georgia	Turkmenistan
	Greece	Ukraine
	Grenada	Uruguay
	Guatemala	Uzbekistan
	Hungary	Vanuatu
	Iran, Islamic Rep. of	Venezuela
	Iraq	
	Jamaica	
	Jordan	
	Kazakhstan	
	Korea, Dem. People's Rep. of	
	Korea, Rep. of	
	Kyrgyzstan	
	Latvia	
	Lebanon	
	Libyan Arab Jamahiriya	
	Lithuania	
	Malaysia	
	Maldives	
	Malta	
	Mauritius	
	Mexico	
		Afghanistan
		Albania
		Bangladesh
		Benin
		Bhutan
		Burkina Faso
		Burundi
		Cambodia
		Central African Rep.
		Chad
		China
		Comoros
		Côte d'Ivoire
		Egypt
		Equatorial Guinea
		Ethiopia
		Gambia
		Ghana
		Guinea
		Guinea-Bissau
		Guyana
		Haiti
		Honduras
		India
		Indonesia
		Kenya
		Lao People's Dem. Rep.
		Lesotho
		Liberia
		Madagascar
		Malawi
		Mali
		Mauritania
		Mongolia
		Mozambique
		Myanmar
		Nepal
		Nicaragua
		Niger
		Nigeria
		Pakistan
		Rwanda
		São Tomé and Príncipe
		Sierra Leone
		Somalia
		Sri Lanka
		Sudan
		Tajikistan
		Tanzania, U. Rep. of
		Togo
		Uganda
		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	<b>East Asia</b>	<b>Latin America and the Caribbean</b>	<b>Southern Europe</b>
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	<b>Eastern Europe and the Commonwealth of Independent States</b>
Central Africa Rep.	Lebanon	<b>South-East Asia and the Pacific</b>	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	Lao People's Dem. Rep.	Dominica	Czech Rep.
Ethiopia	Somalia	Malaysia	Dominican Rep.	Estonia
Gabon	Sudan	Myanmar	Ecuador	Georgia
Gambia	Syrian Arab Rep.	Papua New Guinea	El Salvador	Hungary
Ghana	Tunisia	Philippines	Grenada	Kazakhstan
Guinea	United Arab Emirates	Samoa (Western)	Guatemala	Kyrgyzstan
Guinea-Bissau	Yemen	Singapore	Haiti	Latvia
Kenya		Solomon Islands	Honduras	Lithuania
Lesotho		Thailand	Jamaica	Moldova, Rep. of
Liberia		Vanuatu	Mexico	Poland
Madagascar		Viet Nam	Nicaragua	Romania
Malawi			Panama	Russian Federation
Mali		<b>South Asia</b>	Paraguay	Slovakia
Mauritania		Afghanistan	Peru	Tajikistan
Mauritius		Bangladesh	Saint Kitts and Nevis	Turkmenistan
Mozambique		Bhutan	Saint Lucia	Ukraine
Namibia		India	Saint Vincent	Uzbekistan
Niger		Iran, Islamic Rep. of	Suriname	
Nigeria		Maldives	Trinidad and Tobago	<b>Western and Southern Europe</b>
Rwanda		Nepal	Uruguay	Austria
São Tomé and Príncipe		Pakistan	Venezuela	Belgium
Senegal		Sri Lanka		Denmark
Seychelles			INDUSTRIAL COUNTRIES	Finland
Sierra Leone		Australia	<b>North America</b>	France
South Africa		Israel	Canada	Germany
Swaziland		Japan	USA	Greece
Tanzania, U. Rep. of		New Zealand		Iceland
Togo				Ireland
Uganda				Italy
Zaire				Luxembourg
Zambia				Malta
Zimbabwe				Netherlands
				Norway
				Portugal
				Spain
				Sweden
				Switzerland

## Other aggregates

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### *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