



HUMAN DEVELOPMENT REPORT 1991



Published
for the United Nations
Development Programme
(UNDP)

New York Oxford
Oxford University Press
1991

Oxford University Press
Oxford New York Toronto
Delhi Bombay Calcutta Madras Karachi
Petaling Jaya Singapore Hong Kong Tokyo
Nairobi Dar es Salaam Cape Town
Melbourne Auckland

and associated companies in
Berlin Ibadan

Copyright © 1991
by the United Nations Development Programme
1 UN Plaza, New York, New York, 10017, USA

Oxford is a registered trademark of Oxford University Press

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without prior permission of Oxford University Press, Inc.

ISBN 0-19-507147-6 (paper)
ISBN 0-19-507146-8 (cloth)

Printing (last digit): 9 8 7 6 5 4 3 2 1
Printed in the United States of America on acid-free paper

Editing, desktop composition and production management: Bruce Ross-Larson, Vonda Witman Dashner and Kate Humphrey,
American Writing Corporation, Washington, D.C.

Design: Gerald Quinn, Quinn Information Design, Cabin John, Maryland



Foreword

The 1990s began with a great surge of hope. Democracy swept across Eastern Europe and the Soviet Union. The Berlin Wall came down. Germany was reunited. One-party systems were on the retreat in Africa. A new era of human rights and political freedom seemed to be dawning.

These hopes were brutally dashed when Iraq invaded Kuwait. But the world by then was already a new world—a world free of the East-West divide. The international community, through the United Nations, joined forces to condemn and repulse the aggression. Now a long and costly rehabilitation process must take place. And it is our historic and moral obligation to draw the correct lesson from the recent past: it takes years, decades, generations of people to build development. It may take only seconds to destroy it all. Development needs peace.

The framework for strengthened international cooperation in support of global security exists in the United Nations. It can provide the platform for member states to build a new world—a world of peace and development. We now have the opportunity to rediscover the exciting promise of the beginning of the 1990s and to recapture the peace dividend that was tragically lost in the shifting sands of the Gulf region.

Human Development Report 1991 holds a mirror to the world events of the past year. It is about the sensible reallocation of resources to serve humanity better by involving as many people as possible in the creative use of those resources rather than only a few vested interests. It is about participatory development where people are placed at the centre of all decision-making. It is about human freedom where the creative energies of the people are unleashed to generate economic and social opportunities for themselves and for their

societies. And it is about the process of human development whose main aim is to develop and use all human capabilities.

The Report, for the first time, includes a human freedom index. Though freedom is hard to quantify or to measure, no measure of human development can ever be complete without its inclusion.

The Report also examines the availability of financial resources for implementing human goals. And it comes to a radical conclusion: lack of political commitment, rather than lack of financial resources, is usually the real cause of human neglect. There are far too many examples of wasted resources and wasted opportunities: rising military expenditures, inefficient public enterprises, numerous prestige projects, growing capital flight and extensive corruption. Most budgets can accommodate additional expenditure for human development if priorities are recast. But that is an important “if”. Entrenched power structures can frustrate enlightened reforms. That is why this report identifies not only the wide scope for restructuring public sector budgets, but also a political strategy to engineer such changes.

While the focus of the Report is on public spending for human development, the synergistic relation between the private and the public sectors becomes clear. If markets function well and if there is an enabling policy framework for private initiative and broad-based, participatory development, people are in a position to meet their own needs. Participatory development is the key to economic growth *and* human development.

The real challenge in the 1990s is to translate the human development concern from a concept into reality. The path ahead is to design sound country strategies for human development, to strengthen the data base for

planning and monitoring and to highlight the human development concern in aid allocations and policy dialogue. The Report makes several concrete suggestions for this purpose.

As was the experience with the first Report, the 1991 Report has also emerged from United Nations systemwide cooperation. I am personally grateful to all the specialized agencies and other organizations in the UN system, including the World Bank and the IMF, for their willing and gracious support for the preparation of this report.

Human Development Report 1991 has been prepared by a team composed of UNDP staff members and eminent outside consultants. It was compiled under the guidance and leadership of Mahbub ul Haq, former Finance and Planning Minister of Pakistan, in his capacity as my Special Adviser. I con-

gratulate the team on the excellent contribution they have made to the international development debate.

The validity of a report such as this depends on its independence and intellectual integrity. The views expressed in this report are those of the team, and are not necessarily shared by UNDP, or its Governing Council, or other member governments of UNDP.

I am confident that this Report will contribute to a spirited dialogue on the restructuring of national budgets and aid programmes, and will place human priorities at the very heart of the development dialogue. UNDP stands ready to offer all necessary support to developing countries to translate their human development priorities into action programmes.



William H. Draper III

New York
1 May 1991

**Team for the preparation of
*Human Development Report 1991***

Project director
Mahbub ul Haq

UNDP Team

Chief: Inge Kaul
Members: Leo Goldstone, Bernard Hausner, Saraswathi Menon, Moez Doraid, Kees Kingma, Jeni Klugman, Jiali Li and Hana Shishtawy, assisted in research by Akhtar Mahmood and Paul Redfern, and in drafting by Peter Stalker.

Panel of consultants

Paul Streeten, Frances Stewart, Meghnad Desai, Gustav Ranis and Herbert Wulf

Acknowledgements

The Report benefited from a large number of valuable contributions that the authors received from various organizations and individuals.

Special mention must be made of the support provided by governments in developing countries—especially the many national Statistical Services, and Planning and Finance Ministries—which collaborated with the Report team and national UNDP consultants to obtain data on various aspects of financing human development.

Thanks are also due to the agencies and offices of the United Nations system that were extremely generous in sharing with the team their practical experience and studies. Special contributions were received from ECA, ECLAC, HABITAT, IFAD, ILO, PREALC, UNHCR, UNICEF and UNOV. The other contributing UN system entities were ITC, UNCTAD, UNFPA, UNICRI and the United Nations Department of International Economic and Social Affairs.

The Report draws on the statistical data bases established by the UN Statistical Office, the UN Population Division, UNICEF, the World Bank, IMF, FAO, ILO, UNESCO, WHO, OECD, SIPRI, World Resources Institute and World Priorities, Inc. The data obtained from these agencies have been complemented and updated by information collected from government sources by UNDP field offices. The Report team is most grateful for all these contributions as well as those it received from various other UNDP offices, notably the Regional Bureaux, the Bureau for Programme Policy and Evaluation, the Bureau for Special Activities and the Office of Project Services.

Several colleagues in UNDP offered many useful comments and observations. Thanks are due in particular to Luis Maria

Gomez, Stephen Adei, Aldo Ajello, Denis Benn, Russell Boner, Steven Browne, Pierre-Claver Damiba, Gustav A. Edgren, Peter Gall, Trevor Gordon-Somers, Michael Gucovsky, Nadia Hijab, Eric Helland-Hansen, Arthur Holcombe, Narinder Kakar, Uner Kirdar, Anton Kruidrink, Herbert M'Cleod, Mohamed Abdalla Nour, Sarah Papineau, Jehan Raheem, Elizabeth Reid, Ingolf Schuetz-Mueller, Krishan G. Singh, Sarah Timpson, Emma Torres, Gustavo Toro and David Whaley. Of course, there were numerous other valuable suggestions from UNDP colleagues—too many to acknowledge individually but all gratefully received.

Secretarial and administrative support for the Report's preparation was provided by Linda Grahek, Gayle Millage, Linda Pignon-Rebello, Ida Simons and Karin Svadlenak. Assistance for the Report's production was provided by Lloyd Greenberg, Eileen Kessler, Michael Leclair, Charles McNeill and Ann Rall, and by Kim Bieler, Eileen Hanlon, Ann Matikan, Ana Myer, Jean Robinson, Tracy Smith, Alison Strong and Katrina van Duyn.

The Report team would like to acknowledge with great appreciation the intellectual encouragement and constructive criticism on this Report and on the issue of measuring human development from Dragoslav Avramovic, Partha Dasgupta, Ricardo Ffrench-Davis, Helio Jaguaribe, Lawrence Klein, Carlos Massad, Josef Pajeska, Graham Pyatt, Sadiq Rasheed, Amartya Sen and Salah Al Shaikhly.

This Report would not have been possible but for the constant encouragement and leadership of William H. Draper III, UNDP Administrator. His deep commitment to human development concerns and his determination to protect the intellectual independence of this Report have been the greatest source of inspiration for the authors.

Abbreviations

ECE	Economic Commission for Europe
ECLAC	Economic Commission for Latin America and the Caribbean
ESCAP	Economic and Social Commission for Asia and the Pacific
EUROSTAT	Statistical Office of the European Communities
FAO	Food and Agriculture Organization of the United Nations
GATT	General Agreement on Tariffs and Trade
IFAD	International Fund for Agricultural Development
ILO	International Labour Organisation
IMF	International Monetary Fund
OECD	Organisation for Economic Co-operation and Development
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific, and Cultural Organization
UNFPA	United Nations Population Fund
UNHCR	Office of the United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNOV	United Nations Office at Vienna
UNRISD	United Nations Research Institute for Social Development
USAID	United States Agency for International Development
WFC	World Food Council
WFP	World Food Programme
WHO	World Health Organization
IBRD	International Bank for Reconstruction and Development (World Bank)

Contents

OVERVIEW 1

CHAPTER ONE

Measuring human development and freedom 13

Refinements in the human development index 15

The human freedom index 18

CHAPTER TWO

The state of human development 22

Poverty 23

Inequality 26

Human survival 27

Environmental degradation 28

Regional perspectives 29

 Industrial countries 30

 Asia 33

 Latin America and the Caribbean 34

 The Arab States 35

 Sub-Saharan Africa 35

CHAPTER THREE

Financing human development 38

The complementarity between private and public spending 38

The analysis of public spending 39

The public expenditure ratio 41

The social allocation ratio 44

The social priority ratio 49

International aid 53

Annex: Summary of country studies 58

CHAPTER FOUR

Efficiency in human development 61

Cost reductions in education 61

Cost reductions in health care 63

Cost reductions in water and sanitation 63

Cost reductions in food subsidies 64

User charges 65

Beyond statistics 68

CHAPTER FIVE

The politics of reform 70

Balancing political pressures 71

The politics of aid 75

CHAPTER SIX

A new human order 77

Country strategies for human development 77

A new global agenda for human development 78

The peace dividend 80

The prospects for peace in the Third World 82

A global compact for human development 84

Sample human development profile: Pakistan 85

Technical notes 88

Bibliographic note 102

References 104

HUMAN DEVELOPMENT INDICATORS 111

BOXES

- 1.1 The issues raised by the 1990 Human Development Report 14
 - 1.2 The human freedom index 20
 - 2.1 Balance sheet of human development—developing countries 24
 - 2.2 Balance sheet of human development—industrial countries 25
 - 2.3 100 million women missing 27
 - 2.4 The USA—poverty amid plenty 31
 - 2.5 Cardboard cities for the UK's homeless 31
 - 2.6 AIDS in Africa 36
 - 3.1 Capital flight 49
 - 3.2 Corruption 50
 - 3.3 Prestige projects 50
 - 3.4 Assistance for community health care in Senegal 57
 - 4.1 Double-shift schooling in Senegal 62
 - 4.2 Food subsidies bypass Sri Lanka's poor 65
 - 4.3 User charges raise money, but turn away rural patients, in Ghana 68
 - 5.1 Participating in success 72
 - 5.2 International NGOs 75
 - 5.3 Human adjustment assistance 76
 - 6.1 Sustainable development 79
 - 6.2 International migration—poverty on the move 80
 - 6.3 From debt to investment in people 80
 - 6.4 The peace dividend 81
 - 6.5 Aid—a mutual commitment 84
-

TABLES

- 1.1 HDI ranking for industrial countries 15
- 1.2 HDI ranking for developing countries 16

1.3	Gender-sensitive HDI	17
1.4	Distribution-adjusted HDI	18
1.5	HFI ranking of selected countries	20
2.1	Ratio of income of highest 20% of households to lowest 20%, 1980-87	26
2.2	Regional human development comparisons, latest years	29
3.1	Analysis of public social spending, 1988	41
3.2	Human expenditure per capita, 1988	42
3.3	Private social sector expenditure as % of total, 1988	43
3.4	Total spending on health in Africa	43
3.5	Total revenue as a % of GNP, 1988	44
3.6	Social allocation ratio, 1988	45
3.7	Economic growth and social spending	46
3.8	Domestic debt in selected countries, 1988	47
3.9	Social priority ratio, 1988	51
3.10	Enrolment in private schools, 1985	52
3.11	ODA as a percentage of GNP	53
3.12	Allocation of aid by sector	54
3.13	Analysis of ODA social spending, 1989	54
4.1	User charges	66
4.2	Health user charges in Africa	67
4.3	Public education user charges in Asia	67

FIGURES

1.1	Human development and income	13
1.2	Adjusting the HDI for male-female disparities	17
1.3	Adjusting the HDI for income distribution	18
1.4	Tracking the HDI over time	18
2.1	Net flow of resources from South to North	22
2.2	People and income	23
2.3	People and growth	23
2.4	People in poverty in developing countries	26
2.5	People in poverty in industrial countries	26
2.6	Child malnutrition in urban and rural areas	27
2.7	Safe motherhood	28
2.8	World energy demand	29
2.9	Female-male gaps	30
2.10	Profile of human distress in the industrial countries	32
2.11	Women's lagging wages	33
3.1	The four ratios	39
3.2	Social priority spending	40
3.3	Human expenditure per capita	42
3.4	ODA allocations to human development, 1989	55
3.5	Social priority ODA per capita donor population, 1989	56
6.1	The peace dividend	81
6.2	The military's changing claim on GNP	82
6.3	Military spending and human development performance	83



Overview

The lack of political commitment, not of financial resources, is often the real cause of human neglect.

That is the main conclusion of *Human Development Report 1991*. The Report is about financing human development. A single powerful idea runs through it—that the potential is enormous for restructuring national budgets and international aid in favour of human development. The Report concludes that much current spending is misdirected and inefficiently used. If the priorities are set right, more money will be available for accelerated human progress.

The concept of human development—introduced in the first of these Reports last year—established that the basic objective of human development is to enlarge the range of people's choices to make development more democratic and participatory. These choices should include access to income and employment opportunities, education and health, and a clean and safe physical environment. Each individual should also have the opportunity to participate fully in community decisions and to enjoy human, economic and political freedoms.

People's priorities are not fixed for ever. They change over time as circumstances and aspirations change. And they must all be taken together—with no single dimension pursued at the expense of any other. Many policy-makers frequently concentrate on just one dimension—income. But this concentration is at best an oversimplification and at worst a gross distortion of reality.

Men, women and children must be the centre of attention—with development woven around people, not people around development. Moreover, development must be participatory, and for this, people must have the opportunity to invest in the development

of their capabilities—in their health, education and training. They must also have the opportunity to put their capabilities to use—to be fully involved in all aspects of life, to express themselves freely and creatively.

Thus construed, development will help enhance everyone's individual and social space—with two caveats. One is that the essence of society is not unrestricted satisfaction of individual choices, but the respect for everybody's potential, possibilities, needs and interests. The second is that options for the present generation should not be increased by compromising the options for future generations. In short: development must be sustainable.

The first *Human Development Report* stressed that human development is clearly possible. This much is evident from the progress of the past three decades. Judged by such basic indicators as life expectancy and adult literacy, development has had successes. Average life expectancy in the developing countries increased by 16 years, and adult literacy by 40%. True, a quarter of the people in the developing world still lack many basic necessities. But if development priorities are properly set and political commitment is followed by action, the remaining agenda is manageable.

Human development requires economic growth—for without it, no sustained improvement in human well-being is possible. But while growth is necessary for human development, it is not enough. High growth rates do not automatically translate into higher levels of human development. And firm policy action is required to forge a closer link between economic growth and human development.

Just as economic growth is necessary for human development, human development is

The potential is enormous for restructuring national budgets and international aid in favour of human development

Just as economic growth is necessary for human development, human development is critical to economic growth

critical to economic growth. This two-way link must be at the heart of any enlightened policy action.

The 1990 Report argued that the developing countries have the resources to meet many of their development goals. This Report takes the debate a stage further by showing the potential for restructuring national budgets and foreign assistance to meet human needs.

Those needs are still substantial—above all in developing countries, as this year's review of the state of human development points out:

- *Poverty*—Over one billion people live in absolute poverty.
- *Nutrition*—Some 180 million children, one in three, suffer from serious malnutrition.
- *Health*—One and a half billion people are deprived of primary health care. Nearly three million children die each year from immunizable diseases. About half a million women die each year from causes related to pregnancy and childbirth.
- *Education*—About a billion adults cannot read or write. Well over 100 million children of primary school age are not in school.
- *Gender*—Disparities between men and women remain wide, with female literacy still only two-thirds that of males. Girls' primary enrolment rates are a little over half that of boys', and much of women's work still remains underpaid and undervalued.

People in all developing regions share these problems, but the most urgent problems tend to differ. In Latin America, South Asia and the Arab States, poverty is reinforced by the very unequal distribution of assets. The squeeze of external debt servicing on the resources available for human development is particularly severe in Latin America. In Africa, almost two-thirds of the people lack access to safe water, and fewer than half the children attend primary school. The problem of absolute poverty is increasingly concentrated in Africa. Even in East and South-East Asia, where overall economic growth has been fast, half the people still lack access to safe water and basic health care.

In the industrial countries of the North, average income is much higher than in the South, and almost everyone has access to basic social services. But human deprivation

and distress have not disappeared. Indeed, the analyses for the industrial countries and the developing countries show many points of similarity, although the extent and character of deprivation are different:

- *Poverty*—Over 100 million people live below the poverty line in the industrial market economies. If the USSR and Eastern Europe are included, the number is at least 200 million.
- *Unemployment*—In ten industrial countries, the rate is between 6% and 10%, and in another three it is beyond 10%.
- *Gender*—Female wages are, on average, only two-thirds those of men, and women's parliamentary representation is but a seventh that of men.
- *Social fabric*—In many industrial countries, the social fabric continues to unravel fast—old cultural and social norms are disappearing, with nothing cohesive to take their place. The all-too-frequent result is isolation and alienation. There is evidence of high rates of drug addiction, homelessness, suicide, divorce and single-parent homes.

Human development is a unifying concern—for both the developing and the industrial countries. So, too, is the question of development's sustainability. Each generation must meet today's needs without incurring debts it cannot repay: financial debts, by overborrowing; social debts, by neglecting to invest in people; demographic debts, by allowing unchecked population growth; and environmental debts, by exhausting natural resources.

Last year's Report introduced the human development index (HDI)—a more realistic statistical measure of human development than mere gross national product (GNP) per head. The HDI merged income with life expectancy and literacy to give an overall figure and ranking.

This year, a series of refinements to the HDI improve and extend the original concept in the following areas:

- *A new HDI ranking*—Knowledge is now measured more broadly, not just by adult literacy but also by mean years of schooling. Moreover, income beyond the poverty level is no longer considered to make no contribution and thus is given not a zero weight but a progressively diminishing weight.

The modified HDI leads to many interesting conclusions. Among the industrial countries, Japan still enjoys the highest rating, and Romania is at the bottom. Among the developing countries, Barbados leads the HDI ranking, with Sierra Leone in the lowest position.

For 26 countries, the human development index rank is 20 or more places lower than the per capita income rank, showing that they have considerable potential to improve their human development levels by spending their national incomes more wisely.

- *Gender disparities*—Separate HDIs have been prepared for women and men for 30 countries having enough information. They show that gender disparities are wide in most developing countries. In Kenya, the female HDI is only half the male HDI. In the industrial countries, gender disparities have narrowed (especially in basic education)—but they are still wide in tertiary education, labour force participation and wage rates. In Japan, the share in national income that females earn is only 26% that of males.

The gender-sensitive HDI, developed on the basis of the female and male HDIs, confirms previous findings. Gender discrimination is a worldwide problem. It is especially harsh where resources are scarce—in the poorer developing countries. But even countries like Japan and Switzerland see their HDI values plummet when gender disparities are taken into account.

- *Income distribution*—For countries with wide gaps between rich and poor, national averages are misleading. So, HDI estimates sensitive to income distribution have been prepared for 53 countries. These indicate that the value of human development achievements diminishes greatly when they are unequally shared. The HDIs in several countries—including Nepal, Brazil and Côte d'Ivoire—drop by more than 10% when adjusted for income distribution, and a fifth of the countries drop by more than 5% when similarly adjusted.

- *Human progress*—An attempt to measure changes in human development over time (between 1970 and 1985) shows that many of the least developed countries in Africa made good progress in human development during 1970–85, even when their per capita

GNP growth rate was low or negative.

- *Human freedom*—A human freedom index (HFI) is presented for 88 countries. Although much further research is necessary, a first, tentative conclusion can be drawn: high levels of human development tend to be achieved within the framework of high levels of human freedom.

The signs for further progress are encouraging: Half the countries (14 of 38) that ranked low on human freedom in the mid-1980s have since made important strides towards democracy. Human development stands to gain from this. Its very objective of increasing people's choices could not be achieved without people actually being free to choose—what they want to be and how they want to live.

All these improvements make the HDI more useful and give a better understanding of the patterns of socio-economic progress. But they are still only first steps in a continuing process of refinement. There is some way to go before the HDI can be confidently used to interpret reality and make key policy decisions.

Returning to the major theme of this year's Report—the financing of human development—the main conclusions are as follows.

1. Economic growth for human development

The best way to achieve human development is to promote more equitable economic growth and more participatory development.

During the 1980s, countries throughout the world increasingly relied on private initiative and market mechanisms to promote faster economic growth and improve quality of human life. The moving agents behind this growth are manifold. Among the more important are the many small businesses that provide income for the rapidly growing labour force, stimulating private savings and enabling investments to increase people's productivity.

The best way to promote human development is to increase the national income and to ensure a close link between economic growth and human well-being. This approach is exemplified, in part, by the recent experience of newly industrializing economies of East Asia. Their efficient, broadly based and

High levels of human development tend to be achieved within the framework of high levels of human freedom

The main task is to invest in people, liberating their initiative

employment-intensive economic growth was backed by social services for those who for various reasons were unable to earn their own living.

The need for economic growth, private enterprise and participatory development is also exemplified by the experience of the countries of Eastern Europe, which engaged in high public spending and ignored the need for mobilizing private initiative, while limiting economic and political freedoms. They have since changed. Now their policies focus on privatizing state enterprises, promoting small and medium-size enterprises and attracting foreign investment.

Growth is particularly needed where it has been lacking. For many of the least developed countries, sustained human development cannot be envisaged without a broad range of actions to increase people's capabilities and opportunities. This involves not only mobilizing and developing human capacities but also investing in order to expand and diversify the economic base—and eliminating the barriers to equal opportunity. The emphasis should be on creating profit incentives for farmers and small enterprises—and on rural development, infrastructure building and sustainable development.

Without such action, no human development can be sustained in the longer run. Economic growth has to reach people, and people have to contribute to growth. Both nationally and internationally, economic growth with human development will, in the longer term, depend on achieving a better match between economic opportunities and people's needs.

Today, 77% of the world's people—in the South—earn only 15% of the world's income. For them, the external shocks and deteriorating terms of trade have been devastating. In the highly indebted middle-income countries and in Africa, the terms of trade have worsened by almost 25 percentage points over the past decade. The plight of the least developed countries in trade is even worse—with their share in world exports declining by two-thirds, from 1.5% to 0.5%, between 1965 and 1988. Nor are their prospects bright, given their lack of economic diversity and their weak capacity to react to (positive and negative) external shocks and

changing international markets.

These serious trends need urgent attention. The main task is to invest in people, liberating their initiative. Another is to open global opportunities—to increase the productivity and competitiveness of developing countries, especially the least developed.

2. Optimizing human expenditure

Adequate income-earning opportunities—and properly directed public spending on human priority needs—are essential components of the path to human development.

Not all countries may be able to emulate the employment-intensive growth of the newly industrializing economies of East Asia. Many countries face slow or stagnant economic growth. And many may find it difficult in the short and medium term to correct inequitable patterns of income distribution through such measures as land reform. Population pressure on scarce developmental opportunities and social services would continue even if more determined efforts were made to check population growth.

Policy action is required to meet all these challenges—through private and public spending.

People should, above all, be enabled to spend on social services. Data on private spending on human development are scarce. But for the countries having information, private social spending often exceeds the public. And the figures on private spending do not even reflect the in-kind contribution of household members, particularly women, to human development.

While private spending on human development is quite important in both developing and industrial countries, the public sector often plays a critical, complementary role, especially where incomes are low and basic human needs would otherwise remain unmet. But public action in support of human development can take several forms. It can be policy action aimed at activating private initiative. It can be the provision of public finance to subsidize privately run services. Or it can be public finance for publicly run programmes. Whatever the approach or mix of strategies adopted, past development experience shows that markets alone cannot

ensure good human development; and neither can overextended public sector spending, because it is not sustainable.

3. Restructuring national budgets

Nearly \$50 billion a year—about 2% of the GNP of the developing countries—could be released for more productive purposes. Much of this could come from freezing military expenditure, which absorbs 5.5% of the GNP of the developing world. In some of the poorest countries, this spending is at least twice that on health and education—as in Angola, Chad, Pakistan, Peru, Syria, Uganda and Zaire.

Added savings could come from:

- *Halting capital flight*—For the Philippines, capital flight was equal to 80% of its outstanding debt between 1962 and 1986. In Mexico and Argentina, an amount equal to at least 50% of the money borrowed in the past 15 years has flown out again.
- *Combating corruption*—In Pakistan, the illegitimate private gain from one's public position is unofficially estimated at 4% of GNP. Estimates of corruption are even higher for many other countries.
- *Reforming public enterprises*—The losses public enterprises make in Cameroon, for example, exceed the total oil revenue of the government.
- *Reducing internal policing*—Increased attention to human development could, in many countries, reduce socio-economic disparities, crime, political pressures and the need for policing.

All these issues are very much in the hands of the developing countries, which have to make more sensible use of their funds—and stop preventable losses from their debt-strapped economies.

But one major element of restructuring—external debt—is largely outside their control. For many countries, external debt now exceeds their total GNP—including Laos, Egypt, Bolivia and Mozambique.

Debt repayments take a large share of government budgets. The Philippines spend 36% of its central budget on debt servicing—compared with 22% for social services. Jordan devotes 39% to debt service and 18% to social services. Mexico spends 20% on debt

service and 18% on social services.

These high percentages give some indication of the funds that reducing the burden of external debt could release. But another issue is equally pressing: internal debt.

Internal debt, money owed by a government to its citizens in its own currency, has not received much international attention. Yet the internal debt now exceeds the external debt for many countries—including India, Pakistan, Malaysia, Singapore and the Philippines.

Developing country governments could take many steps to ease the internal debt burden: reducing budgetary deficits, lowering interest rates, swapping debt for equity in public enterprises, introducing a withholding tax on interest yields and indexing capital values in exchange for reduced current interest payments. But each leads to many painful choices.

Countries that restructure their national budgets need a clear strategy and a concrete plan of action. They have to analyse the institutional and political obstacles to reform—and design realistic proposals for overcoming them.

Such policies and strategies should not be confined to developing countries. The rich countries, too, have made puzzling decisions on the allocation of national resources. Some of them steadily reduced their spending on social priority areas during the 1980s. True, the private spending on human development in these countries is considerable. But complementary public funding could have helped tackle urgent social problems, ranging from homelessness to drug addiction, from pollution to the decline of public transport systems. Achieving the proper balance between private and public spending—and *within* public spending—is critical for many industrial countries in tackling the accumulating social and human agenda.

4. Reallocating social expenditures

To develop a sound basis for analysing public spending on human development, countries should monitor four ratios:

- *The public expenditure ratio*—the percentage of national income that goes into public expenditure.

Nearly \$50 billion a year can be released in developing countries for more productive purposes

The human expenditure ratio should become one of the principal guides to public spending policy

- *The social allocation ratio*—the percentage of public expenditure earmarked for social services.
- *The social priority ratio*—the percentage of social expenditure devoted to human priority concerns.
- *The human expenditure ratio*—the percentage of national income devoted to human priority concerns.

The human expenditure ratio is the product of the first three ratios. A powerful operational tool, it allows policy-makers who want to restructure their budgets to see clearly the available options.

If public expenditure is already high (as in many developing countries) but the social allocation ratio is low (as in Indonesia), the budget will need to be reassessed to see which areas of expenditure could be reduced. Military spending, debt servicing, prestige projects and loss-making public enterprises would all be likely candidates.

If the first two ratios are comparatively high but the ultimate human development impact is low (as in Pakistan), the social priority ratio must be increased. For the poorest countries, this is likely to involve arranging a better balance between curative hospitals and primary health care, between universities and primary schools, and between focusing attention on the cities and on the rural areas, where the majority of poor people live.

If the problem is a low public expenditure ratio (as in Bangladesh), raising this—and therefore raising revenue—could be an essential part of the strategy.

Careful examination of the human expenditure ratios for many developing countries suggests several policy conclusions:

- The human expenditure ratio may need to be at least 5% if a country wishes to do well on human development.
- Countries can achieve this in different ways, both efficient and inefficient. An efficient option is to keep the public expenditure ratio moderate (around 25%), to allocate much of this to the social sectors (more than 40%) and to focus on the social priority areas (giving them more than 50%). An inefficient option is to withdraw a large part of national income into the public sector, to depress private investment and initiative and to restrict economic growth and resource ex-

pansion. In several cases, total public expenditure can be cut (perhaps encouraging more private investment) and yet the government can spend more money on human concerns.

- Government spending need not be extensive if GNP growth is high and rather equitable—or if the private sector and non-governmental organizations (NGOs) are extremely active in social spending.

- High government spending with low social priorities is the worst case. If over 25% to 35% of national income is channelled through the government budget, and yet less than 2% of GNP goes into human priority concerns (as in Brazil, Thailand and Sierra Leone), this is the worst of all possible worlds. The public sector is huge, yet the majority of the people do not gain.

- Several countries have moved beyond basic priorities. Mauritius, Sri Lanka, Singapore, Argentina and the Republic of Korea may have only a moderate human expenditure ratio when the priorities considered are basic ones. But they already have high levels of human development and can therefore shift their focus to social services at the higher levels.

The human expenditure ratio should become one of the principal guides to public spending policy. But a high public expenditure ratio can be avoided. When resources are tight, greater attention must be paid to allocation priorities and efficiency in spending. It is wrong, however, to confuse a plea for greater efficiency with indifference to economic growth or the mobilization of additional resources. It is ultimately the actual level of human expenditure per head that really counts. But the best argument for having more resources go to human development is to spend the existing resources well.

5. Cost savings and efficiency

Most countries could use existing resources more efficiently—by adopting more decentralized, participatory approaches to development, by making prudent economies and reducing unit costs, by charging many users for the benefits they receive and by encouraging private initiative in both the financing and delivery of social services.

Many countries have adopted measures

along these lines. There now is an international body of experience from which everyone can learn something relevant to their own circumstances. Here are just a few of the lessons.

- *Involving the community*—A community self-help water programme in Malawi—in which the government provides equipment and training, and the community provides labour for construction and maintenance and local leaders are involved in planning and design—benefits over one million people.

- *Involving NGOs*—It is often taken for granted that the provision of social services is the government's responsibility. This need not be so. The current trend is towards greater involvement of private organizations in the provision of services. The trend is towards choices and away from standardization, towards smaller-scale and away from centralization. NGOs are important in all this. The Bangladesh Rural Advancement Committee (BRAC) schools in Bangladesh provide primary education annually for only \$15 per pupil. The cost has been kept down in several ways—among them, involving village leaders and parents, using simple classrooms and allowing some instruction to be given by teachers who have limited training.

- *Improving management*—Simple management changes in the principal hospital in Malawi could lead to savings of two-fifths in recurrent non-salary expenditures.

- *Using double-shift schools*—Zambia has used double (and even triple) shifts in classrooms to reduce its capital costs in education by almost half.

- *Concentrating on basic drugs*—Average medicine consumption in developing countries was \$5.40 per head in 1985. Yet basic and essential drugs need cost only \$1.00 per head, and an even more basic list could be provided for \$0.25.

- *Food subsidies*—An important social service in many developing countries, food subsidies can be a vital tool for transferring income to the poor and for improving their nutritional status. The challenge is to target the subsidies so that they support the nutrition of the poor most efficiently. There are trade-offs, of course: the more narrowly targeted a programme, the greater the risk that some of the most vulnerable may be missed.

Subsidizing basic commodities that are mainly consumed by the poor, providing free school meals and distributing food through health clinics can be very effective and efficient.

- *Cheaper technology*—A pump and well-construction project in India now allows people to pump water from a deep well for capital costs of less than \$1.00 a year per user.

Limited funds can be stretched by exploiting these ideas and others. The potential for achieving both greater efficiency and greater effectiveness is clear when one looks at the costs for the same services in different countries.

Another approach to reducing costs for the public sector is to charge users for the services they receive. User charges have produced mixed results in developing countries, so far recovering only a modest proportion of costs. Their success or failure often depends on the sector in question. User fees for transport and communication appear to have fewer disadvantages than user fees in the social sectors.

In most African countries, user fees have recouped less than 5% of government expenditure on health—the higher performers being Ethiopia (12%), Mauritania (12%) and Ghana (15%). In most Asian countries, fees have recovered less than 5% of primary education costs. Only in secondary and higher education are the recovery rates beyond 10%.

One problem is that even modest charges can exclude users from the services. So, many governments prefer to offer primary health care and primary education free—partly as a public good, partly to enhance equality of opportunity, but mainly to meet the basic needs of their citizens.

The review of development experience shows that the following principles are useful in designing human development programmes:

- *Primary education*—Primary education is a basic human right and should be provided free. There is also a case for providing public secondary education free. But tertiary education is a different matter: it is expensive and covers only a small proportion of the population, generally from the upper income groups. User charges may therefore be appropriate here—if they are combined with a system of

Food subsidies can be a vital tool for transferring income to the poor

For aid donors as a whole, the aid human expenditure ratio is 0.026% of their combined GNP

loans and scholarships for the needy.

- *Health care*—Access to primary health care should be universal and free. Governments should aim to make savings in this area by adopting an essential drugs programme, based on competitive bidding on the open market—and on making the distribution system more efficient. They should nevertheless charge for certain kinds of hospital treatment.

- *Water and sanitation*—Cross-subsidies should be introduced, with poorer neighbourhoods paying less for their services, and richer areas more.

- *Local use of revenue*—If charges are made for any service, the revenue should be used to benefit priority services, especially at the community level, so that people can see an improvement in the services they pay for.

6. International aid

Aid programmes offer great potential for restructuring. The pay-off could be enormous. If only one-third of today's aid were committed to human priority areas, the aid allocation to these areas would increase fourfold.

Aid budgets, like government expenditure, can be analysed through four ratios:

- *The aid expenditure ratio*—the percentage of a donor's GNP going to development aid.

- *The aid social allocation ratio*—the percentage of each donor's aid that goes to the social sectors.

- *The aid social priority ratio*—the percentage of social sector aid committed to human priority areas.

- *The aid human expenditure ratio*—the product of the three foregoing ratios, and thus the percentage of a donor's GNP going to human priority areas in recipient countries. For aid donors as a whole, this is a tiny figure—0.026% of their combined GNP.

The arithmetic is simple. The official development assistance (ODA) for all countries currently represents 0.3% of their combined GNP. Of this, 23% went to social sectors in 1989, and of the social sector spending, 37% went to human development priority areas. In education, only 7% went to primary schooling. In health, only 27% was for primary health care. And in water supply and sanitation, only 19% went to rural areas.

These averages naturally conceal significant differences among donors. The Nordic countries devote over 0.9% of their GNP to aid, and their aid human expenditure ratios range between 0.05% and 0.11%—many times the overall average for donors. The USA, by contrast, commits only 0.15% of its GNP to aid. And much of this goes as defence support to Israel, Egypt, Turkey, Pakistan and the Philippines. As a result, its aid human expenditure ratio is only 0.01%.

Some people argue that it does not matter if aid itself misses priority targets, that any aid will permit the recipient government to release funds to spend elsewhere. Plausible in theory, this is often wrong in practice.

For many poor countries, aid constitutes such a high proportion of their development budgets that aid priorities inevitably become development priorities. In Burundi, aid provides 56% of the total expenditure on health and education, and the proportion is also high in Chad (53%), Uganda (48%), Somalia (38%) and Ethiopia (35%).

Finance ministers of developing countries are, in any case, unlikely to respond well to such arguments. They are reluctant in the best of times to undertake social expenditures—which offer little immediate financial return and which demand recurring expenditure long into the future. Ministers can hardly be encouraged to increase social spending if donors are also reluctant to finance recurring expenditure—and prefer instead to give money for capital-intensive schemes that just happen to require machinery and technical assistance from the same donor countries.

Of all the categories of development aid, technical assistance is the ripest for reassessment. Africa receives \$6 billion in technical assistance each year, and the figure is rising. While Asia received less than \$5 of ODA per person, Africa receives over \$22 per person. Yet Africa still has some of the lowest human development levels in the world.

The problem is that too much is often being spent on foreign expertise and too little on building up local institutions and mobilizing national expertise.

If the main focus of technical assistance were to build up national capacity, this would do more than reduce the costs of assistance. It would also release millions of dollars for

more productive purposes. And it would, no doubt, enhance the effectiveness of aid.

The Development Assistance Committee (DAC) of the Organisation for Economic Co-operation and Development (OECD) could become the focal point for restructuring aid budgets. Its Secretariat could contribute much by thoroughly analysing the impact of existing aid priorities on the human development levels of recipient countries. It could also help by publishing regularly the aid social allocation ratio, as well as the aid social priority ratio, for each donor.

Improved data availability and greater budgetary transparency will be critical to shifting external assistance towards human development—especially during periods of aid stagnation. They will help strengthen the arguments of those who want to narrow the gap between policy priorities and budgetary priorities.

7. Political strategy

However large the scope, restructuring for human development is likely only with a workable political strategy.

If resources are poorly distributed, the cause generally is political. Protected interests and power structures—military establishments, urban and rural elites, corrupt bureaucracies—all can cause maldistribution.

Restructuring can, therefore, take place only if political pressures are successfully mobilized in its favour. There is no primer for serious policy-makers committed to a fundamental restructuring of their economic and political systems; they normally find their own routes. But experience suggests some general approaches that can foster a gradual, reformist programme.

- *Encourage democratic freedom*—If a society is free, influence does not always require affluence. Democracy is a valuable ally of all. The poor have thus often done well in countries with multiparty systems and free elections. A Latin American example is Costa Rica. In Africa: Botswana and Mauritius.
- *Invoke common interests*—Basic social services like primary health care have many advocates, and spreading the message is generally the key to even wider acceptance. Once it is fully recognized how cheap many options

are, and how they can benefit the whole society, most opposition melts away. Immunizing a child against the six leading child-killing diseases costs only \$0.50 a year, and oral rehydration against diarrhoea costs only \$0.10.

- *Compensate powerful groups*—Sometimes the reallocation of resources to the poor can only be accomplished by offering sweeteners to the rich. Many food subsidy schemes, for example, have been allowed to reach the not-so-poor to make implementing the whole programme politically palatable—as at various times in Morocco, Sri Lanka, Colombia and Egypt.

When tough policy measures are taken, they often need to be accompanied by some compensatory action. In Ghana in the late 1980s, adjustment was accompanied by a variety of compensatory interventions, including public works and health and nutrition programmes.

- *Empower weaker groups*—The best way to achieve this is to decentralize decision-making and to allow people full participation in planning and implementing programmes that affect their lives—as demonstrated by such community organizations as the Carvajal foundation in Colombia, and by the Six-S movement in West Africa.
- *Channel credit to the poor*—Access to credit is another means of access to power. Credit is too often denied to the poor in developing countries—even though it is an easy way to offer support, and even though it is less likely to run into political opposition than other forms of assistance because it engages the poor in the productive process. Such support has done much in Ghana, Rwanda, Cameroon and the Philippines.
- *Allow a free press*—The media can be a powerful ally to more participatory development—and to the poor. Some suggest that you cannot have a famine in a country with a free press. The reason is that an uncensored press makes it much more difficult to conceal dramatic social problems.
- *Coordinate external pressures*—External development partners can often raise sensitive political issues, such as those surrounding land reform or military expenditures. Some donors might be reluctant to do so, preferring to forge an alliance with the government rather than with the people. But

Restructuring for human development is likely only with a workable political strategy

Developing countries can save over \$10 billion a year by merely freezing their military expenditure at current levels

structural reform could provide an opportunity to take a more positive role. If donors were to press for these kinds of reform, they would probably discover many allies in the developing countries—and achieve changes much greater than the marginal improvements they usually settle for. The recent focus of the IMF and the World Bank on military expenditures is a case in point.

8. National compacts for human development

Governments can base their plans for the next decade on comprehensive and realistically costed national strategies for human development.

The Report suggests a four-point agenda for such strategies:

- *A human development profile*—which spells out past achievements, continuing human deprivation and disparities and future goals.
- *Identified and costed targets*—to put human development into practice. These targets should be accompanied by alternative approaches that have been reviewed and costed—and that show what is financially and politically feasible over a specified period.
- *Budget restructuring plans*—to maximize the human expenditure ratio and strengthen the case for additional resources, nationally and internationally.
- *A viable political strategy*—to help develop a national consensus on, and public support for, economic and social reform.

9. A global compact for human development

The world community can establish a global compact for human development—one that puts people at the centre of every issue.

We are a global community in every sense. Not just economically interdependent, but sharing a common environment—and exposed to common risks of war and social dislocation. Consider the damage that will be done if we do not fully accept this. Global trade and economic growth will suffer. The environment will be further degraded. Wars will break out to settle unresolved tensions.

Millions deprived of economic opportunity will migrate in search of a better life.

A global compact for human development should be based on the recognition of the need for a new human order. Each issue should be analysed for its impact on people, designed around the following central components:

- *Realistic human goals for the year 2000*—Human goals for the year 2000, based on the national human development strategies suggested earlier, would include universal primary education, primary health care, family planning, safe water for all and the elimination of serious malnutrition. The additional costs of these goals are estimated at around \$20 billion a year. Just as important though, will be economic targets—particularly the expansion of productive, remunerative and satisfying employment opportunities.
- *A peace dividend*—Most of the additional costs could be met from cuts in military spending. If industrial countries were to reduce their military spending by 3% a year, this could provide \$25 billion a year. And if developing countries merely freeze their expenditure at current levels, this would save potential future increases of over \$10 billion a year. With these and other resources, the developing and industrial countries could agree on a notional sharing of the additional costs of human development in the 1990s—say, in a ratio of two-thirds for the developing countries to one-third for the industrialized.
- *Aid, a mutual commitment*—Donor countries can reassess their aid priorities and commit themselves to the support of human development. For countries keen on advancing human development, the way could be open to a new and productive era for official development assistance—one based on a mutual commitment to human development. Requests for aid should include plans to cut back military budgets and to increase the human expenditure ratio. Donors could offer human adjustment assistance to smooth the potentially difficult socio-economic transition.
- *Debt, trade and foreign investment*—A favourable international economic environment is essential for advancing human development and sustaining it through economic growth. For this, it is necessary to resolve the

international debt crisis, to restore adequate capital flows on acceptable terms to the developing countries, and to create an open world trading community, in which exports from developing countries have greater access to the markets of the industrial countries.

• • •

Human Development Report 1991 lays the foundations for a fresh set of priorities. It explains how they can be chosen, how they can be assessed—and why we can afford to pay for them.

Future reports will build on this foundation. The aim will be to refine further the concepts and the methods of measurement—

and to distil more practical experience from many countries. Another aim will be to do more research and analysis on participatory development and to examine the global dimensions of human development, looking at familiar international issues from a human perspective.

The final message of this year's Report is one of hope. If the obstacles to human development lie in the paucity of resources, in insuperable technical barriers, the task would be hopeless. We know instead that it is too often a lack of political commitment, not of resources, that is the ultimate cause of human neglect. If we can mobilize the political base for action—nationally and globally—the future of human development is secure.

*If we can mobilize
the political base
for action, the
future of human
development
is secure*



Measuring human development and freedom

Human development is moving to centre stage in the 1990s. For too long, the question has been: how much is a nation producing? Now the question must be: how are its people faring?

The real objective of development is to increase people's development choices. Income is one aspect of these choices—and an extremely important one—but it is not the sum-total of human existence. Health, education, a good physical environment and freedom—to name a few other components of well-being—may be just as important.

A realistic view is that growth in income and an expansion of economic opportunities are necessary preconditions of human development (figure 1.1 and box 1.1). Without growth, the social agenda proposed in this Report cannot be carried out. Although growth is not the end of development, the absence of growth often is. But growth should not merely be some aggregate number projected into the future, for the quality of growth is important. The aim should be growth that is:

- *Participatory*—allowing for private initiative and broad-based people's involvement.
- *Distributed well*—benefiting all people.
- *Sustainable*—since raising future production may demand current sacrifices.

Growth is certainly needed, especially in the South, where development levels are low. In all countries, developing and industrial, the growth issue should be one of quality rather than quantity, one of more equitable distribution rather than mere expansion.

The relationship between economic growth and the social concerns expressed in this Report is complex. While growth is necessary for human development, most types of human expenditure will, in turn, accelerate growth. A healthy, well-nourished, well-educated and skilled labour force is the best

foundation for growth. Japan, Singapore and the Republic of Korea invested massively in people—an investment that yielded its fruit in rapid growth.

This kind of investment in the social sectors can have two valuable purposes. It can support a strategy of growth with equity—or it can correct an inequitable growth strategy.

There is no conflict between growth and human development—though there may be a conflict between those who would allocate resources to the rich and those who would direct them to the poor.

While the concept of human development, as presented in the first Report, was widely accepted, it may be further elaborated along the following lines.

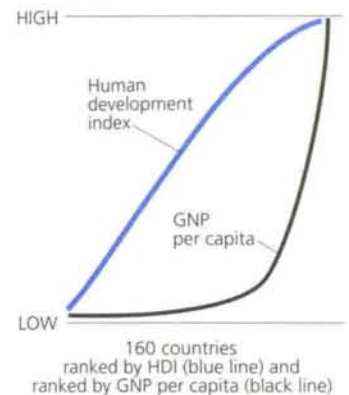
People must be at the centre of human development. Development has to be woven around people, not people around development. It has to be development *of* the people, *by* the people, *for* the people.

- *Development of the people*—every society must invest in the education, health, nutrition and social well-being of its people, so that they can play their full role in the country's economic, political and social life. With more emphasis now being placed on the market and on technological progress, the development *of* people will make an increasingly critical contribution to economic success.

- *Development by the people*—through appropriate structures of decision-making, people must participate fully in the planning and implementation of development strategies. These strategies should provide sufficient opportunities for income and employment growth, so that human capabilities are properly used and human creativity is given its fullest expression.

- *Development for the people*—development must satisfy everyone's needs, and

FIGURE 1.1
Human development and income



The issues raised by the 1990 Human Development Report

The first *Human Development Report*, published last year, defined human development as the process of increasing people's choices. It focused equally on the formation of human capabilities (through investing in people) and on the use of those capabilities (through creating a participatory framework for income and employment growth). This new definition differs from other concepts of development.

Some have seen human development as "human resource development". But investing in people, or human capital formation, is only one aspect of human development. It leaves out all discussion of participation—development by people and development for people.

Others have presented human development as a sectoral issue—investment in education, health and other social services. But human development is also a multisectoral, macroeconomic policy concern. Its ultimate objective is to ensure that economic growth translates into improved well-being of the people.

This view has led some critics to allege that human development strategies do not give enough attention to economic growth. Nothing could be further from the truth.

The five main conclusions of the first Report show that the basic message was not a disregard for economic growth, but a renewed concern to translate this growth into human lives.

1. It is wrong to suggest that the development process has failed in most developing countries in the last three decades.

Judged by basic indicators of human development, it has succeeded beyond any reasonable expectations. Average life expectancy has increased by 16 years, adult literacy by 40% and per capita nutritional levels by over 20%. And child mortality rates have been halved during this period.

Developing countries have achieved in 30 years what it took industrial countries nearly a century to accomplish. The income disparity between the North and the South is still very large: the South's per capita income is only 6% of the North's. But in human terms, the gap is closing fast. Average life expectancy in the South is 84% of the North's average, adult literacy 61% and nutrition measured by daily calorie supply 80%.

True, the past record of the developing world is uneven—between various regions and countries, and even within countries. True

also, the closing of human gaps between the North and the South has been witnessed only in the basic human indicators (such as life expectancy, adult literacy and infant and child mortality) and not in higher levels of education and health care, or in science and technology. True, in addition, there remains a large unfinished agenda of human development—with one-quarter of the people in developing countries still deprived of basic human necessities, minimum income levels and decent social services.

But the overall policy conclusion is clear. The development process *does* work. International development cooperation *has* made a difference. And the remaining agenda of human development *is* manageable in the 1990s if development priorities are properly chosen. It is certainly a message of hope, though not of complacency.

2. 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 world offers too many uncomfortable examples of a wide divergence between income and human development levels. Adult literacy in Saudi Arabia, for example, is lower than in Sri Lanka, despite the fact that its per capita income is 15 times higher. Child mortality in Brazil is four times higher than that in Jamaica, even though its per capita income is twice that of Jamaica.

Why such wide divergences between income and human development levels? The answer lies in distribution: of income, of land, of credit, of social services and of job opportunities. If a better link is to be created between income and human development, it is mandatory to adopt policies that distribute these economic assets and opportunities more equitably.

3. It is conceptually and practically wrong to regard poverty alleviation as a goal distinct from human development.

Most people are poor because they have neither land, nor capital, nor credit, nor the op-

portunity of a decent job. Nor do they have access to adequate social services. The only long-term remedy is to invest in poor people, particularly in their education and training, and to bring them into the mainstream of development. Poverty should not be regarded as a residual of economic growth—to be treated separately, without modifying the growth strategies themselves. Governments should not tackle poverty *after* economic growth. They should adopt economic growth models that have the elimination of poverty as one of their prime objectives.

4. It is wrong to insist that markets alone can deliver balanced patterns of economic growth and human development.

There must be a judicious mix of market efficiency and social responsibility. Even in many free-enterprise industrial nations, 15-20% of GNP is being recycled through the budgets to support a social safety net that offers unemployment and welfare benefits.

In developing countries, where poverty and income distribution are much worse and social services are less adequate than in industrial countries, there is a greater need for a careful balance between private and public sector roles. The present situation is topsy-turvy in many developing countries. The government often intervenes inefficiently in the productive processes of agriculture and industry (where it hardly belongs). Then it spends inadequately (3-4% of GNP) on health, education and the other social services, which should be its primary responsibility.

Public spending is, in fact, misallocated in many developing countries. And some of it is unwisely targeted on what the private sector can do best rather than on what the public sector must do. This situation must be reversed. It is also important that social safety nets are fully protected during periods of rapid growth or social transformation. Otherwise, there may be serious political upheavals to disrupt the development process.

5. It is wrong to suggest that developing countries do not have sufficient resources to take care of their human development goals.

In reality, considerable potential exists for restructuring existing priorities in their national budgets. Many significant changes can be made without necessarily increasing budget expenditures. It is quite possible to balance budgets without unbalancing people's lives. It was this conclusion which prompted the 1991 Report to have "financing human development" as its theme.

provide opportunities for all. Only then will it be truly human-oriented. This would also include providing essential social safety nets.

Thus it is that development increases people's choices—with two caveats. First, enhancing the choices of one individual, or one section of society, should not restrict the choices of another. This calls for equity in human relationships. Second, improving the lives of the present generation should not mortgage the choices for future generations—that is, the development process must be sustainable.

Refinements in the human development index

Last year's Report went beyond defining human development by proposing a way to measure it. The human development index (HDI) combined national income with two social indicators—adult literacy and life expectancy—to give a composite measure of human progress. It was fully recognized then, as now, that the *concept* of human development is much broader than its *measurement*. The HDI concentrated on just three of the many and changing essential choices that define human development. But this was just the start of a process, and this year's Report suggests some refinements.

The basic simplicity of the original human development index has been maintained, since it is a reliable measure of socio-economic progress (technical note 1). Its three components continue to be longevity, knowledge and decent living standards. But some of the indicators that measure these three components are now better defined (technical note 2). Educational attainment is measured by a combination of adult literacy and mean years of schooling. This acknowledges the importance of high levels of skill formation—and greatly helps in differentiating countries near the top of the ladder, particularly the industrial economies. The idea of diminishing returns to income is now better captured by giving a progressively lower weight to income beyond the poverty cut-off point, rather than the zero weight previously given. That zero weight was found to be too drastic an adjustment, particularly for higher income societies.

The modified human development index shows that, of the industrial countries, Japan still enjoys the highest rating, while Romania is at the bottom (table 1.1). Of the developing countries, Barbados leads the HDI ranking, with Sierra Leone at the lowest end (table 1.2).

Since the last Report, 13 countries have changed their rank by nine places or more. These changes do not reflect any spectacular change in actual performance within a year. They result from a more refined and sensitive HDI and from improved availability of data. Countries that have slipped by nine places or more include Cambodia, Chile, Ethiopia, Iraq, Laos and Uganda. Those that have improved by nine places or more include Congo, the Dominican Republic, Namibia, Oman and the USA.

Improving the human development index continues to be an evolutionary search for a more satisfactory yardstick of socio-economic progress. The HDI extends our understanding beyond the GNP measure—by reflecting, if still too dimly, how economic growth translates into human well-being. There are, for example, 26 countries whose HDI rank is 20 or more places lower than their per capita income rank, showing that they have considerable potential to improve their human development levels—by spending their incomes better and planning their investment priorities more wisely. Fourteen of these countries are in Africa—Angola, Benin, Cameroon, Congo, Côte d'Ivoire, Djibouti, Gabon, Guinea, Mauritania, Namibia, Senegal, Seychelles, Sierra Leone and Sudan. Ten are Arab States—Algeria, Bahrain, Iraq, Kuwait, Libya, Oman, Qatar, Saudi Arabia, United Arab Emirates and Yemen. And two are in Asia—Brunei and Iran.

The wide divergence between their rankings in GNP and in human development highlights the distance they have yet to travel in translating economic growth into improvements in the lives of their people—so that their levels of human development are comparable to countries with similar per capita incomes.

The human development index advances our understanding of socio-economic achievement. But it still does not capture all

TABLE 1.1
HDI ranking for industrial countries

	1990 HDI rank	1990 HDI value
Japan	1	0.993
Canada	2	0.983
Iceland	3	0.983
Sweden	4	0.982
Switzerland	5	0.981
Norway	6	0.978
USA	7	0.976
Netherlands	8	0.976
Australia	9	0.973
France	10	0.971
United Kingdom	11	0.967
Denmark	12	0.967
Finland	13	0.963
Germany	14	0.959
New Zealand	15	0.959
Belgium	16	0.958
Austria	17	0.957
Italy	18	0.955
Luxembourg	19	0.954
Spain	20	0.951
Israel	21	0.950
Ireland	23	0.945
Greece	24	0.934
Czechoslovakia	27	0.920
Malta	29	0.917
Hungary	30	0.911
USSR	31	0.908
Bulgaria	33	0.899
Yugoslavia	34	0.893
Portugal	36	0.879
Poland	41	0.863
Albania	49	0.821
Romania	58	0.762

the dimensions of human choices. It is a national average that conceals important differences in the regional, local, ethnic and personal distributions of human development indicators.

Some of these differences are enormous. In Sub-Saharan Africa, for example, only an estimated 26% of rural dwellers have access to safe water, compared with 74% for those who live in urban areas. Life expectancy for the bottom income group in Mexico is 53 years, compared with 73 years for the top income group. The female literacy rate in Pakistan is less than half the male literacy

rate. In the poor North-East of Brazil, infant mortality rates were more than twice those in the rest of the country in 1986.

These examples show that efforts must be made to disaggregate the human development index so that it can present a living profile of the socio-economic condition of people. That is the long-term agenda, and considerable efforts are under way in basic research and data collection. One encouraging fact is that the human development index lends itself to disaggregation.

Some distinct improvements in the HDI have been included in this Report, beyond

TABLE 1.2
HDI ranking for developing countries

	1990 HDI rank	1990 HDI value		1990 HDI rank	1990 HDI value		1990 HDI rank	1990 HDI value
Barbados	22	0.945	Libyan Arab Jamahiriya	76	0.665	Zambia	118	0.351
Hong Kong	25	0.934	Ecuador	77	0.655	Cameroon	119	0.328
Cyprus	26	0.923	Peru	78	0.644	Pakistan	120	0.311
Bahamas	28	0.920	Saint Vincent	79	0.636	Ghana	121	0.311
Uruguay	32	0.905	Dominican Rep.	80	0.622	Côte d'Ivoire	122	0.311
Korea, Rep. of	35	0.884	Samoa	81	0.618	India	123	0.308
Singapore	37	0.879	China	82	0.614	Zaire	124	0.299
Chile	38	0.878	Jordan	83	0.614	Haiti	125	0.296
Trinidad and Tobago	39	0.876	Philippines	84	0.613	Comoros	126	0.274
Costa Rica	40	0.876	Nicaragua	85	0.612	Tanzania, U. Rep. of	127	0.266
Brunei Darussalam	42	0.861	Oman	86	0.604	Lao People's Dem. Rep.	128	0.253
Argentina	43	0.854	Mongolia	87	0.596	Nigeria	129	0.242
Venezuela	44	0.848	Lebanon	88	0.592	Yemen	130	0.242
Mexico	45	0.838	Guyana	89	0.589	Togo	131	0.225
Antigua and Barbuda	46	0.832	Tunisia	90	0.588	Liberia	132	0.220
Mauritius	47	0.831	Iraq	91	0.582	Rwanda	133	0.213
Kuwait	48	0.827	Iran, Islamic Rep. of	92	0.577	Uganda	134	0.204
Qatar	50	0.812	Maldives	93	0.534	Senegal	135	0.189
Bahrain	51	0.810	El Salvador	94	0.524	Bangladesh	136	0.186
Malaysia	52	0.802	Botswana	95	0.524	Equatorial Guinea	137	0.186
Dominica	53	0.800	Solomon Islands	96	0.521	Malawi	138	0.179
Panama	54	0.796	Gabon	97	0.510	Burundi	139	0.177
Suriname	55	0.792	Indonesia	98	0.499	Cambodia	140	0.175
United Arab Emirates	56	0.767	Viet Nam	99	0.498	Ethiopia	141	0.166
South Africa	57	0.766	Honduras	100	0.492	Central African Rep.	142	0.166
Jamaica	59	0.761	Vanuatu	101	0.490	Sudan	143	0.164
Brazil	60	0.759	Algeria	102	0.490	Bhutan	144	0.159
Colombia	61	0.757	Guatemala	103	0.488	Nepal	145	0.158
Cuba	62	0.754	Swaziland	104	0.462	Mozambique	146	0.155
Seychelles	63	0.752	Namibia	105	0.440	Angola	147	0.150
Grenada	64	0.751	Myanmar	106	0.437	Mauritania	148	0.140
Saint Kitts and Nevis	65	0.719	Lesotho	107	0.432	Somalia	149	0.118
Thailand	66	0.713	Morocco	108	0.431	Benin	150	0.114
Belize	67	0.700	Cape Verde	109	0.428	Guinea-Bissau	151	0.088
Saint Lucia	68	0.699	Bolivia	110	0.416	Chad	152	0.087
Saudi Arabia	69	0.697	Zimbabwe	111	0.413	Djibouti	153	0.083
Turkey	70	0.694	Sao Tome and Principe	112	0.399	Burkina Faso	154	0.081
Fiji	71	0.689	Kenya	113	0.399	Niger	155	0.079
Syrian Arab Rep.	72	0.681	Egypt	114	0.394	Mali	156	0.072
Paraguay	73	0.667	Congo	115	0.374	Afghanistan	157	0.069
Korea, Dem. Rep. of	74	0.665	Madagascar	116	0.371	Guinea	158	0.066
Sri Lanka	75	0.665	Papua New Guinea	117	0.353	Gambia	159	0.064
						Sierra Leone	160	0.048

the refinement in the components of the HDI summarized earlier.

First, it has been possible to obtain, for 30 countries, separate female and male estimates of life expectancy, adult literacy, wage rates and mean years of schooling. Separate female and male HDIs for these countries show that female-male disparities are very wide in many developing countries (technical note 3). The female HDI is only half the male HDI in Kenya, two-thirds in the Republic of Korea and over three-quarters in the Philippines.

In industrial countries, greater equality between women and men has been achieved in many basic human indicators—although large disparities persist. In Sweden, the female HDI is 90% that of male, and in Italy, it is 79%. One way of reflecting gender disparity in the country's overall HDI is to construct a gender-sensitive HDI—applying the disparity between the female and male HDIs to the overall HDI. After making this refinement for the 30 countries having the necessary data, the HDI values for all 30 decline (figure 1.2 and table 1.3). If gender disparity is considered—and it must be if human development is the development of *all*—Japan's number 1 HDI ranking among the 30 countries, for example, drops to number 17, more than halfway down, and Finland moves up, from number 12 to number 1.

A second improvement in the HDI has been to make it more sensitive to the distribution of income within a country (technical note 4). Actual or interpolated Gini coefficients (measures of distribution) were obtained for 53 countries—and used to compute human development indices modified by income distribution (table 1.4). The ranking of some countries with fairly unequal income distributions (Australia, Canada, New Zealand and Portugal) slips significantly, but improves for countries with better income distributions (Belgium, Colombia, Italy, the Republic of Korea and the Netherlands). The compilation of this modified index once again drives home the point that a country's human development achievements are greatly diminished if they are not shared by all its people (figure 1.3).

A third refinement of the HDI has been an attempt to measure human progress over

15 years (1970-85) by compiling the HDI on a comparable basis for 110 countries (figure 1.4 and technical note 5). Looking at the HDI over time, we can see tremendous progress co-existing with low absolute levels of human development. Niger, Mali and the former Yemen Arab Republic trebled their HDIs during 1970-85, but the levels remain quite low in their achieved human development. Afghanistan, Burkina Faso, Senegal and Somalia doubled their HDIs, but are still among the bottom 25 countries. This pattern shows that it is easier to increase life expectancy and literacy from very low levels. Among the top countries, the percentage growth rates in literacy and life expectancy are obviously smaller. But Mexico, Colombia, Singapore, Hong Kong, Chile and Venezuela still achieved impressive increases of over 20% in their HDI during 1970-85.

What is more interesting is the relationship between the growth in GNP and the

FIGURE 1.2
Adjusting the HDI
for male-female disparities

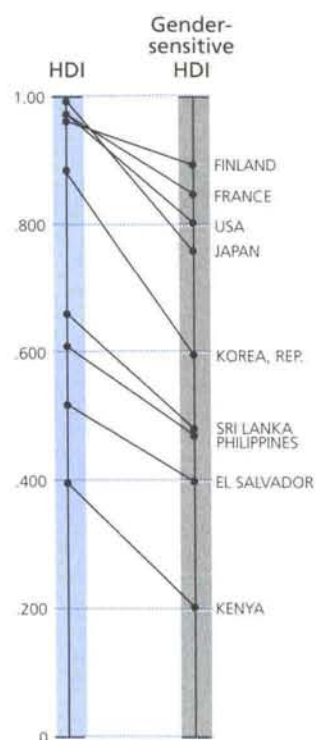


TABLE 1.3
Gender-sensitive HDI

	Gender-sensitive HDI	Percentage difference between HDI and gender-sensitive HDI
Finland	0.902	-6.3
Sweden	0.886	-9.8
Denmark	0.878	-9.1
France	0.849	-12.5
Norway	0.845	-13.6
Australia	0.843	-13.4
Austria	0.832	-13.1
Czechoslovakia	0.830	-9.9
Canada	0.813	-17.3
USA	0.809	-17.2
Switzerland	0.794	-19.0
Germany, Fed. Rep. ^a	0.792	-17.5
United Kingdom	0.783	-19.1
New Zealand	0.776	-19.1
Netherlands	0.770	-21.1
Belgium	0.768	-19.8
Japan	0.764	-23.0
Italy	0.750	-21.5
Ireland	0.688	-27.2
Portugal	0.673	-23.5
Hong Kong	0.654	-30.0
Costa Rica	0.612	-30.2
Korea, Rep. of	0.600	-32.1
Singapore	0.568	-35.4
Paraguay	0.486	-27.1
Sri Lanka	0.484	-27.2
Philippines	0.475	-22.5
El Salvador	0.395	-24.6
Myanmar	0.289	-33.8
Kenya	0.205	-48.5

a. Data for former German Democratic Republic not included.

FIGURE 1.3

Adjusting the HDI for income distribution

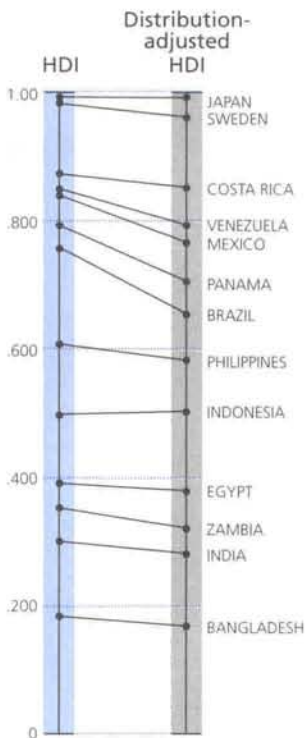
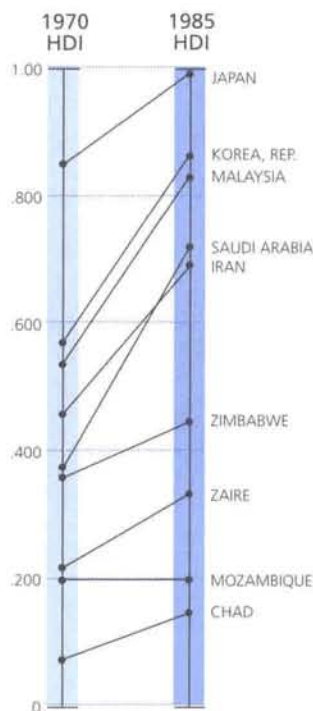


FIGURE 1.4

Tracking the HDI over time



progress in human development. Some countries have used high GNP growth as a vehicle for improvement in human development (Botswana, Indonesia, the Republic of Korea, Malaysia and Tunisia). Others have managed progress through public policy action despite low GNP growth rates (Senegal, Kenya and Côte d'Ivoire are good examples).

TABLE 1.4
Distribution-adjusted HDI

	Distribution-adjusted HDI	Percentage difference between HDI and distribution-adjusted HDI
Japan	0.990	-0.3
Netherlands	0.972	-0.3
Sweden	0.963	-1.9
Switzerland	0.961	-2.0
Norway	0.956	-2.3
Belgium	0.951	-0.7
Canada	0.948	-3.5
United Kingdom	0.948	-2.0
USA	0.944	-3.3
Finland	0.941	-2.3
France	0.938	-3.4
Denmark	0.936	-3.1
Australia	0.935	-3.9
Spain	0.928	-2.4
Ireland	0.928	-1.8
Italy	0.923	-3.4
Israel	0.923	-2.8
New Zealand	0.921	-4.0
Korea, Rep. of	0.897	+1.5
Hungary	0.896	-1.7
Hong Kong	0.891	-4.6
Yugoslavia	0.868	-2.8
Singapore	0.865	-1.5
Costa Rica	0.852	-2.7
Chile	0.831	-5.3
Portugal	0.827	-5.9
Argentina	0.812	-4.9
Venezuela	0.793	-6.5
Mauritius	0.779	-6.2
Mexico	0.767	-8.4
Malaysia	0.743	-7.4
Colombia	0.720	-4.8
Panama	0.705	-11.4
Thailand	0.670	-6.0
Jamaica	0.665	-12.6
Brazil	0.652	-14.1
Sri Lanka	0.636	-4.3
Syrian Arab Rep.	0.631	-7.3
Turkey	0.629	-9.4
Philippines	0.584	-4.7
Tunisia	0.572	-2.7
Iran, Islamic Rep. of	0.538	-6.9
El Salvador	0.508	-3.1
Indonesia	0.503	+0.8
Honduras	0.436	-11.4
Egypt	0.383	-2.9
Kenya	0.372	-6.8
Zambia	0.325	-7.2
Pakistan	0.304	-2.5
India	0.288	-6.2
Côte d'Ivoire	0.268	-13.8
Bangladesh	0.170	-9.0
Nepal	0.128	-18.8

These changes in the measurement of human development—better estimates of the three components of the HDI, greater sensitivity to female-male and income distribution differences, and the computation of the HDI over time to monitor human progress—are all significant improvements. They add to the operational relevance of the HDI. And they greatly increase its contribution to understanding socio-economic progress. But there is still some distance to travel before the HDI can be used confidently to interpret reality and make key policy decisions.

The human freedom index

Human Development Report 1990 emphasized the importance of human freedom: "Human development is incomplete without human freedom. Throughout history, people have been willing to sacrifice their lives to gain national and personal liberty." That being the case, it was recognized that "Any index of human development should therefore give adequate weight to a society's human freedom in pursuit of material and social goals."

Yet the HDI does not include freedom. The problem is that freedom is easier to talk about than to measure. In this Report, a start has been made to reflect one of the most significant aspects of human life. The result, however imperfect, at least shows the direction that future work can take.

The many kinds of freedom generally belong to two broad "clusters". The first comprises "negative" freedoms, so called because they imply freedom *from* something—from arbitrary rule, from illegal arrest or from unwarranted attack on person or property. Whether in villages or nations, these freedoms have always had to be defended—often fought for. And a number of institutions have been developed by democratic systems to protect these freedoms—including the universal franchise, the secret ballot and the rule of law, which guarantees the rights of persons and property.

The second cluster comprises the "positive" freedoms. These are the freedoms to do something—to take part in the community's life, to organize opposition parties or trade union groups, or to go about without being "ashamed to appear in public", as Adam

Smith expressed it some 200 years ago. The most systematic codification of freedoms is in the United Nations Universal Declaration of Human Rights and in the International Covenants on Civil and Political Rights and on Economic, Social and Cultural Rights. These include many personal rights: the right to life, liberty and security of person; equality before the law; freedom of assembly; freedom of thought, religion and opinion; the right to work, the free choice of jobs; the right to an adequate standard of living—including adequate food, clothing, housing, education; the right to participate in community life; and so on.

Many people have attempted to classify human rights and to measure each country against that classification. The systems differ in their concepts, definitions and coverage. And none has so far gained universal, or even common, acceptance (technical note 6).

The one that offers the most systematic and extensive coverage is the index designed by Charles Humana. He examined various UN conventions and international treaties, and from them distilled 40 distinct criteria for judging freedom. These include freedom of movement, the rights of assembly and free speech, the rights to ethnic and gender equality, the rule of law, and other democratic freedoms. Humana's index is thus more than a political freedom index, more than a human rights index. It is a *human freedom* index. Constructed for 1985, the index covers only 88 countries because of the non-availability of data for other countries.

Applying a system of measurement to human freedoms will always be a precarious exercise. The first difficulty is to decide what constitutes serious violations of rights or curtailments of freedom. Does the fact that a few citizens of a country have had their passports revoked mean that the country does not, in principle, allow its citizens to leave the country? Does the fact that some critics of government cannot appear on state-controlled television mean that the country practices press censorship and should be marked down accordingly?

The second contentious area is the relative importance of different rights. Is the right to free assembly more important, or less important, than a free press? Is the right to

ethnic language more significant than the right to vote?

These questions will, no doubt, also arise in respect of the Humana index. And they should be posed. This will encourage more systematic research and studies on human freedom, which today are very scarce.

One aspect of the Humana index, in particular, is likely to be an issue of contention—the gradation of freedom violations ranging from “some violations or infringements” to “substantial oppression” and on to “total denial”. Adopting a simpler method of judgement, one that distinguishes between “freedom guaranteed” and “freedom violated” (a “one”–“zero” approach), gives an illuminating ranking of countries (box 1.2). No country among the 88 covered by the Humana index observes *all* freedoms. Sweden and Denmark top the list with 38 of the 40 measured freedoms guaranteed to their people, followed by the Netherlands with 37 freedoms. Iraq is at the bottom of the list; and Romania and the Libyan Arab Jamahiriya just above it.

But human freedom is a matter that can change very quickly. And it does. Between 1985 and 1990 many countries have witnessed political change, at times of dramatic speed and proportions. There are 18 countries that have recently moved towards greater freedom and democracy. On the whole, the world today is a much freer world than it was only five years ago.

Is there a correlation between human freedom and human development? Any systematic comparison is no doubt hampered by lack of information on certain countries. Nevertheless, for the countries having data, an interesting pattern emerges. Countries that rank high on one indicator also tend to rank high on the other. No doubt, in the mid-1980s, when Humana collected his information, several countries with fairly good levels of human development ranked low on freedom—the Eastern European countries, such countries as Argentina, Brazil and Paraguay in Latin America, and the Philippines in Asia. But they have since made significant strides towards greater democracy. The countries that ranked low on freedom in 1985 and continue to do so include a number of countries with low human development levels.

Human development is incomplete without human freedom

The human freedom index

The goal of human development is to increase people's choices. But for people to exercise their choices, they must enjoy freedom—cultural, social, economic and political.

The *World Human Rights Guide*, by Charles Humana, uses 40 indicators to measure freedom:

The right to

- travel in own country
- travel abroad
- peacefully associate and assemble
- teach ideas and receive information
- monitor human rights violations
- ethnic language

The freedom from

- forced or child labour
- compulsory work permits
- extra-judicial killings or "disappearances"
- torture or coercion
- capital punishment
- corporal punishment
- unlawful detention
- compulsory party or organization membership
- compulsory religion or state ideology in schools

- arts control
- political censorship of press
- censorship of mail or telephone-tapping

The freedom for

- peaceful political opposition
- multiparty elections by secret and universal ballot
- political and legal equality for women
- social and economic equality for ethnic minorities
- independent newspapers
- independent book publishing
- independent radio and television networks
- independent courts
- independent trade unions

The legal right to

- a nationality
- being considered innocent until proved guilty
- free legal aid when necessary and counsel of own choice
- open trial
- prompt trial
- freedom from police searches of home without a warrant

- freedom from arbitrary seizure of personal property

The personal right to

- interracial, interreligious or civil marriage
- equality of sexes during marriage and for divorce proceedings
- homosexuality between consenting adults
- practice any religion
- determine the number of one's children

Drawing on the 1985 data in the *World Human Rights Guide* and assigning a "one" to each freedom protected and a "zero" to each freedom violated, the country ranking in table 1.5 emerges. Clearly, this ranking for the human freedom index (HFI) needs updating. Adding recent information for only one of the 40 aspects of freedom—multiparty elections by secret and universal ballot—makes for many changes. Eighteen countries see their HFI improve.

The world today is a freer world. An updated human freedom index based on a limited number of observable and objectively measurable key indicators is more than overdue.

TABLE 1.5
HFI ranking of selected countries

Country total of freedoms, 1985		Recent move towards greater freedom (multiparty elections held)
<i>High freedom ranking (31-40)</i>		
38 Sweden	25 Jamaica	8 Yugoslavia
38 Denmark	24 Ecuador	▲ 8 Chile
37 Netherlands	23 Senegal	8 Kuwait
36 Finland	▲ 21 Panama	▲ 8 Algeria
36 New Zealand	21 Dominican Rep.	8 Zimbabwe
36 Austria	19 Israel	8 Kenya
35 Norway	▲ 18 Brazil	8 Cameroon
35 France	18 Bolivia	▲ 7 Hungary
35 Germany, Fed. Rep. of	16 Peru	7 Turkey
35 Belgium	15 Mexico	7 Morocco
34 Canada	14 Korea, Rep. of	7 Liberia
34 Switzerland	14 Colombia	▲ 7 Bangladesh
33 USA	14 Thailand	▲ 6 German Dem. Rep.
33 Australia	14 India	▲ 6 Czechoslovakia
32 Japan	14 Sierra Leone	6 Saudi Arabia
32 United Kingdom	13 Nigeria	6 Mozambique
31 Greece	▲ 13 Benin	5 Cuba
31 Costa Rica	11 Singapore	5 Syrian Arab Rep.
	11 Sri Lanka	5 Korea, Dem. Rep. of
	11 Tunisia	5 Indonesia
	11 Egypt	5 Viet Nam
	11 Ghana	▲ 5 Pakistan
		5 Zaire
<i>Medium freedom ranking (11-30)</i>		
30 Portugal		▲ 4 Bulgaria
30 Papua New Guinea		▲ 3 USSR
29 Italy		3 South Africa
29 Venezuela		2 China
27 Ireland		2 Ethiopia
26 Spain		▲ 1 Romania
26 Hong Kong		1 Libyan Arab Jamahiriya
26 Botswana		0 Iraq
25 Trinidad and Tobago		
▲ 25 Argentina		
<i>Low freedom ranking (0-10)</i>		
	▲ 10 Poland	
	▲ 10 Paraguay	
	▲ 10 Philippines	
	10 Tanzania, U. Rep. of	
	9 Malaysia	
	9 Zambia	
	▲ 9 Haiti	

Note: Ranking of countries with the same degree of freedom is done in accordance with HDI ranking.

Yet, some countries with relatively modest achievements in human development also rank fairly high in human freedom: Botswana and Senegal.

This evidence shows that launching and promoting human development does not require the sacrifice of freedom—as governments determined to retain an iron grip have sometimes argued.

Overall, there seems to be a high correlation between human development and human freedom. The causality is far from clear, however. In some cases (the Nordic countries and the USA), political freedom seems to have unleashed the creative energies of the people—and led to ever higher levels of income and human progress. In other countries, a sustained investment in people has eventually given them sufficient power and confidence to loosen the authoritarian grip of their rulers and to increase their political and personal freedom.

The evidence also confirms a central tenet of this Report: that human development is incomplete if it does not incorporate freedom. The next logical step would therefore be to merge the HDI and the HFI into one overall index. This, however, is not yet possible in any realistic fashion—because of several difficulties. The most significant one is lack of data. Even updating the Humana index poses tremendous difficulties. Yes, we know that significant changes have taken place in many countries between 1985 and today that affect—in most instances, positively—human freedom. But there exists no systematic study that would have recorded all those changes.

A new, comprehensive human freedom index is overdue. A second difficulty is political volatility. The human development index is based on relatively stable indicators, which do not change dramatically from year to year. Political freedom, by contrast, can appear or vanish abruptly. A military coup, for example, would cause a sudden drop in the index, even though many aspects of life might remain unchanged.

The winds of economic and political freedom that are now sweeping across so many lands—from the Soviet Union and Eastern Europe to Africa and across to Latin America and the Caribbean—will probably prove to be the best ally of improving the availability of data on human freedom. Democracy facilitates transparency; it encourages accountability and the rule of law. It allows reporting of violations and thus improves recording. An objective, reliable human freedom index could be an important tool of human freedom.

• • •

Human development offers a different vision of economic and political change. Each Report will further refine both the concept and measurement of human development. Each Report will also focus on one important subject. This year the subject is public finance. The Report takes a hard look at the way governments spend their money—and how they could better spend it to transform human development from hope into reality.

There seems to be a high correlation between human development and human freedom



The state of human development

The world has changed in the last 12 months—with astounding advances and major setbacks. Despite this uneven start, there is every chance that the 1990s could be the decade of human development.

Most of the progress has been on the political front. The breakthrough in East-West relations, symbolized by the crumbling of the Berlin wall, continues to reverberate. Germany has reunited faster than anyone could have hoped. The two Yemens, with their quite different political and socio-economic systems, have also united. And free elections have been held in Czechoslovakia, Hungary and Poland—as well as in parts of Yugoslavia and the Soviet Union.

Africa has seen formal movements towards democracy in Benin, Côte d'Ivoire and Gabon. Namibia became independent and held free elections for the first time. In South Africa, some steps have been taken towards dismantling the regime of apartheid. In Asia, Bangladesh, Mongolia, Nepal, Pakistan, the Philippines and the Republic of Korea moved towards free elections. Latin America has moved away from military dictatorships in recent years, most notably in Argentina, Brazil, Chile, Haiti, Panama and Paraguay. And in the Arab region, Algeria and Jordan have moved towards democracy.

The easing of East-West tensions has had many important effects. The most direct has been in disarmament negotiations, raising the prospect of a peace dividend that would shift resources from military to development purposes (see chapter 6). Another aspect has been the reinvigoration of a genuinely united United Nations—which aided the movement to independence in Namibia, acted as an election observer in Haiti and Nicaragua and is participating in a peace plan for Cambodia.

But there have also been major political

setbacks. New forms of violence erupted in Liberia, Somalia, India, the Soviet Union and other countries. Most important, the Gulf war took a terrible toll on human life and well-being—profoundly affecting the long-term prospects for peace and development in the region.

The economic costs of this war, crippling for many countries, include a higher price for oil, a deepening world recession, reduced workers' remittances and lost export markets. Within the region, Jordan, Egypt and many others have been hard hit. Jordan is estimated to have lost 40% of its GNP through lost trade and workers' remittances. Turkey has lost millions of dollars because of the shutdown of Iraq's oil pipeline through its territory. And Egypt has lost billions of dollars in remittances and tourism.

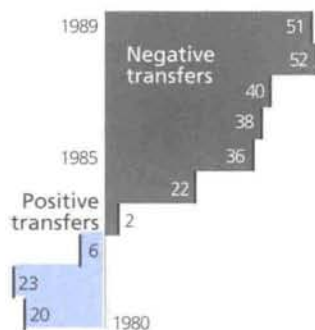
Countries outside the region that enjoyed valuable remittances from migrant labourers in the Gulf have suffered as those workers fled the crisis area and returned to face unemployment and poverty at home. The countries worst affected include Bangladesh, India, Pakistan, the Philippines, Sri Lanka and Thailand.

The industrial countries—particularly the USA—devoted billions of dollars to this conflict, resources that could have improved education and reduced housing shortages and poverty at home and abroad. The Gulf war is estimated to have cost \$1 billion a day. The cost of just ten days of war was enough to immunize all the children of the Third World against vaccine-preventable diseases over the next ten years.

The fall-out from the crisis, difficult to assess so far, is certain to affect development in the Arab States and in many other parts of the world for years to come.

On the economic front, many problems persist. Chief among these, for the develop-

FIGURE 2.1
Net flow of resources
from South to North
US\$ billions



ing countries, is the external debt burden. This debt is producing a net flow of resources from poor countries to rich—some \$50-60 billion in 1989 alone, resources that countries of the South urgently need for their development (figure 2.1).

For Eastern European countries, the establishment of the European Bank for Reconstruction and Development represents a first step towards the solution of their financial problems. But the Third World's debt crisis now seems to have a lower priority.

Trade is an equally worrying economic issue for developing countries. A failure of the Uruguay round of GATT negotiations would mean that the world will rely less on multilateral agreements, and more on bilateral deals between countries and trading blocs, from which many developing countries are excluded. The major blocs are the European Community, the European Free Trade Association, the Pacific Rim group (with Japan in the lead) and the USA-Canada Free Trade Agreement (being extended to some Latin American countries, notably Mexico).

For countries outside these blocs, the trade outlook is poor. The developing countries' share of world trade, excluding oil-exporting countries, fell from 15.2% in 1968 to 12.9% in 1988. Protectionism has been estimated to cost developing countries \$100 billion a year in lost revenues for agricultural products, and a further \$50 billion for textiles. International trade and finance need integration, not fragmentation—an open flow of goods across borders, not the raising of barriers. That openness will allow prosperity to be created and shared by every nation, not concentrated in blocs and alliances.

The political and economic events of the last 12 months have been momentous: some encouraging, some disturbing, but all part of the current state of human development. Two balance sheets register the successes in human development, as well as the current state of human deprivation, for developing and industrial countries (boxes 2.1 and 2.2). For the industrial countries, successes in science and technology, for example, are offset by environmental failures and a deteriorating social fabric. And while developing countries as a whole have increased food output per person, a fifth of their people still go hungry every day.

Four issues on the deprivation side of the balance sheets require the sustained attention of the international community. Common to rich and poor countries alike, their solution will require national and international action:

- Poverty
- Inequality
- Human survival
- Environmental degradation

Poverty

The global distribution of income still has the power to shock: 77% of the world's people earn 15% of its income (figure 2.2).

Expressed in GNP per capita, the average income in the North (\$12,510) is 18 times the average in the South (\$710).

This gap is widening, partly because of economic growth rates. Economic growth in the South continued to decline in 1989 and is predicted to fall further. The other major factor is population growth. In the next decade, the developing countries' overall population growth rate is expected to be 2% a year, compared with 0.5% for the industrial countries. Population growth is usually fastest where poverty is greatest and health and education services are weakest—in the least developed countries, and particularly in rural areas. As a result, the percentage of world population experiencing negative growth has in the 1980s been four times the percentage in the 1970s. However, more than 60% have, during the same period, experienced growth rates of 3% or more (figure 2.3).

There are about 1.2 billion poor people in the developing countries—a figure estimated to rise to 1.3 billion by 2000 and probably 1.5 billion by 2025. Asia has the largest number of poor people—500 million—but there is a steady concentration of poverty in Africa. It is estimated that Africa's share of the world's poor will rise from 30% today to 40% by 2000, overtaking Asia (figure 2.4). Indeed, if African leaders and the international community do not take action now, more than half the continent's population will live below the poverty line at the end of the decade.

The industrial countries show, meanwhile, that higher average income is no guarantee

FIGURE 2.2
People and income

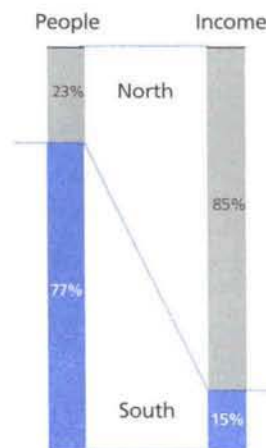
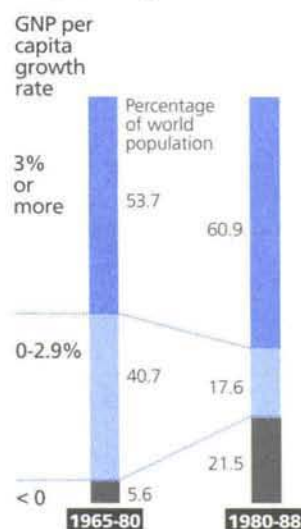


FIGURE 2.3
People and growth



Balance sheet of human development—developing countries

PROGRESS

DEPRIVATION

PROGRESS	DEPRIVATION
LIFE EXPECTANCY	
<ul style="list-style-type: none"> • Average life expectancy increased by over one-third between 1960 and 1990—and is now 63 years. 	<ul style="list-style-type: none"> • Ten million older children and young adults and 14 million young children die each year—most from preventable causes.
HEALTH	
<ul style="list-style-type: none"> • The proportion of people with access to health services has risen to 63%. 	<ul style="list-style-type: none"> • 1.5 billion people still lack basic health care. • Over 1.5 billion people do not have safe water, and over 2 billion lack safe sanitation.
FOOD AND NUTRITION	
<ul style="list-style-type: none"> • Average calorie supplies as a percentage of requirements increased between 1965 and 1985 from 90% to 107%. 	<ul style="list-style-type: none"> • One-fifth of the population still goes hungry every day.
EDUCATION	
<ul style="list-style-type: none"> • Adult literacy rates increased between 1970 and 1985, from 46% to 60%. 	<ul style="list-style-type: none"> • Over 1 billion adults are still illiterate. • 300 million children are not in primary or secondary school.
INCOME	
<ul style="list-style-type: none"> • Income per head grew annually in the 1980s by almost 4%—and 9% in East Asia. • More than one person in four in the 1980s lived in countries with growth rates above 5%. 	<ul style="list-style-type: none"> • More than 1 billion people still live in absolute poverty. • Income per head has declined over the last decade in Latin America and Sub-Saharan Africa.
CHILDREN	
<ul style="list-style-type: none"> • Under-five mortality rates were halved over the last three decades. • Immunization coverage for one-year-olds increased dramatically during the 1980s, saving an estimated 1.5 million lives annually. 	<ul style="list-style-type: none"> • Over 14 million children die each year before reaching their fifth birthday. • 180 million children under five suffer from serious malnutrition.
WOMEN	
<ul style="list-style-type: none"> • Primary school enrolment for girls increased between 1960 and 1988 from 79% to 87%. • Women's enrolment in tertiary education has increased almost everywhere—and achieved near-equality with men in Latin America and the Caribbean. 	<ul style="list-style-type: none"> • Half the rural women over 15 are illiterate. • Women are often denied the right to decide whether or when to have children. Half a million women die each year from causes related to pregnancy and childbirth. • Women are often legally (or effectively) denied the right to own, inherit or control property.
RURAL AND URBAN AREAS	
<ul style="list-style-type: none"> • The proportion of people living in rural areas with access to adequate sanitation has doubled over the past decade. • 88% of urban dwellers have access to health care, and 81% have access to safe water. 	<ul style="list-style-type: none"> • Only 44% of the rural population have access to basic health care. • There are 2.4 people per habitable room, three times the average in the North. One urban dweller in five lives in the nation's largest city.

Balance sheet of human development—industrial countries

PROGRESS

DEPRIVATION

LIFE EXPECTANCY AND HEALTH

- Average life expectancy is 75 years.
- Virtually all births are attended by health personnel, and the maternal mortality rate is only 24 per 100,000 live births.
- Two-thirds of the population is covered by public health insurance.
- On average, 8.3% of GNP is spent on health care.

- Adults on average smoke 1,800 cigarettes per year and consume 4 litres of pure alcohol.
- More than half the people born today are likely to die of circulatory and respiratory diseases, many of which will be closely linked to sedentary lifestyles, fat-rich diets, alcohol consumption and cigarette smoking.
- The US alone reported 137,000 cases of AIDS in 1989.

EDUCATION

- Governments provide on average nine years of full-time compulsory education.
- Over one-third of all graduates are science students.
- On average, 6% of GNP is spent on education.

- Almost four persons in ten lack any upper secondary school education.
- Only 15% of the youth in the age group 20-24 enrol for full-time tertiary education.

INCOME AND EMPLOYMENT

- GNP per capita has increased between 1976 and 1988 from \$4,850 to \$12,510.
- Industrial countries produce 85% of the global wealth every year.

- The wealthiest 20% of the population receive almost seven times as much income as the poorest 20%.
- About 6.5% of the total labour force is unemployed, one-third of it for more than 12 months.

SOCIAL SECURITY

- Social welfare expenditures now account on average for 11% of GDP.

- About 100 million people lived below the poverty level in 1990 (200 million if the USSR and Eastern Europe are included).

WOMEN

- As many women as men are now enrolled in secondary and tertiary education.
- Females above the age of 25 have already received, on average, 9 years of schooling.
- One-fourth of the female graduates are science students.

- Women's wages are still only two-thirds of men's wages.
- There are 50 reported rapes per 100,000 females aged 15-59.
- Only one-fifth of the parliamentary representatives are women.

SOCIAL FABRIC

- People have the opportunity to be informed and connected with one another: there is one radio for every person, one TV set and one telephone for every two people.
- The average family owns a car.
- Every third person purchases a daily newspaper.
- There are six library books per person.

- Many industrial countries are experiencing a fast change in their social fabric. Most striking examples: Finland, the highest proportion of single parent homes (10%); Sweden, the highest illegitimacy ratio (42%); USA, the highest divorce rate (8%).
- About 433 persons out of every 100,000 are seriously injured every year in road accidents.

POPULATION AND ENVIRONMENT

- The current annual population growth rate is around 0.5%.
- Almost the entire population has access to safe water and sanitation facilities.

- The dependency ratio is as high as 50%.
- Annual emission of traditional air pollutants is 42 kilograms per 100 people.
- The greenhouse index had already reached 3.5 by 1989.

FIGURE 2.4
**People in poverty
 in developing countries**

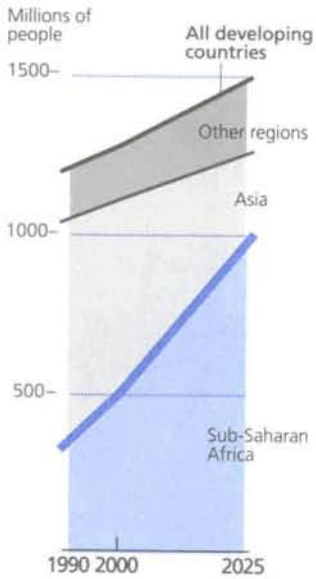


FIGURE 2.5
**People in poverty
 in industrial countries**

Total - 200 million people



TABLE 2.1
**Ratio of income of highest
 20% of households to
 lowest 20%, 1980-87**

Hungary	3.0
Japan	4.3
Belgium	4.6
Sweden	4.6
United Kingdom	6.8
USA	8.9
Australia	9.6

of poverty eradication. About 100 million people in the Western industrial countries still live below the poverty line—200 million if the USSR and Eastern Europe are included (figure 2.5). Poverty has become particularly entrenched in young, single-parent families and among ethnic minorities.

Inequality

National income figures give some indication of the distribution of poverty around the world. But they hide sharp contrasts and inequalities within countries. Three dimensions of inequality stand out: rich and poor, men and women, and urban and rural.

Rich and poor

With low incomes, poor people are less able to meet their basic needs for food, health and shelter. They also are likely to have shorter lives. In Mexico, the poorest people can expect to live on average only 53 years—20 years less than those in the top income bracket.

While life expectancy is increasing in most countries, it is still quite low for some of the poorest groups. Babies born to poor families in Colombia are twice as likely to die in the first few years as those from richer families. And it has been found that poorer women in cities are at much greater risk of dying from breast cancer than other women, because they know less about prevention and have to rely on public hospitals whose early detection systems are often inadequate.

Education also varies with income, at times even dramatically. In some Indian villages, the literacy rate for the highest caste, the Brahmins, was 90% while that for the lowest castes was only 10%.

Although difficult to measure precisely, it is well known that large numbers of people in developing countries lack adequate housing. And in some industrial countries, homelessness continues to be a problem.

Income distribution in the industrial countries can be quite skewed (table 2.1). In some countries, such as Australia, New Zealand, Switzerland and the USA, the richest 20% get between eight and ten times the income of the poorest 20%.

No doubt, the differences between rich and poor widen as one looks at higher levels of human development—higher levels of education, access to information, transportation and so on.

Men and women

Women have made some progress over the last 30 years. Levels of education for women in the South have been rising steadily. In primary schools, the enrolment of girls used to be about 60% that of boys. Now, it is more than 90%.

But there is still a long way to go. The female human development index (see chapter 1) is less than two-thirds the male HDI in many countries, including Kenya, Myanmar and Singapore. Female enrolment ratios in higher education in developing countries are typically only half the male ratios. Women still lag behind in literacy in many countries. In South Asia, female literacy rates are only half those of males. In some countries, the figures are much worse—as in Afghanistan (24%), Sudan (25%), Sierra Leone (30%) and Nepal (32%).

Gender inequality is often reinforced by law. Women can be denied rights to own or inherit property, to receive pensions or even to decide whether or when to bear children.

Industrial countries also have significant gender biases. These and other aspects of female-male inequality are discussed later in this chapter.

Urban and rural

Most poor people in Asia and Africa live in rural areas. Even in more urbanized regions in Latin America and the Arab States, a substantial proportion of the poor are rural. In most countries, those who live in the countryside typically earn 25% to 50% less than those in the towns and cities. The contrasts seem especially marked in Africa, where the agricultural crisis has resulted in falling incomes from cash crops, reduced food production and increased malnutrition (figure 2.6).

These disparities are aggravated by imbalances in the delivery of social services. In one-third of the developing countries, rural

people are only half as likely to be covered by health services as those in the urban areas. Even then, they are likely only to have simple clinics, compared with the modern hospitals to be found in the towns and cities. A similar contrast is evident for safe water and sanitation—rural access is less than half that for urban areas in Côte d'Ivoire, Ghana, Mozambique and Somalia. And for electricity, rural access is about one-third of the urban figure.

Education services, too, are much less adequate for rural children. Literacy rates in rural Africa and Asia are, as a result, typically less than half those of urban areas.

Human survival

A long life may not guarantee that people develop their talents and achieve their goals, but it increases the chances that they will.

The world has made considerable progress in longevity over the past three decades. Life expectancy globally has risen from 53 years to 66 years. In the developing countries, the rise was from 46 to 63, and in the industrial countries, from 69 to 75. Nevertheless, it is estimated that some 25 million children and young adults die each year—a figure equivalent to the total population of Tanzania or Canada.

Child mortality

Child mortality rates in developing countries fell by half between 1960 and 1989—showing that dramatic progress is possible. But the rates of child mortality per 1,000 live births continue to be high in the least developed countries (200) and in Africa (188). Female child mortality is particularly high in several countries. The keys to further progress are better food and nutrition, improved education for mothers, better primary health care and more safe water and sanitation facilities, especially in the rural areas. All these objectives are feasible (chapter 3).

It might be thought that, if more children survived, population problems would get worse. Quite the reverse. Fertility tends to drop when parents are more confident that their children will survive. The world would gain if children everywhere lived longer.

Maternal mortality

Women in the South are at least 12 times more likely to die from causes related to pregnancy and childbirth as women in the North. Maternal mortality accounts for half a million deaths a year. Sub-Saharan Africa has the highest maternal mortality rate—540 deaths per 100,000 live births. South Asia's maternal death rate is over 400. These figures reflect the severe neglect and low status of women in some parts of the world, and contribute to the low proportion of women in the population (box 2.3).

Lack of access to safe methods of family planning makes abortion one of the leading causes of maternal mortality—accounting for about 200,000 of the half million deaths each year. Other major causes are haemorrhage, infection, toxæmia and obstructed labour—all problems that could often be dealt with if better medical and prenatal care were available (figure 2.7).

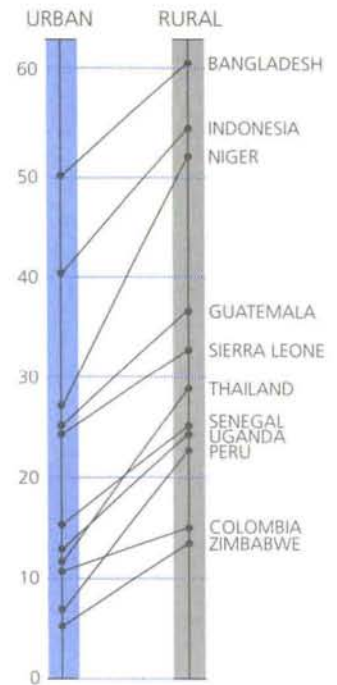
Most at risk through pregnancy, girls under 15 are ten to 15 times more likely to die than women in their twenties—and their babies less likely to survive. The first child of a teen-age mother is nearly twice as likely to die than the second or third child of a woman aged 20-24.

HIV/AIDS

The HIV/AIDS epidemic is particularly alarming—some eight to ten million adults around the world are thought to be infected

FIGURE 2.6
Child malnutrition
in urban and rural
areas

Percentage of children underweight



100 million women missing

BOX 2.3

Around 105 males are conceived for every 100 females. But the male advantage is short lived—biology thereafter seems to favour women.

If both sexes receive similar nutrition and health care, women live noticeably longer—they are more resistant to disease and generally harder. They enjoy this advantage right from the outset, even in the womb, and especially during the months immediately following birth. As a result, in populations where girls are treated much the same as boys, there are about 106 females for every 100 males.

If women, and especially girls, do not receive equal treatment, the story

changes. In most of Asia and North Africa, far fewer female children and women survive, because they suffer active discrimination. In South and West Asia and in China, there are only 94 females for every 100 males.

This means a shortfall of about 12% of the "natural" figure. In China alone, some 44 million women are missing taking into account the difference in age structure. Adding this figure to the shortages in North Africa and in South, South-East and West Asia, as Amartya Sen has demonstrated, nearly 100 million women are missing.

with the human immunodeficiency virus (HIV), and half of them are likely to develop AIDS in the next decade. It is estimated that a further 15 million new cases of HIV infection will be added in the 1990s—more than half in the developing world, with a high proportion in eastern and central Africa. The number of people infected is also increasing in Asia (especially in Thailand and India), and in Latin America and the Caribbean (in Haiti, Brazil, Mexico and other Caribbean countries). The USA has by far the highest number of reported AIDS cases (over 137,000 in 1989)—nearly half of all cases worldwide.

The financial implications of the epidemic are staggering. In a 1988 study of the medical treatment costs alone per AIDS case, these costs ranged from one-third to twice the per capita GNP in Tanzania, and from around three-quarters to almost ten times the per capita GNP in Zaire. The cost of diagnosis is more than many individuals earn in six months. One hundred condoms cost around US\$2 if procured by international agencies, and many countries have an annual health budget that is less than US\$5 per capita.

But the economic consequences of the epidemic do not end there. The majority of the HIV-infected people are 15 to 49 years of age. Most have established households, are

economically active and are supporting significant numbers of dependents: children, parents, spouses and others. A community-based survivor assistance strategy is thus essential. Governments and private enterprises will need to plan for the impact of HIV-related morbidity and mortality on population structure, on productivity, on the availability, replacement and training of labour, and on the tax base and foreign exchange.

Other untimely deaths

The AIDS epidemic is, however, only one of the major causes of untimely deaths that occur worldwide.

In the developing countries, some ten million older children and young adults die every year. Malaria and other tropical diseases account for many of these deaths, and other leading causes include respiratory diseases, diarrhoeal diseases, injuries and sexually transmitted diseases other than AIDS.

Road accidents killed hundreds of thousands of people in 1988 and injured millions more. For 15 developing countries, they constitute the second major cause of death (after intestinal diseases). In developing countries as a whole, the traffic fatality rates are 20 times higher than in industrial countries.

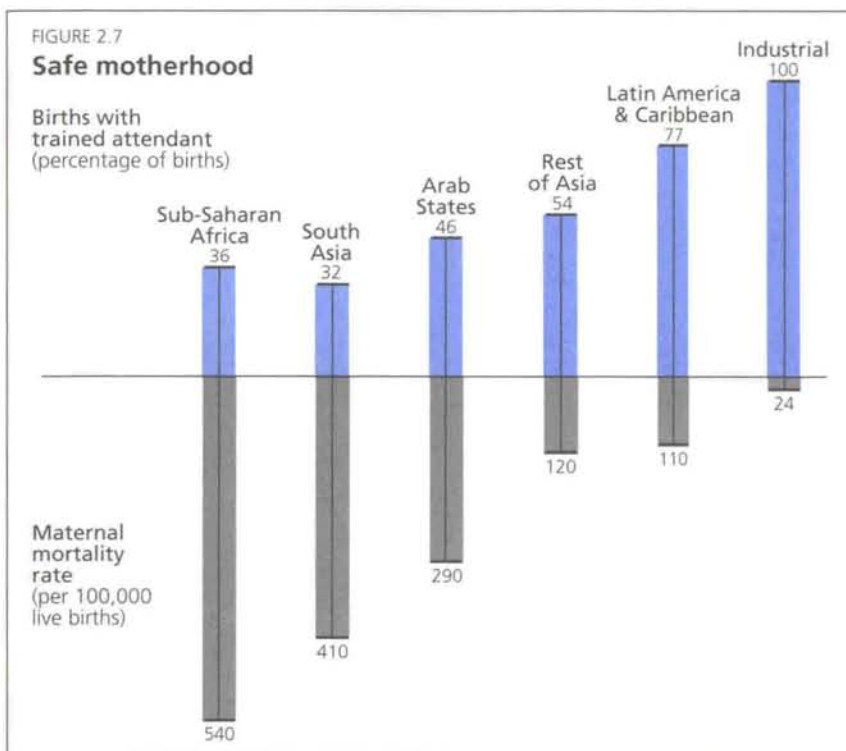
Cigarette smoking claims millions of lives through lung cancer and other diseases.

Natural disasters such as cyclones, earthquakes and floods have caused three million deaths over the last two decades—and violent dislocation for at least one billion people. The technical know-how to protect communities against such destructive forces is now available, but available to very few.

Environmental degradation

It is ironic that significant environmental degradation is usually caused by poverty in the South—and by affluence in the North.

Poverty and population pressures in developing countries force people to cultivate ever more marginal lands. This further erodes the thin soil and depletes shallow water resources—creating even greater poverty, as crop yields fall and women spend even more hours each day collecting firewood and fetching water.



Three-quarters of the poor people in the South live in ecologically fragile zones, and around 14 million have become environmental refugees—driven from their homes by ecological degradation.

The economic impact of such degradation is severe. Nigeria was one of the world's leading tropical log exporters, but in 1988 it imported \$100 million worth of forestry products. Indonesia's economic growth rate between 1970 and the mid-1980s could have dropped from 7% to 4% if the costs of environmental degradation were accounted for.

The average person in the South consumes only one-third of the energy resources consumed by a person in the North. Energy consumption per capita, measured in gigajoules, is 30 in Latin America, 21 in Asia and 12 in Africa—and in some African countries no more than one. Compare this with 110 in Japan, 165 in the former Federal Republic of Germany and 280 in the USA.

The North's consumption of energy is profligate—because of spacious houses with high heating and cooling costs, and sprawling cities with road networks clogged with two or three cars per family. One result is that the North produces about half the six billion metric tons of greenhouse gases emitted each year—even though it has only one-fifth of the world's people.

Development in the South will increase its energy consumption. Energy requirements, measured in millions of tons of oil equivalent (mte), are expected to grow at an average of 5% a year from 2,000 mte today to over 3,000 by the end of the century (figure 2.8).

The solution cannot be to restrict the South's development to conserve the world's energy. Everyone has to share the same environmental space, requiring equity in the use of the environment within, and between, generations. Rich countries will have to consider cutting back consumption to allow developing countries to achieve their full potential. But both industrial and developing countries must also increase their energy efficiency and develop new and renewable sources of energy.

Investing in the South's human development is also important for the protection of the environment. Skilled and knowledgeable people are in a better position to respond to incentives and opportunities, to help diversify the developing economies and to take up non-agricultural employment. They are less likely to exhaust the fragile zones where many of the world's poor try to make a living.

Regional perspectives

Human development is a global concern, and people everywhere should accept the eradication of world poverty as a responsibility of all.

But the development of each region raises particular problems—arising from its history, culture and stage of development (table 2.2). The discussion here summarizes these problems for five groups of countries.

- Industrial countries
- Asia
- Latin America and the Caribbean
- The Arab States
- Sub-Saharan Africa

FIGURE 2.8
World energy demand
(millions of tons, oil equivalent)

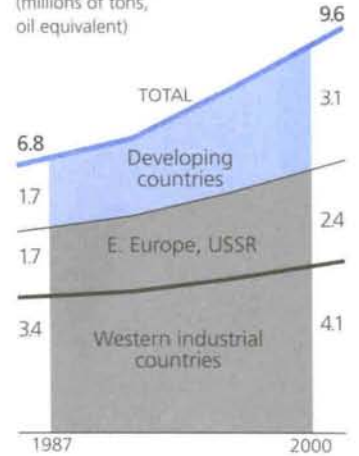


TABLE 2.2
Regional human development comparisons, latest years
(Bold signifies values worse than average)

	South Asia	East and South-East Asia	Latin America and the Caribbean	Arab States	Sub-Saharan Africa	Developing world	Industrial world
GNP per capita (US\$)	390	530	1,830	1,820	470	710	12,510
Life expectancy (years)	58.4	68.1	67.4	62.1	51.8	62.8	74.5
Under-five mortality rate (per 1,000)	151	57	72	106	179	116	18
Maternal mortality rate (per 100,000)	410	120	110	290	540	290	24
Adult literacy rate (% 15+)	42	72	82	53	45	60	..
Scientists and technicians (per 1,000)	3.0	..	39.5	..	..	9.5	139.3
Annual population growth rate (1960-90)	2.3	2.0	2.4	2.7	2.8	2.3	0.8
Annual urban population growth rate (1960-90)	3.9	3.9	3.7	4.6	5.2	4.0	1.4
Military expenditure as % of spending on health and education	164	..	29	166	70	109	38
Population below the poverty line (%)	42	11	3	15	72	32	2
Female-male gap in literacy (M = 100)	49	73	95	58	56	66	..
Rural-urban gap in access to safe water (U = 100)	61	76	63	49	35	62	..

Industrial countries

Life for most people in the industrial countries is relatively easy. Life expectancy is on average beyond 70 years, almost everyone has access to clean water and primary health care—and no one need starve to death.

But in Eastern Europe, the recent political changes have exposed considerable poverty, inequality and pollution. The current changes to more market-oriented economies will involve a painful period of transition for many people, with unemployment on the rise.

In the other industrial countries, income inequality is one form of deprivation that persists (box 2.4). Income disparity in the UK, for example, grew between 1979 and the late 1980s. While a large segment of the population benefited from the economic growth achieved during this period, the number of people below the poverty line increased from 8.2 million to 10.3 million—from 15% of the population to 18%. Another disparity

is that between men and women. But human deprivation also takes on new forms in industrial countries—the distress of alienated individuals as the social fabric unravels.

Gender disparities

The inequality that affects the most people in the industrial countries continues to be that between men and women (figure 2.9). Although the same proportions of girls and boys are enrolled in primary and secondary schools, when it comes to the tertiary level, the gaps start to open up. Women's enrolment as a proportion of male enrolment in tertiary education is 76% in Japan and Portugal and 66% in Switzerland.

The differences are even more marked in scientific and technical study—the ratio of female students to male students is 35% in Italy, 32% in Austria and 28% in Canada, the Netherlands, the UK and Hungary.

The educational disparities are replicated in the world of work. Women in all industrial countries are much less likely to be employed than men. Women's participation in the labour force, expressed as a percentage of male participation, is 61% in Japan, 58% in Switzerland, 45% in the Netherlands and 41% in Ireland.

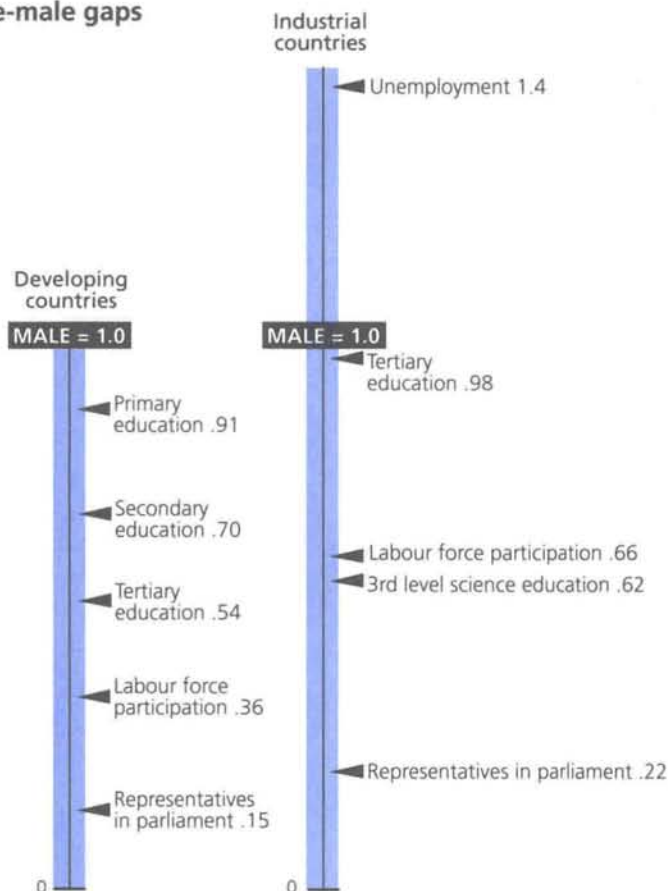
Working women are also lower paid. In all industrial countries, women's wages are significantly lower than men's (figure 2.11). In France and Belgium they earn about three-quarters of the average male wage, and in Japan only about half. They also are at greater risk of unemployment—female unemployment levels are typically about one-and-a-half times male levels. Men continue to dominate the decision-making centres of business and government. Relatively few women enter parliament. Even in countries where their representation is relatively high—such as Sweden, Finland, Norway and the USSR—women account for only a third of the legislators.

Unemployment

The years 1987 and 1988 saw the highest employment growth in over a decade in many industrial countries: 2%. Yet, this growth has failed to make significant inroads on the lev-

FIGURE 2.9

Female-male gaps



els of unemployment, which remain substantially above what had been the postwar norm. Moreover, unemployment has become increasingly chronic and long-term; over one-third of the unemployment is for more than 12 months and, in six countries, over one-third of the unemployment is for more than 24 months.

The continuing expansion and use of human capabilities remains a crucial task for industrial countries. Beyond achieving economic and employment growth, effort must be devoted to training in the skills for tomorrow. This is especially important to combat increasing structural unemployment, where the number of the unemployed rises together with the number of unfilled vacancies.

The changing social fabric

Most countries are going through rapid change—in technology, in communications, in lifestyles—all of which have far-reaching consequences for society. Old cultural patterns are disappearing, the family is playing a smaller role, and few new cohesive forces seem ready to take their place (box 2.5).

There are about 300 recorded *drug crimes* per 100,000 people in Canada, nearly 100 reported *rapes* for every 100,000 women aged 15 to 59 in the Netherlands, over 400 *prisoners* and 9 *murder victims* per 100,000 people in the USA and nearly 50 *suicides* per 100,000 people in Hungary (figure 2.10).

Although these high figures could reflect a greater determination to report and record such incidents, they also reflect the growing distress in industrial societies.

Similarly, the break-up of families can be viewed from two angles. Single parents now head an increasing number of homes, and a higher proportion of children are being born to unmarried mothers. Much of this family fragmentation is a result of outside forces—poverty, drugs, consumer pressures, increased mobility. Many divorces also result from assertions of personal rights to freedom—by husband or wife—assertions that would not have been tolerated in earlier times. But these freedoms can have a high price—in individual trauma, disruptions of children's lives and family impoverishment.

The unravelling social fabric in the indus-

trial countries shows starkly that higher national incomes are no protection against social tension and human distress.

BOX 2.4

The USA—poverty amid plenty

Millions of people in the USA have missed out on the increasing national prosperity of the last 25 years.

The US Bureau of Census estimates poverty thresholds each year. The statistics give little sense of the anxiety of parents precariously balanced on the edge of survival, or of hungry and badly clothed children ill-equipped for the adult responsibilities ahead. Nor do they indicate the *process* of poverty—how it is created and sustained. But they do answer some of the most basic questions.

- *How many poor people are there?*

About 32 million—13% of the total population, about the same proportion as for 1988, but much higher than ten years previously. A further 11 million are considered to be “near poverty”.

- *How poor are they?*

Some 38% are in families whose total income is less than half their poverty threshold. This proportion is increasing—in 1975 it was only 30%.

- *How old are they?*

About 40% were under 18, and 11% were elderly. Children have made up the highest proportion since 1973. And there

is a very high proportion of elderly people hovering near the poverty threshold.

- *What racial group do they belong to?* Assessing poverty within each racial group shows blacks with the highest proportion of poor people (31%), followed by hispanics (26%), followed by whites (10%).

- *Where do they live?*

About 40% live in areas with a high concentration of poverty, mostly inner cities. This pattern is much more evident for blacks than whites.

- *What kind of families do they have?*

Most of the poor (76%) live in families, and 52% were single-parent families headed by women. The latter proportion has more than doubled since 1959, but has remained steady through the 1980s.

- *Are they working?*

About 50% of households had one member working, and 16% had jobs throughout the year.

- *What level of education do they have?*

Rates of poverty increase sharply as education levels fall—a relationship that holds good across all races.

BOX 2.5

Cardboard cities for the UK's homeless

A well-housed population is an indicator of successful public policy for an industrial country. But in the UK in 1989, over 400,000 people were officially classified as homeless (including 196,000 children).

Most are on low or inadequate incomes (many receiving social security), and 40% are single-parent families with young children.

There are also people who have been temporarily housed by local authorities. In 1989, about 120,000 people, many of them children, were living in “bed and breakfast” hotels. Their sunless rooms have only rudimentary cooking facilities and often lack the most basic furniture. A recent study found that half these buildings were unfit for habitation. Families stay in them for 30 weeks on average.

Beyond these people, many others

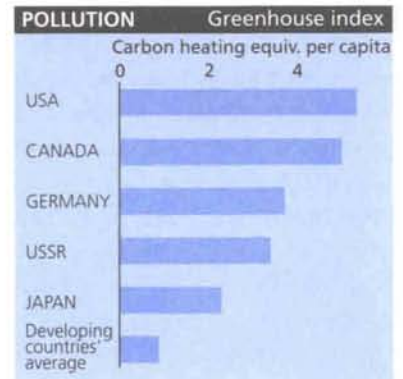
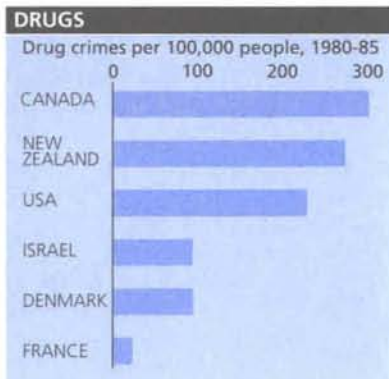
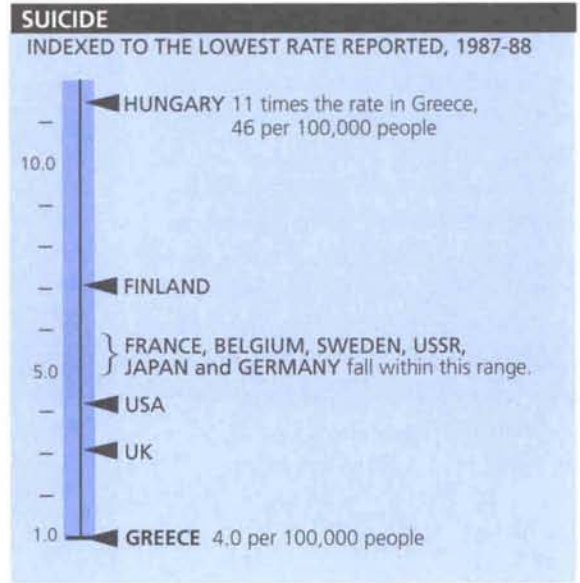
experience housing stress—in unfit or overcrowded accommodation. Local authorities have refused to accept them as homeless. In 1989, some 130,000 families had their requests for assistance rejected.

Then there are the “hidden homeless”, mainly single people aged 16-18, whose numbers were estimated at 180,000 in 1986. This is almost certainly an underestimate, particularly of women and young girls. The majority are unemployed and come from disadvantaged backgrounds (many had previously lived in local authority care)—and an increasing proportion are black.

The single young people are in many ways the most vulnerable—at risk from prostitution, crime and drugs. Thousands now live in rough “cardboard cities” in all the major towns of the UK.

FIGURE 2.10

Profile of human distress in the industrial countries



Asia

Asia has some three billion people—over 70% of the world's population. It has seen substantial progress in human development over the last three decades. Life expectancy has increased from 46 years to 64. And there have been significant improvements in education, with primary and secondary enrolments combined, increasing from 57% to 71%.

But progress has been uneven, within and between countries. Asia as a whole is better understood by taking intraregional differences into account—particularly those between East and South-East Asia on the one hand, and South Asia on the other.

East and South-East Asia

Some countries in East and South-East Asia have achieved fairly rapid reductions in infant mortality—to around 5% a year. These include China (4.5%), Singapore (4.8%) and Hong Kong (5.9%). Around 85% of the region's one-year-old children are immunized—a higher proportion than the average for industrial countries.

Life expectancy here is significantly higher than for developing countries as a whole—it is now 70 years and more in several countries, including China and Malaysia. The annual population growth rate, over the last three decades at 1.5%, is lower than the average for developing countries (2.3%), and contraceptive prevalence is now 66% (the industrial country average is only 70%).

Advances in health and in child survival have contributed to this slower growth in population, as have improvements in education. The literacy rate increased between 1970 and 1985, from 67% to 80%.

Important components of this progress have been the consistent (and sometimes very high) rates of employment-intensive economic growth. In the most notable cases, this growth was preceded by redistributing assets, especially land, more equitably.

In some respects, the countries of this region—particularly Hong Kong, Singapore and the Republic of Korea—have more in common with the industrial countries than with other developing countries in South Asia and Africa. Their spectacular export success

has been based on building up human capabilities, through rising levels of health and education, as well as creating advanced and diversified production structures. Such countries as Thailand and Malaysia are seeking to join in this success.

Despite all this progress, there is still significant poverty and inequality. Only about half the population has access to both safe water and sanitation. There is still marked discrimination against women. Female literacy rates are only 73% of those for men—a figure that has not changed in the past 15 years.

South Asia

The countries of South Asia have also made progress in the last 30 years. But, except Sri Lanka, they all fall into the category of “low” human development. Bangladesh raised the average life expectancy from 40 to 52 years between 1960 and 1990, but this is still ten years lower than the average for developing countries as a whole.

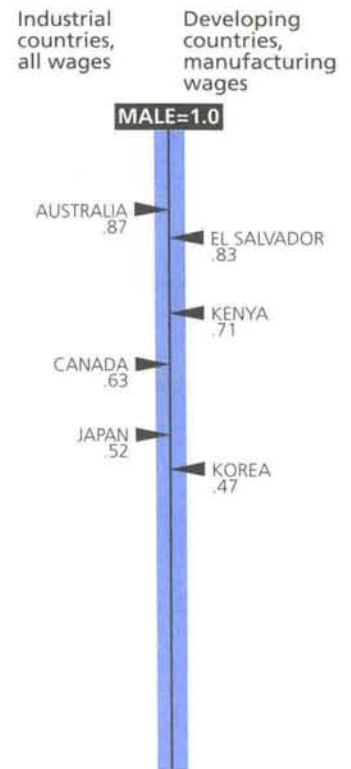
South Asia has the lowest literacy rate (42%) of all the regions. Some countries have made only limited progress. Nepal has, since 1970, raised its adult literacy rate from 13% to 22%. In health, there have been increases in the immunization coverage of one-year-old children. In Bangladesh, this coverage rose from 1% to 60% over the last decade. In Sri Lanka, the coverage is now 89%.

The economic progress that is so vital to human development has been slow in this region—partly due to population growth. Annual economic growth rates between 1960 and 1988 have averaged just over 3%. GNP per capita remains low, particularly in Nepal (\$180) and Bangladesh (\$170).

Pakistan has had an impressive annual growth rate (around 6%) but has failed to translate this into human progress. A comparison with Sri Lanka highlights the failure: while Pakistan has much the same GNP per capita, its average life expectancy, at 58 years, is 13 years lower.

Inequality is one of the most striking features of South Asia—between rich and poor, males and females, different regions and different ethnic groups. In rural Punjab, landless families have infant mortality levels 36% higher than those for landowning families.

FIGURE 2.11
Women's lagging wages



Inequality is one of the most striking features of South Asia

In Asia as a whole, one child in three suffers from malnutrition, and nearly 700 million people live in poverty, with the great majority of them in two countries—India and Bangladesh. Only two-thirds of the population has access to health services and clean water. Female life expectancy is low, with a substantial number of women who would have lived if they had been born elsewhere. Asia remains one of the poorest regions of the world.

Latin America and the Caribbean

Impressive average human development levels have been achieved in Latin America and the Caribbean. Between 1960 and 1990, the under-five mortality rate, per 1,000 live births, dropped from 157 to 72. Average life expectancy is now 67 years: only seven years short of the industrial country average. And in Barbados, Costa Rica and Cuba, people live longer on average than they do in industrial countries.

Education levels are also higher than in the rest of the developing world. The average literacy rate is 82%—and Argentina, Barbados, Guyana, Jamaica, Uruguay and Trinidad and Tobago have rates over 95%. The region also has a greater number of scientists and technicians per 1,000 people than the developing world as a whole—40 compared with 10.

But the economic problems of the 1980s have hit this region hard. The debt crisis, high interest rates, barriers raised against Latin American exports, and low commodity prices—all wrought havoc with some of the region's past achievements in human development. Average inflation rates soared above 100% during the 1980s in Argentina, Bolivia, Brazil and Peru—eroding real wages and discouraging investment. Open unemployment remained relatively constant between 1980 and 1989, but employment shifted towards less productive activities. Production per head fell, along with living standards, and child malnutrition and infant mortality started to rise in many countries.

Although this region has some of the most advanced economies of the developing world, these countries also have some of the sharpest contrasts between rich and poor—with millions below the poverty line. The top

fifth of the population in Brazil earns 26 times more than the bottom fifth. In Peru, the bottom 40% of the population get just 13% of the national income (compared with 21% in Morocco, 20% in India and 23% in Indonesia).

The region also has some very poor countries with inadequate social services. The percentage of the population with access to safe water can be very low—in Nicaragua (54%), Bolivia (47%), Haiti (41%), El Salvador (39%) and Paraguay (35%). There are some very low ratios for combined primary and secondary school enrolment—Bolivia (76%), Paraguay (69%) and El Salvador (69%).

Latin America is one of the most urbanized parts of the developing world. Seventy-six percent of the population and two-thirds of the workforce now live in cities—with almost one-third of employment in the informal sector.

The proportion of women in the workforce has been growing steadily—from 18% in 1950 to 26% today. Part of the reason is that a higher proportion of women than men migrated from rural areas to towns and cities. Many households are today headed by women—up to 40% in some cities in the late 1980s.

In education, there is not much difference between women and men. The female literacy rate is only 5% lower than the male rate, and more girls are in secondary school than boys.

The human development priorities in Latin America differ from those of other regions. The basic services are still inadequate in some countries. But in others, many of the basic goals in health and education have been achieved. For them, the health emphasis is on extending better standards of care to a greater proportion of the population. The educational task is to improve secondary and tertiary levels—particularly to train the scientists and technicians who can improve the region's competitiveness in the world economy.

The region does not spend much on the military: its ratio of military to health and education expenditures is less than a third of the average for the developing world. But resources do need to be shifted away from large, loss-making public enterprises, which

largely benefit the wealthy, to activities oriented more to human development.

The Arab States

Over the past three decades, the Arab States had some of the developing world's highest increases in per capita income—largely due to oil exports.

Progress in human development has also been substantial. Between 1960 and 1988, life expectancy increased from 47 to 62 years. Literacy rates rose from 34% to 53% between 1970 and 1985, and the mortality rates, for children under five, were reduced by nearly two-thirds. Access to health services is the highest in the developing world, and access to safe water is second only to Latin America.

Despite the great wealth of many parts of the region, there still is considerable poverty. About 40 million people live below the poverty line, and 60 million adults are illiterate.

The potential of women in the Arab States remains largely unrecognized. Tradition weighs heavily in rural areas and in more conservative pockets of the region, leaving male-female gaps that are wider than anywhere else in the world. The female literacy rate is only 39%, compared with 66% for men. Only 15% of the official labour force are women, although the statistics seriously underreport their economic role, particularly in agriculture and the informal sector.

More needs to be done to enable women to participate fully in education, training and work—and in public life in general.

Another priority must be food production. The region relies heavily on food imports—equivalent to \$100 per person annually and set to rise to \$300 by 2000. The Arab States account for only 5% of the world's population, but they import 13% of the food traded on the international markets (and 20% of the cereals).

The gap between the richest and poorest Arab countries has widened substantially in recent decades—between the oil producers and the rest. The poorer countries do not have the oil income, and the size and growth rate of their population have been higher. The difference in GNP per capita was 2:1 in favour of the oil producers in 1960, but 9:1 in 1987. GNP per capita varies from \$480 in

Sudan to \$15,770 in the United Arab Emirates.

The oil-rich countries have fairly high human development levels. Kuwait, Qatar, Bahrain and the United Arab Emirates have the highest rankings. But their human development index rankings still lag far behind their GNP rankings, despite the rapid change in some of these countries during the past two or three decades.

Another group of Arab countries has medium levels of income and human development. Countries like Tunisia, Syria, Lebanon and Jordan have relatively modest GNPs per capita, but with fairly even income distributions, they have achieved levels of human development that are higher than the average for the region.

A much poorer group includes Yemen and Sudan, with very low levels of income and human development.

Many of the poorer Arab States have provided skilled and unskilled labour for the oil-rich countries. Egypt, Sudan, Tunisia, Morocco, Jordan, Syria, Lebanon and Yemen have together sent millions of workers, and their remittances have provided much-needed hard currency. But the migration has also drained the home countries of labour—and of previous investments in human capital.

Political instability, with the Gulf crisis as the latest manifestation, threatens many of the region's achievements. Military expenditures are 13% of GNP, higher than anywhere else in the world and nearly twice the spending on health and education.

Sub-Saharan Africa

Africa has made important human development gains in recent decades. Since 1960, infant mortality rates have fallen by 37%, and life expectancy has increased from 40 years to 52 years. Adult literacy increased by two-thirds between 1970 and 1985.

But economic growth has been slow in the 1980s, and the population has been rising by 3.2% a year. As a result, GNP per capita has been falling by an average of 2.2% a year in the last ten years. In 1989, however, this trend seems to have reversed with a positive growth in GNP per capita.

Despite the improvement, under-five mortality still stands at 178 deaths for every

The gap between the richest and poorest Arab countries has widened substantially in recent decades

1,000 live births—which compares with 57 for South-East Asia and 72 for Latin America and the Caribbean. In Angola, Guinea-Bissau, Malawi, Mali, Mozambique and Sierra Leone, a quarter or more of the children die before the age of five.

More than half the population has no access to public health services—although traditional medicine continues to play an important role. Almost two-thirds lack safe water. Tropical diseases afflict a high proportion of the population—18 million suffer from sleeping sickness, and malaria kills hundreds of thousands of young children each year. AIDS has devastated many families, especially in central and southern Africa (box 2.6).

Unemployment is one of the most serious problems. It is estimated that 100 million people were unemployed in 1989—four times as many as in 1979—and most were women and young men. In addition, another 100 million people are underemployed. Real wages are falling: by 30% between 1980 and 1989.

Many people have migrated from the rural areas, partly because the cities offer better prospects. But people have also been driven from the land by population pressure and the degradation of the soil. Searching for work in the cities, they often join the fast-growing informal sector—which at least offers them

employment, albeit often in marginal production for near-subsistence wages.

Family budgets in the region are tight. People struggle to meet their most basic needs, and such items as schooling may have to be sacrificed. Girls are often the first to be withdrawn from school. The net primary enrolment ratio for girls is 44%, compared with 54% for boys, and the female literacy rate is only 34%, compared with 56% for males.

The lack of job opportunities at home has led many of the better educated to emigrate in search of work. There are four times as many Ghanaian doctors practising abroad as at home. Nigeria, too, has lost hundreds of highly specialized medical personnel to the industrial countries. Many teachers are leaving. This is a serious drain, undermining much of the basis for development.

In several countries, these problems have been compounded by political violence—cross-border conflicts, ethnic upheavals and civil strife. Angola, Burundi, Ethiopia, Liberia, Mozambique, South Africa and Uganda have suffered especially in this respect. By 1989, a combination of apartheid, social unrest and military skirmishes had created about six million refugees and 50 million disabled persons. Including the effects of natural disasters and difficult socio-economic conditions adds another 35 million displaced people.

The outlook for Africa is bleak unless concerted national and international efforts set the continent on a more positive course. The potential is there. Africa has the people and natural resources to create a much more prosperous future. But it will require substantial human investment, as well as a major restructuring of economic policies.

Improving the position of women is one of the most important tasks. Apart from the benefits to the women themselves, this would also reduce infant mortality, and then reduce population growth as desired family size fell.

Many of the resources already exist in the budgets of governments. Many African countries are spending enormous sums on the military, on inefficient public enterprises and on wasteful prestige projects—funds urgently needed to improve health, education and nutrition.

BOX 2.6

AIDS in Africa

AIDS is a worldwide problem. But some countries in Africa are hit especially hard by the disease. More than 1% of the people of Sub-Saharan Africa, aged 15 to 49, are infected with the human immunodeficiency virus (HIV), which gives them a high risk of contracting AIDS.

The following countries are examples of the serious situation in Central and East Africa:

- *Uganda*—where figures of infection, ranging from 10% to 20% of the adult population, are reported for regions along Lake Victoria. As of 1991, more than 25% of pregnant women seen in antenatal clinics in Kampala are HIV-positive.
- *Burundi*—where 17% of women attending antenatal clinics were found to be HIV-positive.
- *Zambia*—where 20% to 25% of various groups in Lusaka were found to be infected.

AIDS will be one of the major killers

in these countries, primarily for the economically active groups.

Urgent action is needed. Among the first priorities must be behaviour change and public health campaigns. People should know about the disease—and how to protect themselves and their families, through the use of condoms and other precautions.

Health budgets will also have to be increased, especially at the local level. Increasingly, communities are responding to the epidemic and local resources are being mobilized. External support, however, is also urgently needed. The emphasis must remain on minimizing further transmission. But in those countries, where infection is widespread, community-based assistance programmes will be required; and governments and firms will have to plan to minimize the immense social and economic costs associated with the epidemic.

Despite all the progress in human development, much remains to be done. In almost every country, from the least developed to the high-income industrial, many basic human development needs have to be met in nutrition, health, education, housing and other areas.

Meeting people's basic needs is important. But the *development* of people is just as important. People who are healthy, confident and skilled will be in a much better position to cope with a fast-changing environment—and meet the technological and competitive demands of the international

market-place. The emphasis here on meeting people's priority needs reflects the Report's participatory approach to development. There can be no human development without people being alive, healthy, knowledgeable and able to make a decent living. These are the essentials that must be ensured if people are to take charge of their own development, if they are to create their own opportunities, economic, social and political.

The next chapter looks at policy measures that could be adopted towards this end—public spending on human development.



Financing human development

The human development challenge for the 1990s is formidable. Millions in developing and industrial countries lack the most basic requirements of a decent and satisfying life—food, safe water, education, health care, adequate shelter and a clean environment.

The complementarity between private and public spending

Above all, a low income frustrates people's development, for they simply do not have the means to acquire the basic goods they need. Nor in many cases do their governments offer as much support through health, education or other services as they should.

Most of what people need comes from individual or family efforts—from what they earn or from what they grow or make for themselves. This is their primary income (as distinct from secondary income received in kind from government). The size of the primary income determines what food or other essential items any household can afford. The best strategy for human development is to increase the primary incomes in a society by unleashing the creative energies of its people, its resources and its capacities, and by ensuring that these incomes benefit the majority of the population.

Strong policy action is needed for the generation and better distribution of primary incomes. Sustained and more equitable economic growth puts households in a much better position to meet their needs—as the experience of the newly industrializing East Asian economies shows. But if those in power maintain unjust patterns of land distribution, or neglect to promote employment opportunities, they will keep people poor and impede the country's entire development effort.

Governments do, of course, withdraw

some of this primary income in taxes. In return, they are expected to ensure personal and national security, and provide physical infrastructure (like roads and electricity) as well as social infrastructure and services (like health clinics, schools and food subsidies). For the poorer people, government services can help make up for the inadequacy of their primary incomes. But there can be striking differences between one country and another in the amounts of money raised in taxation—and in the ways it is spent. This chapter explores the opportunities for public financing of human development. It looks closely at the proportion of each country's income spent through the government budget on social priority areas.

Before analysing the patterns and efficiency of public social spending in developing countries, however, the role of the state should be placed in a broader perspective.

First among the state's several functions that bear on human development is the responsibility for encouraging the creation of productive, remunerative, satisfying employment—including self-employment. Jobs do more than provide income and produce goods and services. They also engage people in the activities of the community, making them agents of change.

Sensible macroeconomic policies can help achieve this. The exchange rate, for example, should not be overvalued, and there should be no trade restrictions that handicap labour-intensive exports. Inflation should be controlled, and interest rates should not lead to credit rationing that excludes small borrowers. Nor should the country's distribution of assets discriminate against small entrepreneurs and their workers, stifling initiative and worsening poverty.

But even the best macroeconomic policies may fail unless they are complemented

by effective *meso* policies—policies that link the macro and the micro level and that bear directly on people’s lives. Chief among these are the level and structure of government social expenditures and the design of the policy measures and programmes they support (see country studies at the end of this chapter).

To play as productive a part as possible the state should:

- *Allow markets to work properly*—The small enterprises should not be stifled with excessive regulations. But regulations must be in place to ensure competition.
- *Correct for failures of the market*—discouraging activities like pollution or traffic congestion, certain types of stock exchange speculation or the consumption of goods like cigarettes or drugs or petrol. Conversely, the state should subsidize activities, such as public transport, that it wishes to encourage.
- *Create physical infrastructure*—such as roads, railways, harbours, electric power stations and telecommunications. The state is often best suited to providing infrastructure itself, but where private enterprise can provide it efficiently, and does so, policies must promote private investment.
- *Support important public goods*—including a legal framework, public parks and defence and national security.
- *Ensure that people are at the centre of development*—investing in the formation of human capabilities, mobilizing and using people’s productive and creative potential and making social security arrangements available to those who may not be able to help themselves—especially for the unemployed, the elderly and disabled or otherwise incapacitated persons.

The following discussion focuses on this last point, particularly on how public spending responds to existing priority needs with investments in people—investments to build capabilities.

The analysis of public spending

To analyse how public spending on human development can be designed and monitored, this Report suggests the use of four ratios (figures 3.1 and 3.2):

- *The public expenditure ratio*—the percentage of national income that goes into

public expenditure.

- *The social allocation ratio*—the percentage of public expenditure earmarked for social services.
- *The social priority ratio*—the percentage of social expenditure devoted to human priority concerns.
- *The human expenditure ratio*—the percentage of national income devoted to human priority concerns.

The human expenditure ratio is the product of the first three ratios. It is a powerful operational tool that allows policy-makers who want to restructure their budgets to see existing imbalances and the available options.

If public expenditure is already high (as in many developing countries), but the social allocation ratio is low (as in Tanzania), the budget will need to be reassessed to see which areas of expenditure could be reduced (figure 3.2). Military spending, debt servicing and loss-making public enterprises would all be likely candidates.

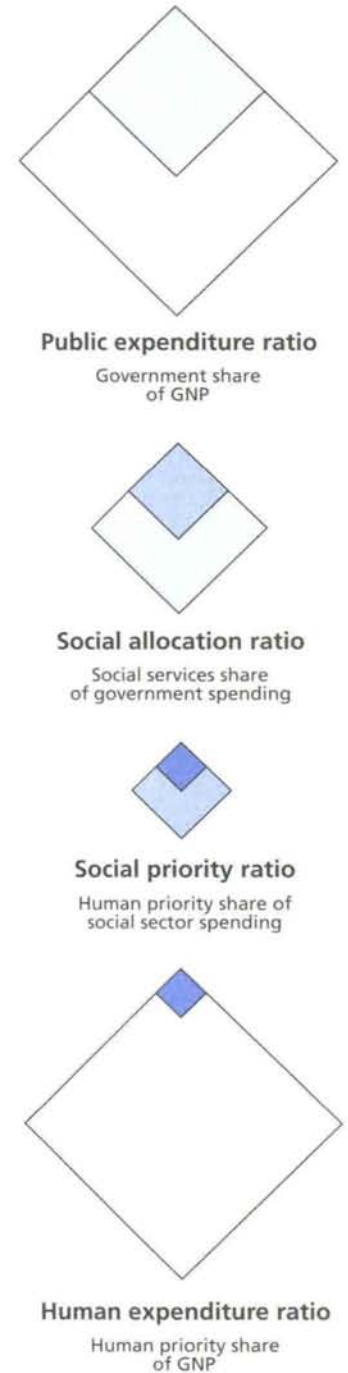
If the first two ratios are high, but the ultimate human development impact, as reflected in human development indicators, is low (as in Pakistan), the social priority ratio must be increased. For the poorest countries, this is likely to involve seeking a better balance between expensive curative hospitals and preventive primary health care, between universities and primary schools and between focusing greater attention on the cities and on the rural areas, where most poor people live.

The human expenditure ratios for 25 countries, covering 74% of the developing world, present some interesting patterns (table 3.1). They illustrate how it is possible to arrive at similar expenditures on social priority areas, but from very different directions.

Pakistan and Indonesia have a low human expenditure ratio, despite reasonable overall levels of public expenditure. The reason is that their social allocation and social priority ratios are low. The Republic of Korea, on the other hand, directs a large share of its relatively small public budget towards social priorities and has, as a result, a much better human expenditure ratio.

Even countries with a high human expenditure ratio (such as Jordan) rely on large public expenditure ratios, while others (including Malaysia and Morocco) have par-

FIGURE 3.1
The four ratios



The human expenditure ratio is the product of three ratios:

E/Y = public expenditure as a proportion of national income

S/E = the proportion of public expenditure going to the social sector—the social allocation ratio

P/S = the proportion of expenditure in the social sectors going to human development priorities—the social priority ratio

Put differently, the human expenditure ratio is: $E/Y \times S/E \times P/S$

ticularly high social priority ratios.

What probably matters more than the human expenditure ratio is human development spending per person in absolute terms (figure 3.3 and table 3.2). This helps place the ratio in its proper perspective. For instance, the Republic of Korea and Malaysia spend similar amounts on social priority concerns per person (\$128), even though Malaysia's human expenditure ratio is twice that of the Republic of Korea, because the latter's GNP per capita is twice that of Malaysia. Similarly, Kuwait's human expenditure ratio is half that of Botswana, yet its absolute expenditure per person is nearly seven times that of Botswana.

Several important policy conclusions emerge from all of this:

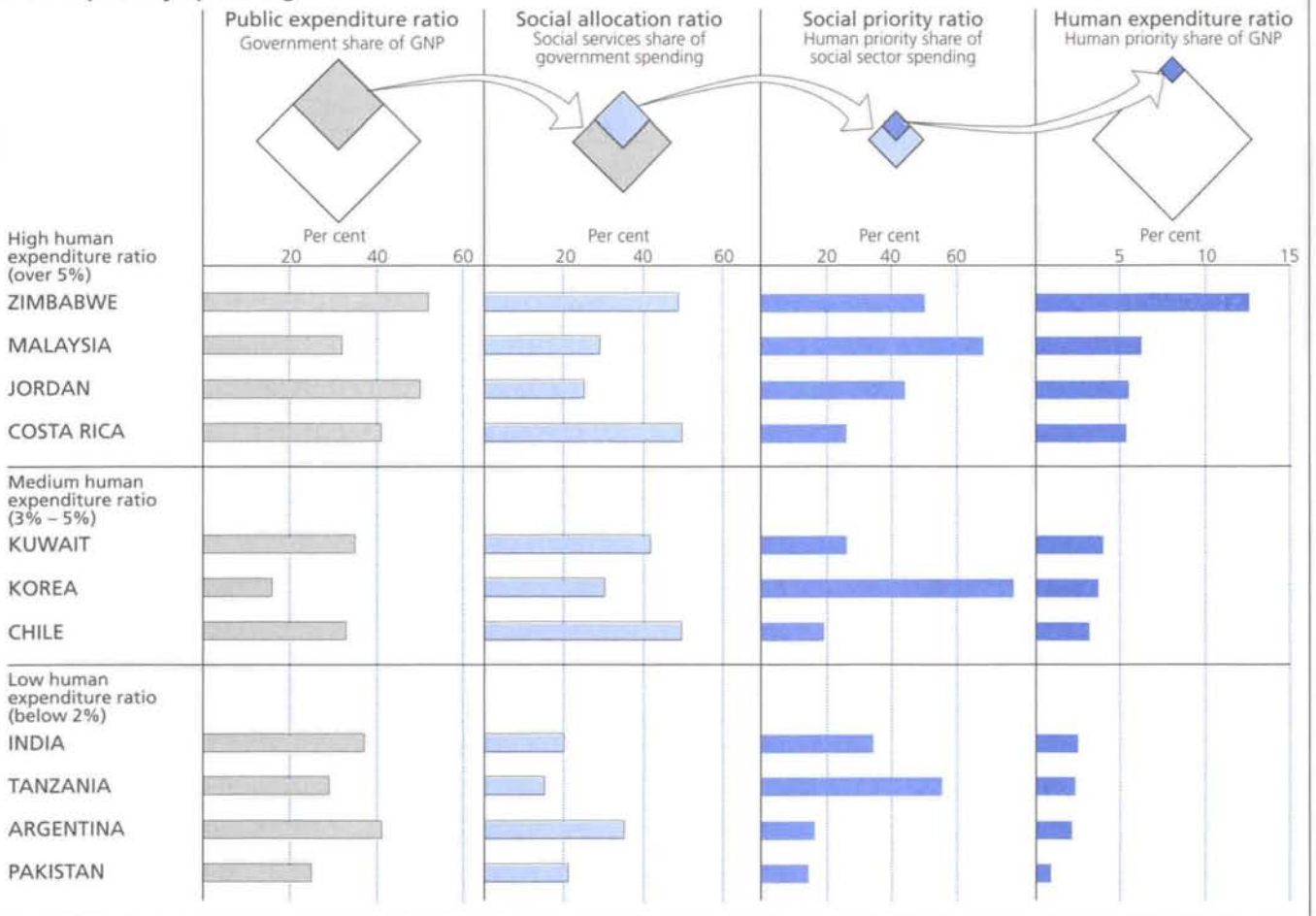
- The human expenditure ratio may need to be around 5% if a country wishes to do well in human development.
- This can be achieved in different ways—

both efficient and inefficient. A preferred option is to keep the public expenditure ratio moderate (around 25%), allocate much of this to the social sectors (more than 40%) and focus on the social priority areas (giving them more than 50%). An inefficient option is to withdraw a large proportion of national income into the public sector, to depress private investment and initiative and to restrict the economic growth and resource expansion that can ultimately finance human development. In several cases, total public expenditure can be cut back (that might encourage more private investment) and yet the government can spend more public money on human concerns.

- Budgetary interventions need not be extensive if GNP growth is rapid and equitable—or if the private sector and non-governmental organizations are extremely active in social spending. Even when the funding is

FIGURE 3.2

Social priority spending



public, the implementation can still be private. Many governments find that the private sector and NGOs can provide social services more efficiently, and are increasingly channelling public funds through them.

- High government spending with low social priorities is the worst case. If 25% or more of national income is channelled through the government budget, and yet less than 1% of GNP goes into human priority concerns (as in Pakistan and Indonesia), this is the worst of all possible worlds. The public sector is huge, yet the majority of the population does not benefit from public social expenditure.

- Several developing countries have moved beyond basic priorities. Countries like Mauritius, Singapore, the Republic of Korea and Chile may have only a moderate human expenditure ratio when the priorities considered are basic ones. But they already have achieved high levels of human development

and can therefore shift their focus to supporting social services at the higher levels.

The human expenditure ratio should increasingly become one of the principal guides to public spending policy. When resources are tight, greater attention must be paid to allocation priorities and efficiency in spending. It is wrong, however, to confuse a plea for greater efficiency with indifference to the mobilization of additional resources. The best argument for mobilizing more resources is spending existing resources well.

The following sections analyse the human expenditure ratio's components in detail.

The public expenditure ratio

A high public expenditure ratio is neither a virtue nor a necessity. Public policy and public spending must facilitate, encourage and complement private spending to ensure that

The best argument for mobilizing more resources is spending existing resources well

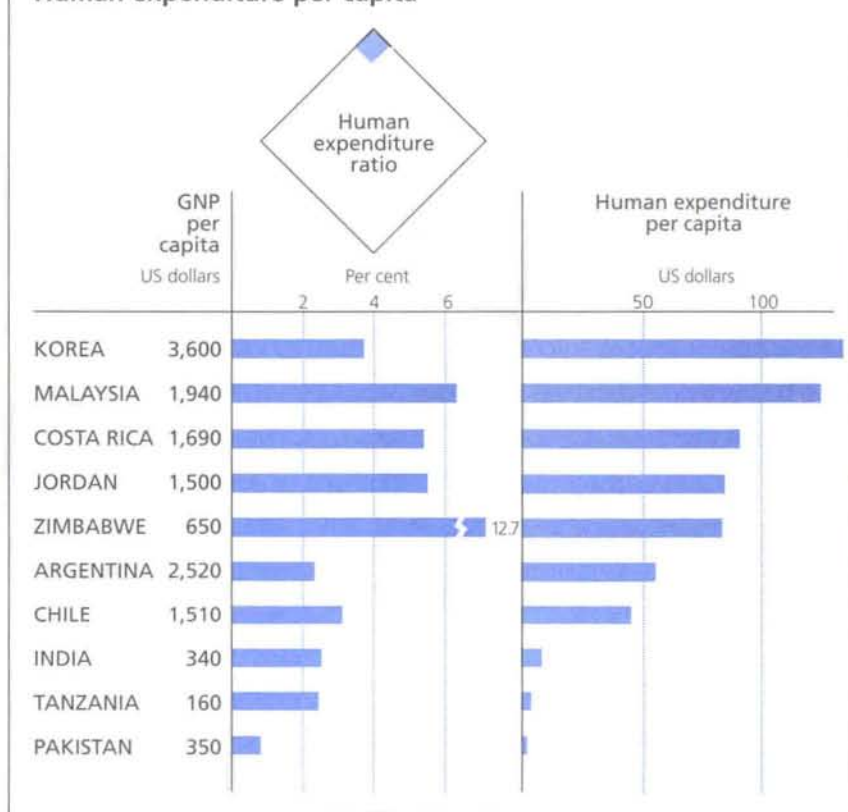
TABLE 3.1
Analysis of public social spending, 1988

	Human expenditure ratio (columns 2x3x4) (%) (1)	Public expenditure ratio (%) (2)	Social allocation ratio (%) (3)	Social priority ratio (%) (4)
<i>High levels of human expenditure – above 5%</i>				
Zimbabwe	12.7	52	49	50
Botswana	7.7	51	37	41
Malaysia	6.3	32	29	68
Morocco	6.3	29	42	52
Jordan	5.5	50	25	44
Costa Rica	5.4	41	50	26
<i>Medium levels of human expenditure – between 3% and 5%</i>				
Singapore	4.3	35	35	35
Brazil	4.2	34	32	38
Kuwait	4.0	36	42	26
Korea	3.7	16	30	77
Mauritius	3.1	27	40	29
Chile	3.1	33	50	19
<i>Low levels of human expenditure – below 3%</i>				
India	2.5	37	20	34
Thailand	2.5	16	37	42
Sri Lanka	2.5	31	43	18
Philippines	2.4	21	22	53
Tanzania	2.4	29	15	55
Argentina	2.3	41	35	16
Nigeria	2.2	29	20	38
Colombia	2.1	15	40	36
China	2.1	19	24	46
Sierra Leone	1.6	13	39	31
Bangladesh	1.2	12	24	42
Pakistan	0.8	25	21	14
Indonesia	0.6	25	13	18
Weighted average	2.9	28	28	38

Note: The social priority ratio is the expenditure on primary health care and basic education as a percentage of total social sector expenditure.

FIGURE 3.3

Human expenditure per capita



human development needs are met. If a government is to allow for sufficient spending on priority areas, a public expenditure ratio of 20-25% is probably desirable. For a series of countries the public expenditure in 1988 varied from a high of 52% in Zimbabwe, to a low of 12% in Bangladesh.

For the few countries having reliable data—such as Argentina, India and the Philippines (table 3.3)—private spending often exceeds public spending. One study on the private financing of health care found that the relative significance of the private sector does not correlate with a country's GNP—richer and poorer countries alike can have heavy private involvement. In Africa, in 11 of the 15 countries covered, expenditures in the private sector exceeded those of all levels of government (table 3.4).

But there are questions to ask: What are the aims of public spending? Who benefits from it? Does it encourage or discourage private initiative? Does it crowd out private investment? Many developing countries spend one-quarter or more of the national income through the government budget, yet very little of this goes to human priority concerns—less than 3% of national income.

Taxation is the main source of finance for public expenditure. The possibilities for raising tax revenue will obviously vary among countries, depending, among other things, on the structure of the economy, on the stage of development and on the country's institutional capacity.

A government's expenditure can (and often does) exceed its revenues, but such "deficit financing" can lead to a very unstable economy. Bolivia in the 1980s is an extreme example: its deficit rose to 28% of GNP—leading to hyperinflation and a serious economic crisis. So, each country should aim at roughly balancing its budget and raising the taxes to do so.

Taxes in developing countries typically come from three major sources: direct tax (on personal incomes or on corporations), indirect tax (usually on sales) and taxes on foreign trade.

- Personal income taxes are relatively insignificant in developing countries, generally averaging about 10% of total tax revenues (compared with around 30% in industrial

TABLE 3.2

Human expenditure per capita, 1988

	Human expenditure per capita (US\$)	Human expenditure ratio (%)	GNP per capita (US\$)
Kuwait	536	4.0	13,400
Singapore	390	4.3	9,070
Korea	133	3.7	3,600
Malaysia	123	6.3	1,940
Costa Rica	92	5.4	1,690
Brazil	90	4.2	2,160
Jordan	83	5.5	1,500
Zimbabwe	83	12.7	650
Botswana	77	7.7	1,010
Argentina	57	2.3	2,520
Mauritius	56	3.1	1,800
Morocco	52	6.3	830
Chile	46	3.1	1,510
Colombia	25	2.1	1,180
Thailand	25	2.5	1,000
Philippines	15	2.4	630
Sri Lanka	10	2.5	420
India	9	2.5	340
China	7	2.1	330
Nigeria	6	2.2	290
Sierra Leone	5	1.6	300
Tanzania	4	2.4	160
Pakistan	3	0.8	350
Indonesia	3	0.6	440
Bangladesh	2	1.2	170
Weighted average	17	2.9	570

countries). The main reason is the small number of people earning salaries in the formal sector. But there also are high rates of tax exemption, as well as widespread evasion. In Bangladesh, only 0.5% of the population is liable to pay personal income tax.

- Corporate tax is more important, typically contributing around 17% of total revenue. The share often exceeds 25% in countries that export oil or minerals, and in some cases 50%—as in Congo, Indonesia, Oman, Venezuela and Trinidad and Tobago.

- Indirect taxes, predominantly on sales, are more heavily relied on in many developing countries—contributing about 28% of total tax revenue on average. And in some cases—like Côte d'Ivoire, Mauritius and Morocco—they contribute over 75%.

- Foreign trade taxes—import and export duties—typically amount to 25% of total revenue. Import duties are the single most important source of revenue in developing countries, particularly in Africa, South Asia and the Arab States.

Other, less widespread forms of taxation, such as social security contributions, are significant for some countries in Latin America (representing about 27% of revenue in Uruguay). But they are not collected at all in many other parts of the world. Wealth taxes are even less common, though they can be found in Nepal, Singapore, El Salvador and Jamaica.

The level of taxation largely determines the possibilities of government spending. But

the design of the tax system is also important, since it has implications for both equity and efficiency in the economy.

Direct taxes tend to be progressive, since the rich pay a higher percentage of their income than the poor. But indirect taxes may have different distributional effects, depending on their design. If they apply to basic goods, they can be regressive, since every buyer of a loaf of bread pays the same, taking a higher proportion of a poorer person's income. In Tanzania, for example, indirect taxation is regressive since it applies to basic commodities like sugar. But in most developing countries, food and other basic items tend to be exempt, so the poor pay less sales tax than those who buy luxury goods.

The "revenue ratio" for any country is the government's total revenue from all sources expressed as a percentage of GNP (table 3.5). If a government wants to spend more money on human development (while still balancing its budget), it will have to raise its revenue ratio, or reallocate revenue from other parts of the budget to the social sector. The potential for doing either will vary greatly from one country to another, but some general observations can be made.

- *Administration*—The tax systems in most developing countries are complex and unstable. Much more revenue could be gained by simplifying the procedures, collecting all the information required and then enforcing collection. Reducing the number of exemp-

TABLE 3.3
Private social sector
expenditure as % of
total, 1988

Philippines	69
India	64
Argentina	55
Mauritius	54
Ghana	53
Costa Rica	28
Jordan	26

TABLE 3.4
Total spending on health in Africa

Country	Year	Government share (%)			Private share (%)			
		Central and external aid	Local	Total	NGOs	Modern	Traditional	Total
Botswana	1979	62.8	10.5	73.3	7.6	11.8	7.3	26.7
Burkina Faso	1981	72.6	1.9	74.5				25.5
Burundi	1986			70.5	7.2	22.3		29.5
Cent. Afr. Rep.	1986			41.2				58.8
Ethiopia	1986			35.6	1.7	53.7	9.0	64.4
Kenya	1984	43.3	5.6	48.9	7.2		44.0	51.2
Lesotho	1986			40.6	7.5	51.9		59.4
Madagascar	1985	44.8	0.8	45.6	4.1	35.5	14.8	54.4
Mali	1985			42.4		18.8	38.8	57.6
Rwanda	1982			46.5	29.1		24.4	53.5
Somalia	1982			49.2				50.8
Swaziland	1984			32.4	12.0	17.6	38.0	67.6
Uganda	1982	15.2	4.5	19.7	4.4	22.9	53.0	80.3
Zambia	1981	43.0	0.8	43.8	7.1	33.1	16.0	56.2
Zimbabwe	1987	53.0	8.8	61.8	4.3	33.9		38.2

The tax systems in most developing countries are complex and unstable

tions, expanding the tax base and perhaps reducing tax rates would help rationalize existing systems and increase total revenues. Brazil has—in the wake of the 1988 reforms that reduced tax rebates and introduced a modest wealth tax—managed to increase its tax ratio by four percentage points. Likewise, Ghana succeeded, through a series of tax reforms aimed at both efficiency and equity, in increasing its tax ratio from 5% in 1983 to about 14% in 1989.

- *Tax handles*—These refer to administratively simple ways of collecting taxes. The opportunities for taxation are often quite limited in economies that are largely agricultural—or where production is for subsistence, or takes place in small enterprises. Taxes on mineral exports, as in diamond-producing Botswana, are usually more promising. Indeed, the countries with the highest tax ratios tend to be those with the highest share of mining in their GNP. A recent study showed that countries where tax ratios were falling tended to be those relying on indirect taxes.

- *Income*—A country's wealth and its efforts to raise taxes are not necessarily correlated. Colombia is much richer than India, for example, yet has much the same tax ratio. And while Bolivia and Zimbabwe have similar levels of GNP per head, their tax ratios are very different. This shows the untapped potential for raising public resources.

- *Economic growth*—What does matter, however, is whether the economy is expanding. Economic growth facilitates increasing revenue ratios—as happened in the 1980s in Botswana, Burkina Faso, Colombia, Indonesia, the Republic of Korea and Sierra Leone.

Burkina Faso, for example, is poor, with few minerals and little manufacturing. Yet it has managed to increase its tax ratio while reducing inflation to a very low level.

Colombia has achieved economic growth even while adjusting its economy. It has also raised its tax and public expenditure ratios. Colombia's tax system appears to be fairly progressive, based on income and property taxes and on value-added taxes that exclude basic goods.

The link between economic growth and taxes is complex, however. Both Malaysia and Morocco collected relatively less tax in the 1980s, even though their economies grew. This very fact may, however, have been critical in encouraging growth, increasing private spending and reducing (or at least holding constant) the need for public spending.

The social allocation ratio

Governments also differ greatly in how much of their spending goes to social areas like nutrition, health and education. The social allocation ratio varies greatly—from 13% in Indonesia to 50% in both Costa Rica and Chile. Unfortunately, data on total government spending are not available for many countries, so that the ratios are unknown for them.

For some countries, the social allocation ratio refers only to central government spending. Regional or local authorities also contribute to social sector spending—and this can be a significant proportion for federally structured governments like India's, where 85% of expenditure on education and health comes from provincial or local governments. Similarly in Brazil, around 18% of health expenditure comes from state or local governments. Again, however, the data on local spending are not available for all countries, so the social spending figures here are incomplete in some cases. If social sector budgets were available in a consolidated form for all countries, this would permit more valid international comparisons.

TABLE 3.5
Total revenue as a % of GNP, 1988

<i>High ratios</i>	
Botswana	74.1
Gabon	47.1
Nicaragua	40.7
Oman	35.9
Brazil	34.4
Egypt	34.3
Tunisia	33.2
Zimbabwe	32.0
Panama	31.9
Chile	31.7
<i>Low ratios</i>	
Haiti	10.8
Paraguay	10.6
El Salvador	10.5
Guatemala	10.3
Nepal	10.3
Peru	9.0
Bangladesh	8.6
Uganda	8.2
Sierra Leone	7.3

Note: Central revenue only.

“Social spending” includes that on education, health, welfare, social security, water, sanitation, housing and amenities. In many countries, particularly in Sub-Saharan Africa and South Asia, education and health make up the bulk of social expenditures. In Latin America (in Argentina, Brazil and Chile, for example) social security payments are much more significant. High social spenders devote over 40% of public expenditure to the social sector, and the low spenders, 20% or less (table 3.6).

A high social allocation ratio does not guarantee a good human development performance, but it does make an important contribution. Some developing countries have high social allocation ratios and social priority ratios—and have also attained high levels of human development. Almost all start from large public expenditure ratios—one-third or more of GNP. But many of these countries could find ways to reduce the size of the public sectors and yet maintain, or even increase, their human development spending.

The trend in social spending in developing countries over recent years is disturbing. In many countries, the real expenditure per head has been declining (table 3.7). In five of the seven Latin American countries shown, spending was lower during 1985-87 than in 1979-81. Half the African countries saw similar falls, with Tanzania as the worst case, with its social spending falling by half during the 1980s.

Asian countries and the Arab States—probably due to economic growth—managed to raise social spending during the 1980s, though in most cases the rate of increase was smaller than that during the 1970s.

Increasing the social allocation ratio

Financing human development usually involves switching resources from other areas of government expenditure.

But restructuring budgets can be difficult. Each government has existing commitments to fulfil and operates under political constraints. Still, it is easy to exaggerate these constraints and encourage passive attitudes towards highly undesirable spending patterns. The large changes by some countries show just what can be achieved.

The constraints tend to be less when government expenditure is rising and when aid flows can be committed in new directions. The time-scale is also important: there is much more flexibility in the medium and long term because of fewer contractual commitments.

Human development and economic growth need to be promoted together. Expenditure on economic items—including infrastructure such as roads and telecommunications—is very important for overall development. So, increasing social expenditure should not mean diverting resources from the economic sector. There may be some potential for savings in this sector, but widespread economic cut-backs could undermine the potential for growth.

But there are a number of other expenditure items where savings no doubt can be made. Defence is one of the largest components in this category—and a prime candidate for cut-backs. In many poor countries, military spending is now two to three times higher than spending on education and health.

Beyond defence spending, discussed in chapter 6, the other areas that have a great potential for releasing funds for more productive uses are:

- External debt
- Internal debt
- Internal policing
- Public enterprise losses

EXTERNAL DEBT REPAYMENTS. The burden of debt, and the reversal of net resource transfers to developing countries, constitute fundamental obstacles to human development. The latest figures for external debt repayments (1989) totalled US\$171 billion, a sum that claims an even larger share of the developing

In many developing countries, the real social expenditure per head has declined in recent years

TABLE 3.6
Social allocation ratio, 1988

<i>High social spending – above 40%</i>	
Costa Rica	50
Chile	50
Zimbabwe	49
Sri Lanka	43
Kuwait	42
Morocco	42
<i>Low social spending – 20% or less</i>	
India	20
Nigeria	20
Tanzania	15
Indonesia	13

Developing country external debt doubled over the past decade

world's resources than the military. By the end of 1990, the highly indebted Latin American countries had over US\$423 billion in long-term loans outstanding, and they paid out almost 5% of GDP (or 24% of export receipts) in debt service (and even this did not cover all interest due). Although the total debt that African countries owed is much less (US\$70 billion, or less than that of Mexico alone), the relative burden there is even more severe. The total debt of the low-income African countries is typically five times their annual export income. For ten of these countries, it is ten times that income, and scheduled debt service averages 80% of their exports.

Developing country debt doubled over the past decade, as economic growth was generally depressed and interest rates remained at historically high levels. The prob-

lem was particularly severe for commodity-dependent countries. Worsening terms of trade and the inability to increase export earnings made their debt burden worse. Attempts to obtain trade surpluses to cope with sudden increases in debt obligations failed, as the increasing supply of price-inelastic goods led to falling prices. Continued efforts to adjust failed to bring the promised results.

Most external debt in developing countries is owed by the government, because either the public sector undertook the initial loan or because it guaranteed private liabilities. The net negative resource transfers from high debt obligations and the collapse of voluntary lending have imposed a severe resource constraint on public expenditure—inhibiting policies for restructuring, investment and growth. The attempt to maintain debt service

TABLE 3.7
Economic growth and social spending

	% change from 1973/75 to 1979/81		% change from 1979/81 to 1985/87	
	Expenditure on education and health	GNP per capita	Expenditure on education and health	GNP per capita
<i>Latin America</i>				
Barbados	24.6	23.3	5.2	1.4
Chile	22.8	32.8	-12.5	-7.5
Costa Rica	127.4	13.0	-32.5	-9.8
Mexico	53.8	21.9	-21.3	-6.6
Panama	5.1	14.8	19.5	4.2
Uruguay	-4.6	28.3	-24.2	-13.2
Venezuela	14.1	-0.8	-20.5	-16.8
<i>Arab States</i>				
Bahrain	20.7	17.8	36.5	-9.6
Egypt	7.4	41.8	5.9	-9.4
Kuwait	-17.4	-32.0	22.7	-42.9
Oman	67.7	75.9	235.8	53.2
Syria	4.8	29.8	7.0	-13.7
Tunisia	25.2	30.1	6.4	8.1
Yemen	712.4	30.8	36.0	15.9
<i>Asia</i>				
India	8.9	9.6	72.6	22.3
Indonesia	102.3	38.7	32.4	11.6
Iran	31.6	-23.2	-23.3	-0.3
Korea	95.2	45.1	47.7	43.7
Malaysia	28.1	31.1	26.7	12.7
Myanmar	-0.2	22.0	41.7	16.5
Nepal	45.8	4.4	58.9	5.3
Pakistan	119.9	16.2	22.2	24.2
Singapore	65.9	47.3	84.6	30.4
Sri Lanka	20.5	21.2	14.7	21.0
Thailand	68.8	30.6	38.1	21.0
<i>Africa</i>				
Burkina Faso	34.7	15.1	10.4	10.9
Ethiopia	-18.2	-20.5	..	..
Liberia	16.2	-17.1	-14.0	-22.3
Mauritius	87.6	23.6	-16.9	5.4
Tanzania	0.2	-2.9	-52.6	-12.1
Zimbabwe	..	..	53.4	3.4

in the face of deteriorating terms of trade entailed fiscal deflation and devaluation. In the Philippines, debt service increased its share of government expenditure from around 2% in 1975 to 36% in 1988, when social services accounted for 22% of the total budget. In Kenya in 1984, debt service represented 20% of government expenditure, compared with the 23% spent on education. In Mexico, debt service is 20% of the government budget compared with 18% for the social sectors.

Clearly, there is a need for some medium-term resolution of the debt problem. The focus has recently shifted from rescheduling to debt and debt service reduction. There have been various schemes for debt conversions, debt buy-backs, special bonds, and so on. More formal schemes for debt relief, initiated by US Secretaries of State, have had disappointingly limited results. Although the Brady Plan has the laudable goal of restoring sustained growth, it is doubtful whether it will make much difference to the amount of service that debtors are paying. For example, the arrangement for Costa Rica merely cut contractual obligations to the levels of repayment that had previously been maintained.

In reality, debt relief has been considerable, as the majority of countries in Latin America and the Caribbean are in substantial arrears on their commercial debt. This situation is widely accepted as a fact of life by bankers and their shareholders as well as governments. But there still is a major haemorrhage of resources that stymies economic growth and social expenditures in developing countries.

Measures to improve the trade situation would also make an important contribution

to financial viability. These measures include improving the access to industrial country markets in such areas as textiles and clothing, tropical goods and agriculture.

Further, large-scale debt relief or default—of much greater magnitude than the Brady Plan now envisages—will be essential to restore the conditions for growth and provide the resources for primary social and economic expenditures.

INTERNAL DEBT. Internal debt—money a government owes to its own citizens in its own currency—is a virtually unexplored aspect of the contemporary debt problem. Yet in some cases it exceeds the external debt—as in India, Malaysia and the Philippines (table 3.8).

Countries acquire this debt in several ways, including national saving schemes and selling government bonds. Internal debt may seem of less concern than external debt, since interest payments and amortization do not involve resources leaving the country—they are transfer payments from one group of citizens to another. But the problem of internal debt is still serious.

Servicing the debt takes up resources that could be used in the social or productive sectors. In the Philippines, for example, internal debt service absorbs 23% of expenditure—while only 22% goes towards social sector spending.

Interest rates on internal debt are sometimes higher than those on external debt—as in Pakistan, Colombia and Mauritius. And it is politically very difficult (and perhaps unfair) for a government to obtain debt relief from its own citizens.

Policies to reduce the internal debt bur-

Internal debt is beginning to exceed the external debt in many developing countries

TABLE 3.8
Domestic debt in selected countries, 1988

	Domestic debt service as a % of total government expenditure	Domestic debt service as a % of total debt service	Total debt as a % of GNP	Domestic debt as a % of total debt
Malaysia	33.7	69.9	49	70.2
Philippines	22.5	62.6	60	59.0
Chile	14.5	61.5	68	34.1
Nigeria	9.2	38.2	101	26.0
Zimbabwe	8.8	55.7	37	47.3
Côte d'Ivoire	8.2	20.7	93	12.8
Jordan	8.1	23.6	94	34.8
Pakistan	7.1	67.6	37	55.7
India	4.1	92.3	19	90.0

The record of most public enterprises is very poor

den may therefore offer good potential for increasing social sector finance. The most direct way to reduce internal debt is through raising revenue and repaying the debt. Many countries made major improvements in their budgetary position in the 1980s—such as Botswana, Burkina Faso, Colombia and Indonesia. In each case, the improvements were made while raising government expenditure per head, by increasing taxation. Other countries have also improved their position but at the expense of government expenditure—Malaysia, Peru, Zambia and Uruguay.

Devices have been suggested for reducing the debt burden by converting it to equity or other forms of asset. Other options might be to reschedule debt or index it to reduce the current costs.

Each of these mechanisms can significantly reduce the short-term debt burden. Improving the budgetary position would do so permanently. Others, such as indexation, would offer short-term gains but only at the expense of increasing the long-term debt burden and perhaps passing the problem on to the next generation.

INTERNAL POLICING. A great deal of security expenditure in many developing countries is aimed at maintaining law and order, or policing the country's people. But quantifying this expenditure is not easy. Security spending takes diverse forms. And the budget for internal policing may be shown under various government departments—the President's Office (as in Pinochet's Chile), the Ministry of Defence (Zaire) or the Home Secretary (United Kingdom).

The sensitivity of the subject also restricts information on police numbers and expenditure. Governments often do not report the full expenditure, and estimates from other sources can vary widely. So, it is probably more useful to consider figures for overall security expenditure rather than those for civil police.

For some developing countries, there is also specific information on "public order and safety expenditures". The most striking case is that of Sri Lanka, where the proportion of government expenditure spent on police almost trebled between 1982 and 1987. In Ethiopia, the share of public resources devoted to internal policing remained at about

5% during the 1980s. In the latest Indian Plan, the budget for internal policing exceeds that for central expenditures on social services—partly a response to growing ethnic and religious strife.

Democratization at all levels could be the key to reducing expenditure on internal policing. If civil liberties are enhanced, the political functions of control and the financial demands imposed by the security forces are correspondingly reduced—and funds can be released for human development. This process could then become self-perpetuating. Progress in human development, with open and participatory systems responsive to the needs of all people (including minorities), reduces the need felt for enforced security.

PUBLIC ENTERPRISE LOSSES. Many developing countries have engaged in a range of economic activities through public enterprises. These include manufacturing, natural resource extraction, agricultural marketing and the provision of utility services.

Public enterprises consume a major part of the budgetary resources in many countries of Sub-Saharan Africa, but they are also significant elsewhere. In Uruguay, one in four workers is employed by the state—whose monopolies include insurance, ports, gambling and cement production. Sri Lanka has more than 270 public enterprises, which employ 40% of the formal sector workforce.

The record of most public enterprises is very poor, with few successful examples. Management has more often been incompetent, and the resulting losses constitute a massive drain on many national budgets. Net transfers from government to public enterprises are about 3% of GDP annually in Egypt and 2% in the Philippines. In Sri Lanka, public enterprises account for 20% of government expenditure and 62% of the budget deficit. In Cameroon, the losses have often exceeded oil revenue. In some cases, part of these losses might be justified in social terms—such as extending marketing or distribution services to poor and remote areas. But there is enormous room for improvement.

The obstacles to satisfactory performance are various. Politicians frequently interfere in the daily running of public enterprises, using them as important instruments of patronage

and making many unmerited appointments to positions of power. Public enterprises have often become the employer of last resort—resulting in falling productivity and morale and a decline in real wages. Weak management and secrecy about their operations have compounded the problems. In the end, the state is usually willing to subsidize these loss-making enterprises.

An increasingly important way to deal with inefficient public enterprises has been privatization. Many developing countries find that efforts to privatize elicit protests from employees and other affected groups and look for alternative solutions. But half-hearted measures are unlikely to succeed, as shown by Argentina, Brazil, Pakistan, Poland and the USSR. Wherever bold privatization has been attempted, it has begun to yield satisfying results—after an admittedly painful transition. Wherever half-way measures have been tried, neither economic efficiency nor social justice has been achieved.

Even without privatization, certain significant reforms are possible. There is a need to match greater autonomy with improved financial reporting and greater accountability. The links with consumers could also be made more efficient—particularly through pricing policies. In many cases, the prices for telephones, energy and water are well below marginal cost. It might be thought that charging more realistic prices would hit the poor unduly, but this is not usually so. Around 90% of publicly provided electricity and water services are consumed by industry and by the better off. The poor often have to rely on more expensive alternatives, such as water delivered in trucks by private companies.

Recovering the real cost of services from those who can afford paying would generate more resources for the government (or at least reduce losses) and thus release funds for social expenditure. Prices could, in any case, be differentiated with poor groups in mind. For instance, charges should be lower for water from yard taps, which are used by the poor.

Freeing up the financial constraints would also allow for expansion of services—say, by making labour-intensive infrastructure improvements to extend services to poorer areas.

Resources are dissipated in many other ways: capital flight (box 3.1), corruption (box

3.2) and prestige projects (box 3.3). The examples show the wide scope for increasing social expenditures by squeezing expenditures in other sectors—or by eliminating government waste. But how much of the expenditure allocated to the social sector is actually earmarked for human priority concerns?

The social priority ratio

The social priority ratio is the percentage of social expenditure directed at the priority areas. What is considered to be a priority will naturally change from one country to another, and change over time as human development proceeds. Countries that have already achieved high standards of literacy may well regard higher education as their next priority area. Where basic standards of health have been achieved, health ministries will want to increase attention to more sophisticated kinds of curative care.

Capital flight

BOX 3.1

The export of capital by nationals and corporations represents a serious drain of resources from many developing countries. Estimates of the magnitude of the outflow differ enormously, in view of the inherent difficulties of measurement. But reliable sources suggest that for Mexico, Argentina and Venezuela (three of the largest Latin American debtors) an amount equivalent to at least half of the money borrowed in the last 15 years has flown out again. In the Philippines, it has been estimated that capital flight amounted to 80% of the outstanding debt between 1962 and 1986.

The wealthy benefit from such capital movements. They often incurred the original debt and then bought, at subsidized rates, dollars that they transferred abroad. Many Latin American governments later assumed these debts as a public responsibility—leaving the wealthy with tax-free dollar assets abroad, placing the burden of adjustment and fiscal austerity on the poor.

If governments were pursuing sound macroeconomic policies, this would create scope for local investment and reduce the need for capital to flee.

More realistic exchange rates would

also contribute—along with exchange controls, if appropriate—as the Republic of Korea and Colombia reflect. But controls are no panacea, as evidenced by the failures in Mexico and France.

The problem of capital flight is exacerbated by the practices of commercial banks in the haven countries—soliciting funds for tax-free interest and offering high interest rates.

Tax reform is also needed—in Latin America, all interest earned overseas is free of tax, while in the USA, only local residents are liable for tax—creating obvious incentives to keep tax-free accounts abroad. Ideally, the governments in haven countries should eliminate the tax exemptions enjoyed by foreign-held assets—through instituting withholding taxes, for example—and avoid the high interest rates that intensified capital flight in the 1980s.

These proposals could help prevent future losses. But there are ways, too, of repatriating capital that has already fled. Governments can announce amnesties both on unpaid taxes and on violations of exchange controls. Above all, however, there must be stability and confidence in the economy.

Corruption

Corruption, the use of one's position for illegitimate private gain, is a serious problem in many countries—and a waste of time and money that could be better used elsewhere.

The Recruit scandal in Japan and the savings and loan debacle in the USA are two of the most infamous recent examples in the North. And developing countries—from Indonesia to Zaire to the Dominican Republic—have often suffered from chief executives who amass huge fortunes for themselves and their families.

But corruption generally takes place on a much smaller scale. There are often vast bureaucracies in developing countries operating extensive administrative controls. The rules and the lines of authority are frequently unclear. And they are often less constrained by legal principles than their counterparts in the North. Given the low pay of officials and the striking inequalities in income, status and wealth all around them, the temptation to supplement their incomes can be great.

Corruption is not easy to combat. Major anticorruption drives tend to have only a limited impact—as in the USSR in the late 1980s and Nigeria in the mid-1970s.

Openness in the conduct of public business can help minimize corruption. This requires, among other things, open tendering for contracts and keeping registers of the business interests of officials. Together with an educated electorate and a free press, this approach can remove the easier opportunities and raise the deterrent of detection. But openness does not guarantee probity, as the frequency of scandals in the industrial countries attests.

This is an area in which some new thinking would be welcome. Since corruption often operates at the highest levels, involving rich and powerful elites, it can be difficult for local people to expose. There might thus be a role for an international organization that could operate along lines similar to those of Amnesty International.

Many developing countries, however, have very low standards of public health, education and water. For them, the priority must be basic education, primary health care and the extension of basic water systems to poor areas of both cities and rural areas.

Of course, even the poorest country should have an efficient hospital system and good universities. All countries need skilled local people to teach children, to mend broken limbs, to design bridges and to formulate economic and social policy. But countries where the illiteracy rate is beyond 40% probably should not be spending the largest share of their education budgets on financing free universities.

Likewise, social security systems may not be a good use of available funds for developing countries. Social security payments tend to go to those in formal employment—not the poorest people. In Chile in 1985, for example, it was estimated that only 13% of social security payments benefited the poorest 40% of the population. Of health spending, by contrast, 64% did reach the poor.

This Report makes the assumption that, for most developing countries, the basic services should be given priority. And calculating the social priority ratio on this basis highlights the cases where the social sector spending is badly skewed (table 3.9). Pakistan is one clear case. It has the lowest priority ratio in the sample. In a country where literacy rates are only 31%, the government is directing less than a third of social expenditure towards basic education.

Priorities change with the level of development. Argentina is a country that spends a significant amount on the social sector. Yet it, too, has a low social priority ratio—the share of overall social spending flowing to health and education has been falling at the expense of social security payments. In Argentina's case, however, this could be seen as a case of shifting priorities after some of the basic goals have been achieved. Human development levels are now high—the literacy rate equals 95%.

Health priorities

Primary health care for many countries would be the cheapest and quickest way to improve health standards. It costs between \$100 and

Prestige projects

There are many projects whose principal aim seems to be to enhance the prestige of national leaderships. One example is the recently constructed \$250 million basilica to rival St. Peter's, in a country where only 10% of the population is even nominally of that denomination—and where 82% of people lack access to safe water. Quite apart from squandering scarce resources, such projects destroy the credibility of the government at home and abroad.

The construction of new capital cities can also be a questionable use of public resources. These capitals have sprung up from Canberra to Islamabad. There are some arguments in their favour. They help promote national unity and identity, and for newly independent nations a fresh seat of government can symbolize a break from the colonial past. But this cannot justify extravagance, which will ultimately undermine, rather than further, national solidarity.

Some prestige projects, designed in conjunction with foreign donors, can re-

sult in undertakings that are totally inappropriate and an excessive drain on local expenditure. The institute for malaria research in the Solomon Islands is one of several such projects funded by Japan in the South Pacific. The air-conditioning costs alone exceed what the government could afford.

The World Bank, too, has funded large and expensive ventures that proved technically poor and ill-designed for their intended purpose. One infamous example is the Morogoro shoe factory in Tanzania, built to produce high-quality exports. Expensive (and totally inappropriate) Italian technology was installed in what is one of the largest shoe factories in the world. At the peak of production, it operated at only 7% capacity, and the quality was so poor that the shoes were difficult to sell locally, let alone overseas.

Such projects would not get off the ground if development planning and aid programming were more participatory and if social priority needs were clearly identified.

\$600 to save each additional life through preventive health care, while the corresponding figure for curative care is between \$500 and \$5,000. Part of the reason: a primary health worker costs about \$500 to train, a fully qualified doctor around \$60,000.

Most countries spend a high proportion of their health budgets on hospitals—over 90% in Malawi and Sierra Leone and over 80% in Argentina, Bolivia, the Republic of Korea, Liberia, Panama, Tanzania, Togo and Uruguay. Many countries that spend a high proportion of their budgets on hospitals also have very high infant mortality rates (as in Liberia and Tanzania).

Things often get worse when a country is undergoing a severe economic adjustment programme. If health budgets come under pressure, primary health care is often hit hardest. It is a case of choosing priorities. One kind of health priority need not displace the other completely. The two need to be kept in balance.

Despite a low ranking in the social priority tables, Bangladesh provides an illustration of restructuring health expenditures. It inherited an urban-biased, curative health care system. Now the system, based on the primary health care concept, has an institutional network for providing health care facilities from the grassroots level upwards. This shift is reflected in the increasing share of rural health clinics in the health budget—rising from less than 10% in 1978 to 60% in 1988, implying greater access for the poor, especially in rural areas. In Malaysia, successive national governments have had the political impetus to redistribute income towards the Malays (*bumiputras*), who are generally poorer and live in rural areas. As a result, expenditures per head on education, health and pensions in Malaysia are higher in the rural areas than in the towns and cities.

Other governments have promoted low-cost, high-impact interventions. Indonesia introduced a nationwide programme of this type in the 1980s, and an estimated 85% of mothers and children now have access to preventive health facilities. This *posyandu* programme, based on meetings in private homes and village halls, concentrates on basic priorities like nutrition, immunization, diarrhoeal disease control and health education.

Chile's dramatic reduction in child mortality rates over the 1970s and 1980s was achieved through a series of targeted programmes, including subsidies to poor pregnant women, primary school feeding schemes and nutritional rehabilitation for severely malnourished children. This success is controversial, however. Some argue that the narrow focus on child health and nutrition was at the expense of other social measures. And while more children survived, the overall living standards of the poor fell during the same period, due to declining primary incomes.

Education priorities

Although the first priority in education should be a well-organized system of basic schooling, the primary level accounts for less than half the total education expenditure in every region. Over 100 million children worldwide receive no primary education. A further 200 million receive no education beyond the age of 12.

This is a wasted opportunity. Not only is primary education of fundamental importance in itself, it is also a good way to direct resources more specifically towards the poor, since a far greater share of the benefits of primary education accrues to those who are less well off. In Costa Rica, for example, 57% of the benefits of primary education go to the poorest 40% of the people, while only 8% go to the wealthiest 20%.

Basic education also brings high economic returns. In many countries, the economic returns to primary education are almost twice as high as those to higher education. Yet, throughout the developing world, a disproportionate share of spending goes to the higher levels. In francophone Africa, East Asia, Latin America and the Pacific, tertiary education receives a greater proportion of government funds than primary.

Restructuring is taking place in some countries—indeed, it is more common in education than in health. In 22 countries in Sub-Saharan Africa, the share of education budgets for primary schooling rose during the 1980s in 15 countries, fell in five and remained constant in one. In Latin America, there seem to have been clear improvements in Brazil, Chile and the Dominican Republic. In Ar-

TABLE 3.9
Social priority ratio, 1988

<i>High ratios</i>	
Korea, Republic of	77
Malaysia	68
Tanzania	55
Philippines	53
Morocco	52
Zimbabwe	50
<i>Low ratios</i>	
Chile	19
Sri Lanka	18
Indonesia	18
Argentina	16
Pakistan	14

Ironically, the wealthy often benefit more than the poor from public, social services

gentina and Jamaica, the share of primary education fell as that of tertiary education rose. In Jamaica, this shift may reflect a move in the right direction—the adult literacy rate is 98%, and the combined primary and secondary school enrolment ratio is 82%. Higher education is thus the next challenge to address.

The training of scientists and engineers is important—particularly in East Asia and Latin America, where literacy rates are high. But a good deal could be gained from even limited restructuring. Reducing government expenditure on tertiary education by just 12% in the Arab States would permit a doubling of expenditure on primary schools—a critical need in a region where literacy rates are low.

Water and sanitation priorities

The inequalities evident for health and education services are matched by those for water supply. Clean water and safe sanitation, along with adequate food, are the foundations of human development. Yet the poor are badly served: around 50% of rural households, and 20% of urban ones, have no safe water supply. In some countries the disparities are much greater. In Ethiopia, people in urban areas have 14 times greater access to sanitary facilities than those in the countryside.

Around \$10 billion is spent each year on water supplies in developing countries, and an estimated 80% of this goes to services for the better off. To provide safe water through stand pipes would cost only \$5 per person per year. It is ironic that in many countries the wealthy receive a good service very cheaply while the poor get inadequate services at a high price.

Private sector response to social priority needs

National human development strategies work best when they seek to achieve complementarity and interaction between the public and private sectors. That has often been confirmed. But what is the response of the private sector to social priority needs?

The data on this point are patchy, but some assessments are possible.

In education, it appears that in all regions, except the Arab States, the private sector contribution is weighted towards higher education (table 3.10).

There are, however, wide variations among countries in the same region. Asia as a whole has relatively little private primary education, but it is significant in Bangladesh (11%) and Thailand (9%). Private secondary education in Asia shows even greater variation—from 93% in Bangladesh to 2% in Sri Lanka and zero in China and Laos. Tertiary education also varies, from 83% in the Philippines to zero in China.

Sub-Saharan Africa shows a different pattern. The private sector is much more significant in anglophone countries, where it accounts for a third of primary enrolment and almost a half of secondary enrolment. In the francophone and other countries, the figures for both levels are 8% or less.

For health, there are many well-known examples of well-equipped, private hospitals in developing countries. In Morocco, for example, 90% of the hospital beds are in private institutions.

But one also finds that large segments of the population—between 60% and 80% in some parts of Peru—are treated privately, by local, traditional healers.

TABLE 3.10
Enrolment in private schools^a, 1985
As % of total enrolment at that level

Region	Primary		Secondary		Higher	
	%	Number of countries	%	Number of countries	%	Number of countries
Asia	3.9	10	26.0	9	28.6	13
Sub-Saharan Africa	15.4	32	26.4	31	..	..
Latin America	17.7	19	29.1	19	33.6	7
Middle East and North Africa	8.8	15	8.1	17	3.3	15

a. Includes schools that rely solely on private contributions and those that receive some government aid.

The most interesting cases are probably those between these two alternatives. For example, both the Gandhigram Institute of Rural Health and Family Welfare in India and the Association of Rwandan Tradipractitioners of Bare encourage cooperation between traditional and modern health practitioners.

Other “mixed” strategies in health—of special interest in meeting basic health needs and those of the poor—encourage interaction between the public and the private sectors. Many examples could be cited of private hospitals working under contract to a ministry of health.

Another significant aspect is that private health care—particularly that of NGOs—has in some cases moved in to make up for failures of public provision. In other cases, traditional care has retained a significant role in health—notably in Uganda, Kenya and Swaziland. Elsewhere, private medicine may have been introduced to offer a higher standard of care to those who can afford it.

International aid

Aid programmes also offer great potential for restructuring—and an enormous pay-off. If only one-third of existing aid were committed to human priority areas, the aid allocation to these sectors would increase fourfold.

Aid budgets, like government expenditures, can be examined through four ratios:

- *The aid expenditure ratio*—the percentage of a donor’s GNP that it gives in aid.
- *The aid social-sector ratio*—the percentage of each donor’s aid that goes to the social sector.
- *The aid priority ratio*—the percentage of social sector aid committed to human priority areas.
- *The aid human expenditure ratio*—the product of the three foregoing ratios, and thus the percentage of a donor’s GNP going to human priority areas in recipient countries.

The aid expenditure ratio

Most donor countries have failed to reach the internationally agreed target of 0.7% of GNP for official development assistance (ODA). While there is considerable variation among countries—Norway allocated over 1% of its

GNP to aid, and the USA only 0.15%—the general trend in the 1980s has been downwards (table 3.11).

Despite these declining ratios, the share of ODA in net financial flows to developing countries has risen dramatically over the past decade—from about one-third to over two-thirds—largely because of the unavailability of private loans. This is particularly true for the poorest countries. Indeed, in some 40 countries, the ODA they receive exceeds 10% of their GDP.

The aid social-sector ratio

It is not possible, however, to be precise about how aid was used—particularly to estimate how much of it went to the social and productive sectors. Some aid is given to support a government’s general expenditure programme. This programme aid may not be tied to any one sector, so that it can be used for defence or infrastructure or for social sectors. On the other hand, aid given specifically for the social sectors may—in theory, though rarely in practise—only substitute for funds the government would have provided anyway, and which it can now spend elsewhere.

Untied programme aid formed a rising proportion of aid flows in the 1980s, partly because of the increasing importance of structural adjustment loans. From the World Bank, adjustment lending in 1989 accounted for 18% of its IBRD commitments and 8% of its IDA funding, compared with 8% and 4% for 1980-82. Within adjustment lending, an increasing proportion—two-thirds in 1989—has been directed towards specific sectors. But until 1989, only two such sectoral adjustment loans were for the social sectors, so the effect has been to reduce the proportion of funds

If only one-third of existing aid were committed to human priority areas, the aid allocation to these sectors would increase fourfold

TABLE 3.11
ODA as a percentage of GNP

	1970	1980	1989
Norway	.33	.90	1.04
Sweden	.41	.85	.97
Netherlands	.60	.90	.94
Denmark	.40	.72	.94
Canada	.41	.47	.44
Australia	.59	.52	.38
Japan	.23	.27	.32
United Kingdom	.42	.43	.31
USA	.31	.24	.15
Average for industrial countries	.33	.35	.32

specifically available for human development.

Aid social-sector ratios have also been falling in bilateral lending, as seen in the sectoral allocation of aid from western donors (accounting for over 85% of bilateral, or government-to-government aid) (table 3.12). For bilateral aid, the proportion for health and education together dropped from 24.5% to 17.4% between 1979 and 1989. For multilateral aid, the proportions are even lower. There are, however, considerable variations among donors: ranging from the relatively low allocations of Japan (8.4%) and Sweden (13.8%) to the higher proportions of Belgium (38%) and New Zealand (54%).

Even if the social allocation ratio is falling generally for certain recipient countries, the aid allocated to education and health can form a substantial proportion of their total social expenditure. In some cases, it exceeds the

amount spent by national governments.

Much of the aid not allocated to the social sector is still important for human development—which involves both the economic and social aspects of people's lives. Support for some forms of infrastructure, say, will be of great value. Indeed, for countries already at a high level of human development, certain types of social spending may have a lower priority. Countries like Chile, Cuba and the Philippines, which already have high literacy rates, need to be spending more on higher education.

One part of non-social-sector aid that is very questionable is assistance to the military. Military assistance is an important instrument of US foreign policy. The real level of military assistance from the USA peaked during the Korean war. There has since been a major regional shift away from Asia and towards Israel, Egypt and the Gulf area. The next largest share goes to a group of countries where the USA has rights to military bases—Turkey, Greece, Portugal, Spain and the Philippines, though Pakistan was also an important recipient during the 1980s at the time of the Afghanistan war. Elsewhere, the assistance to Africa (excluding Ethiopia in the early 1970s) and Latin America (apart from El Salvador) has been relatively low. Most US military aid since 1974 has been in the form of credit sales rather than grants. But the loans have largely been forgiven (as at various times for Israel, Egypt, Turkey and Pakistan).

The aid priority ratio

The proportion of social sector aid allocated to priority areas (such as primary health care, basic education, family planning and rural water supply) has been small. The aid priority ratio is only about 36.6% (figures 3.4 and 3.5 and table 3.13)—despite repeated pronouncements from the international community about the importance of basic education and health care and rural services. Italy has a particularly low ratio, and those for France, Australia and Canada are not much higher. The Nordic countries and Switzerland have the highest aid priority ratios.

The aid priority ratio in table 3.13 is based on the Credit Reporting System (CRS) database of the OECD. But its coverage—

TABLE 3.12
Allocation of aid by sector

	Bilateral ^a		Multilateral 1988
	1979	1989	
Health and population	8.0	6.7	7.8
Education	16.5	10.7	4.3
Total social and administrative infrastructure including planning and public administration	30.8	25.7	19.9
Agriculture	17.9	11.3	23.2
Other	51.3	63.0	56.9
Total	100.0	100.0	100.0

a. OECD/DAC, accounting for 85% of total bilateral aid.

TABLE 3.13
Analysis of ODA social spending, 1989

	Aid human expenditure ratio (%)	Aid expenditure ratio (%)	Aid social allocation ratio (%)	Aid social priority ratio (%)
Average	0.026	0.32	22.6	36.6
Netherlands	0.128	0.94	25.2	53.8
Denmark	0.110	0.94	22.4	52.2
Sweden	0.070	0.97	13.8	51.9
France	0.053	0.54	39.1	25.1
Finland	0.051	0.63	29.3	27.4
Switzerland	0.047	0.30	20.1	78.7
Germany ^a	0.047	0.41	25.6	44.4
Australia	0.029	0.38	30.7	25.2
United Kingdom	0.028	0.31	24.8	36.6
Canada	0.023	0.44	19.9	25.9
Italy	0.017	0.42	18.0	22.4
USA	0.012	0.15	17.1	46.1

Note: Column 1 is the percentage of a donor's GNP allocated to priority sectors (primary health care and basic education) in recipient countries through ODA. It is calculated as columns 2 x 3 x 4.

a. Excluding the former German Democratic Republic.

approximately 70% of total bilateral ODA—is notably incomplete in the cases of some large donors, like France, Germany and the United Kingdom. Rough assumptions have been made about the sectoral distribution of bilateral grants (technical note 7). It must be noted, however, that actual figures are only approximations and need to be carefully checked: what matters is the method of this analysis.

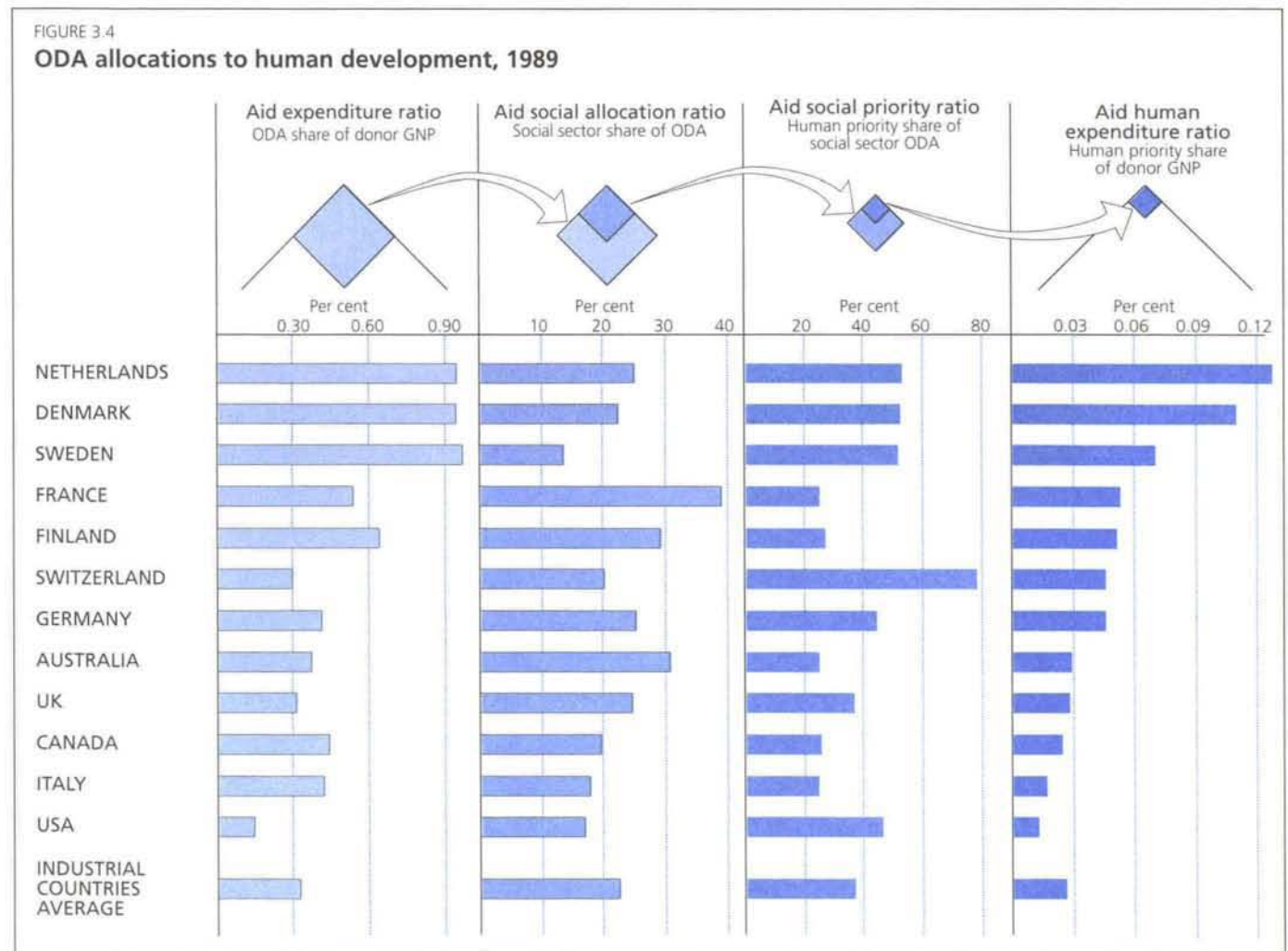
Education received only 11% of all bilateral aid during the 1980s. Flows to primary education were limited, and declined in real terms for middle- and low-income countries.

Educational assistance to Sub-Saharan Africa in the early 1980s, for example, was heavily skewed towards higher education. This bias is reflected in the allocations per student—\$1.10 per primary pupil, \$11 per secondary pupil and \$575 per university student—though the discrepancy arises, to some extent, because higher education is more expensive.

Social sector aid is skewed in this way when donors prefer their contributions to be more visible—the city hospital rather than the rural clinic. But even when there is a real desire to promote primary programmes, it can be very difficult to channel funds to small-scale, highly dispersed local initiatives and to ensure that they are replicable. It certainly is possible, however—as with the success in promoting primary health care in Senegal (box 3.4).

Social sector aid that has a high priority ratio will tend to direct resources more towards the poor. But it is also possible to have much the same effect in economic sectors by supporting poverty-oriented projects.

Aid directed towards small-scale agriculture and industry, for example, can improve the incomes of the poor. Indeed, the evidence shows that poverty-oriented projects have a high rate of return and that attempts to reach the poor do not undermine economic efficiency. But many projects have worked in the



other direction. In India, for example, many poor tend to be landless. So external assistance has often been provided to support efforts aimed at increasing food production through the provision of irrigation, credit, extension and new seeds. These efforts have mostly benefited the middle-income farmers. Agricultural advances have certainly helped raise food output in India. But, unfortunately, the purchasing power of India's poor has not increased significantly. As a result, the incidence of malnutrition has not fallen.

For the urban poor, there have been numerous attempts—of varying success—to offer credit and technology. In Costa Rica, external assistance helped finance over 400 urban microenterprises, which have created jobs and raised incomes. Over half the beneficiaries were among the extremely poor.

Restructuring aid budgets

The potential is great for donors to mobilize more resources for human development by restructuring their aid budgets. The aid priority ratio—the proportion of donors' GNP allocated to human priority concerns—is extremely low. For OECD donors as a whole, it

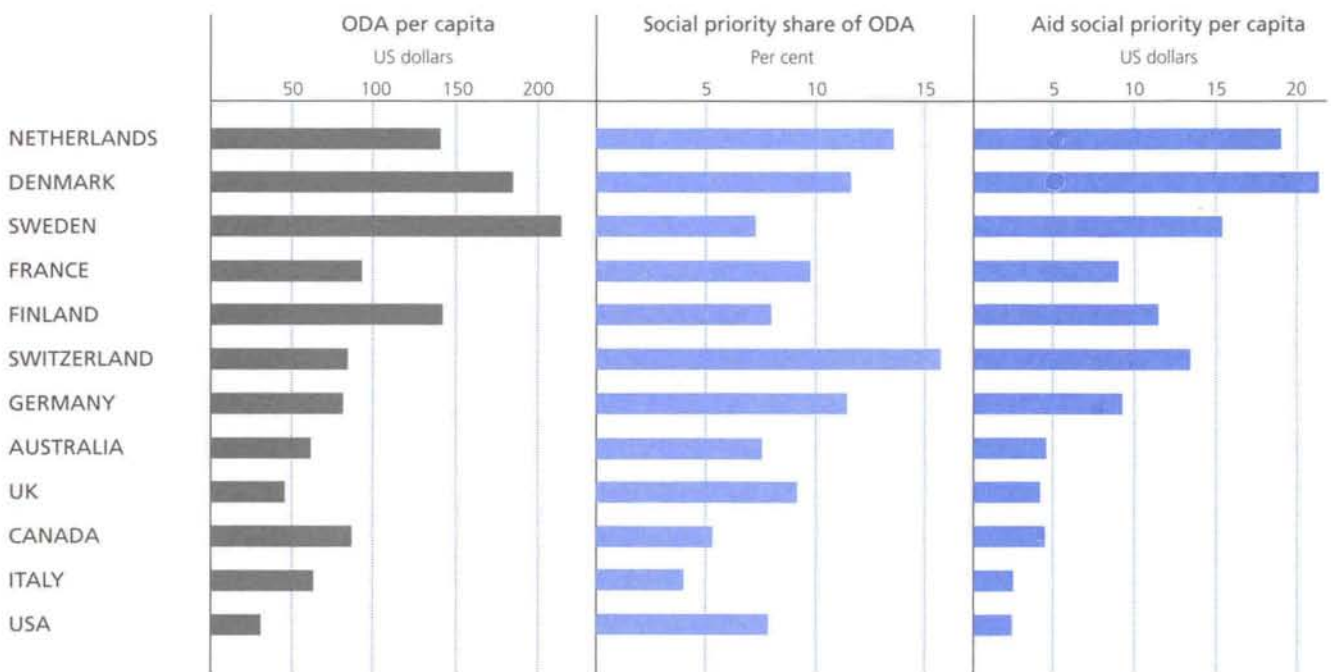
is only 0.026% of their combined GNP.

The arithmetic is simple. Official development assistance (ODA) for all countries currently represents 0.32% of their combined GNP. Of this, only 23% went to social sectors in 1988, and of the social sector spending, only 37% went to human development priority areas. In education budgets, for example, only 7% went for primary schooling. In health budgets, only 27% was for primary health care. And only 19% of the water supply and sanitation funds went to the rural areas.

Averages like these naturally conceal significant differences among donors (table 3.11). The Nordic countries devote over 0.9% of their GNP to aid, and their aid priority ratios are between 0.05% and 0.11%—many times more than the overall average for donors. The USA, on the other hand, commits only 0.15% of its GNP to aid. As a result, its aid human expenditure ratio is only 0.01%.

Some people argue that it does not matter if aid misses priority targets: any aid will permit the recipient government to release funds to spend elsewhere. Plausible in theory, the argument is wrong in practice. For many countries, aid constitutes such a high proportion of their development budgets that aid

FIGURE 3.5
Social priority ODA per capita donor population, 1989



priorities inevitably become development priorities. In Burundi, aid provides 56% of total expenditure on health and education. The proportion of total expenditure is also high in Chad (53%), Uganda (48%), Somalia (38%) and Ethiopia (35%).

Finance ministers of developing countries are, in any case, unlikely to respond well to such arguments. They are reluctant in the best of times to undertake social expenditures—which offer little immediate financial return and demand recurring expenditure long into the future. Ministers will hardly be encouraged to increase social spending if donors, too, are reluctant to finance recurring expenditure—and prefer instead to give money for capital-intensive schemes that happen to require machinery and technical assistance from the same donor countries.

Of all the categories of development aid, technical assistance must be the ripest for reassessment. Africa receives \$6 billion in technical assistance each year, and this figure keeps rising. Yet Africa still has some of the lowest levels of human development in the world.

The problem is that too much is being spent on the salaries of expensive foreign experts and too little on building up local institutions and expertise. Shifting the main focus of technical assistance to building up national capacity would not only reduce the cost of assistance. It would also release millions of dollars that could be put to more productive purposes.

Assistance for community health care in Senegal

BOX 3.4

The Pekine project, a successful primary health programme in Senegal, was initiated with external assistance in 1975 to provide health care to a poor part of Dakar, the capital.

By 1985, the project had 24 health posts, with two higher level health centres, seven maternity units and two dental units. The emphasis in the 800,000 medical visits during that period was on preventive medicine; the local rate of immunization rose from 5% to 60%. But cures were also offered for fairly straightforward conditions.

Participation was important. The beneficiaries were consulted on the programme from the beginning, and local health committees were established to control and administer the health posts. Training local staff was a high priority.

Central funding, including external assistance, was reduced over time and locally raised funds covered an increasing portion of costs—part of which came from small user charges. By 1983, local funds financed 70% of the recurrent costs.

Donor countries must thus reassess their aid priorities and commit themselves to the support of human development. If recipient countries adopt the same priorities, the way will be open to a new and productive era for official development assistance—one based on a mutual commitment to human development (see chapter 6).

A restructuring of aid budgets will require much better disclosure and publication of information. The OECD Development Assistance Committee (DAC) could make a valuable contribution here. It could analyse the effects of existing aid priorities on the human development levels of recipient countries. It could also help by regularly publishing aid social allocation ratios and aid priority ratios for each donor.

Summary of country studies

Republic of Korea

Primary income distribution: Good
Human expenditure ratio: Medium
Public expenditure ratio: Low
Social allocation ratio: Medium
Social priority ratio: High

The main force behind human development in the Republic of Korea has been the rapid, widespread expansion of primary incomes, through economic growth. Land reform in 1949 laid the foundation for broad access to the country's most productive asset. There also was an emphasis on education, especially primary education, to develop the human resources needed for growth with equity. And macroeconomic policy encouraged the shift from import substitution to employment-intensive production for export.

But the experience has shown that high growth rates alone are not enough to ensure human development. Since 1976, the government has extended medical insurance to cover more than half the population and developed high-quality public health and education systems. It also provides free, or heavily subsidized, medical care to poor families—especially to mothers and children.

Human development thus started with the government's promotion of primary incomes. But now the government also directs a significant proportion of public resources towards the social sector, especially to social priority areas.

Zimbabwe

Primary income distribution: Poor/Moderate
Human expenditure ratio: High
Public expenditure ratio: High
Social allocation ratio: High
Social priority ratio: High

Zimbabwe illustrates the power of a high human expenditure ratio. The government's commitment to priority areas has resulted in human expenditures per person greater than those of wealthier countries—and accounts for the country's impressive achievements in literacy, child mortality and life expectancy.

After independence, the social allocation ratio rose from under 20% in 1978 to nearly 30% in 1981 and 49% today; the public expenditure ratio remained high but constant. Defence and administration spending dropped correspondingly, from 44% to 28%.

The social priority ratio rose as health expendi-

ture shifted from urban hospitals to preventive rural services. Enormous progress was also made in education, where the share of the budget allocated to primary schooling rose from 38% to 56%, doubling the real expenditure per head. All primary school age children are now attending school, and for secondary schooling, the gross enrolment ratio has risen to 51%.

Even in the 1980s, during periods of economic adjustment and severe drought, the falling infant mortality rates and rising school enrolment ratios showed how human development continued to progress.

Zimbabwe also shows what properly structured foreign aid can do. Aid financed almost a fifth of the budget for immunization in 1983. Aid also played a major role in financing the Child Supplementary Feeding Programme, from its inception in 1981. The contribution of aid to rural water supply rose from 32% in 1983 to 58% in 1985.

Tanzania

Primary income distribution: Moderate
Human expenditure ratio: Low
Public expenditure ratio: Medium
Social allocation ratio: Low
Social priority ratio: High

Tanzania's impressive progress in human development over the past three decades is reflected in increasing literacy (from less than 30% to an estimated 52%) and life expectancy (from 41 to 54 years). Although income per head, at \$160, is less than half the regional average, Tanzania's performance in human development—as reflected in child mortality and nutritional status—compares favourably with its neighbours in Africa.

These achievements are the outcome of a philosophy to provide basic social services to the entire population. Tanzania has one of the oldest national health care systems in Sub-Saharan Africa. Since the late 1960s the rural population has been organized in registered village settlements, facilitating the extension of basic social services. Over 80% of the population has access to health care, and almost 90% of the one-year-olds are immunized.

Even so, significant deprivation persists. Half the population lacks access to safe water, and nearly half the children do not attend primary school. Primary school enrolment dropped in the second half of the 1980s. Secondary enrolment rates are less than 5%.

Despite a high priority for primary education and health care, the country's human expenditure per per-

son was only US\$3.80 in 1988. Reasons for this paltry spending are low income per head and the inadequate attention to social sector expenditures.

Budget strains since the mid-1970s have resulted in severe cut-backs, including basic social services. Health expenditures per person have declined by one-quarter over the period. These cut-backs have led to decreasing quality, and reduced access for the poor, who cannot afford to purchase these services.

The need to restructure public expenditures is urgent. Tanzania's social allocation ratio is only 15%, while debt servicing, public enterprises and military expenditures drain the government budget.

Human development is hampered by high rates of population growth (averaging 3.4% annually between 1960 and 1990) and poor economic performance. The restoration of growth and expanding income-earning opportunities, together with restructuring public expenditures towards the social sectors, are crucial factors in improving human development in Tanzania.

Costa Rica

Primary income distribution: Moderate

Human expenditure ratio: Medium

Public expenditure ratio: High

Social allocation ratio: High

Social priority ratio: Medium

Costa Rica has an outstanding record of human development. With high public expenditure and social allocation ratios, it has attained human development indicators close to those of Europe.

The basis for the social reforms was laid in the 1940s, when the Army was abolished and "autonomous institutions" were created for health, education and social insurance. A long history of democracy reinforced the pressure for welfare policies, underpinned by a rapid expansion in the export of cash crops, like coffee, which helped generate income-earning opportunities.

Primary health care was emphasized from the early-1970s, through programmes of rural health and community health. Both stressed preventive action (especially against infectious and parasitic diseases) as well as community participation.

In education, the proportion of girls completing primary school rose from 17% in 1960 to 65% in 1980. The high percentage of educated mothers helped bring down infant mortality—which in turn contrib-

uted to a decline in the desired family size and the fertility rate.

The social security system in Costa Rica is universal, whereas elsewhere in Latin America it tends to be regressive, benefiting only those in formal employment. By 1980, almost all Costa Ricans were covered by a combination of pensions, health insurance, social welfare and public health. The moderate social priority ratio does not include the contribution of social security payments (in this case positive).

Eventually, however, the country's income started to lag behind its social spending. The growing deficits were financed by both domestic and foreign debt, and when foreign assistance dried up in the 1980s, Costa Rica suffered a serious recession.

But Costa Rica's human development achievements have proved resilient even in these adverse conditions. Once women know about family planning and have been educated in hygiene and nutrition, such gains are not quickly lost. Infant mortality rates and malnutrition have continued to fall (although at a declining rate) as economic conditions have worsened.

There have been some warning signs, such as a disturbing drop in primary school enrolment in the 1980s. But Costa Rica remains an outstanding example of human development in Latin America—and the world.

Jordan

Primary income distribution: Moderate

Human expenditure ratio: High

Public expenditure ratio: High

Social allocation ratio: Low

Social priority ratio: Medium

Jordan has a level of human development that is high by the standards of the Arab region. High levels of public expenditure and a moderate social priority ratio have resulted in a high human expenditure ratio.

With the majority of the population under 15 years of age, there has been a strong emphasis on education. Jordan raised literacy rates from 47% in 1970 to 74% in 1985. And though still low (62%), female literacy rates are significantly above the average for the region.

The high educational levels of Jordanians has paid off in economic and financial terms. Skilled labour is the country's most valuable resource. Remittances from skilled Jordanian labour in the Gulf area has constituted a major source of hard currency.

Jordanians have also made considerable progress in health. Since 1960, life expectancy increased from 47 years to 67, and child mortality rates fell from 217 per 1,000 births to 55. Health services have been focused on Amman, the capital, where over a third of the population lives. But the government is now improving the quality of rural primary health care by establishing rural health centres capable of offering a wide range of basic services.

Jordan's experience is of special relevance to higher income countries in the region and elsewhere, who failed to reach human development levels compatible with their incomes. Astute allocation of scarce resources, together with a fairly equitable distribution of income, have contributed to human development levels that are better than in other countries with per capita incomes several times Jordan's.

Indonesia

Primary income distribution: Good
Human expenditure ratio: Low
Public expenditure ratio: Medium
Social allocation ratio: Low
Social priority ratio: Low

Indonesia has enjoyed broad-based economic growth since the 1970s. It reaped large windfall profits from its oil production—and used them to provide for the time when the oil revenues dwindled. The government has advanced human development, both by generating widespread primary incomes, particularly in agriculture, and by supplementing these through social services. The proportion of people below the poverty line fell considerably in the 1980s—though the incidence of poverty is much higher in the eastern parts of the archipelago.

The government launched a massive primary education programme and eliminated school fees in 1978—achieving high basic enrolment rates.

Significant problems remain, however. A high proportion of the population is part of the “marginal poor”, with incomes only slightly above the poverty line. Indonesia still lags behind many of its neighbours in nutrition, life expectancy and infant mortality.

The social allocation and social priority ratios are far below average, and the human expenditure ratio is very poor. Health expenditure is relatively low, biased heavily towards urban curative care. Higher priority needs to be given to preventive health facilities in the villages—through programmes, such as *posyandu*.

Safe water and sanitation are also only available to a minority of Indonesians, usually the better-off urban residents. Much more attention needs to go to the public provision of priority social services.

Argentina

Primary income distribution: Poor
Human expenditure ratio: Medium
Public expenditure ratio: High
Social allocation ratio: Medium
Social priority ratio: Low

Argentina has achieved high rates of literacy and school enrolment (both stood at over 95% by the mid-1980s), and child mortality rates are less than one-third of the developing country average.

Nonetheless, Argentina's human development performance is disappointing, considering its level of GNP per head (\$2,520). Substantial proportions of the population, especially in the North and the slum areas around Buenos Aires, have only limited access to education, health care or safe water and sanitation. Social conditions have worsened with the prolonged economic crisis. The share of the population with access to safe water declined by nine percentage points over the 1980s, to 51%. Since the mid-1970s, average household income declined by more than one-fifth, in real terms, and income distribution became more skewed.

The public expenditure ratio is high. Although the social allocation ratio is moderate (35% in 1988), 70% of this is directed to social security payments, which benefit only those working in the formal sector, rather than the poor. Since Argentina has, over an extended period of time, achieved high rates of access to health care and basic education it can, to a certain extent, be seen as a case of shifting priorities in the light of past achievements in providing pensions, higher education and more sophisticated health care.

At the same time, it is vital that these achievements—largely attained before 1970—be preserved. This has not always been the case, as the experience of the 1980s reflects. In this sense Argentina's low priority ratio is a cause for concern: social services that mainly benefit the poor—primary education, public hospitals, primary health care and slum improvement programmes—have suffered more severe deterioration over the past decade than social expenditures directed towards the better-off Argentines.



Efficiency in human development

Government budgets in all developing countries are extremely tight, so the search goes on for reducing the unit costs of social services—without compromising quality or reducing access. The search also goes on for recovering some costs by charging users for the services they receive.

Measures for cost reduction and recovery must be seen in their political and socio-economic context. Indeed, past experience suggests that a “healthy” degree of competition between public and private services in the human development field often leads to price reductions, to greater access and thus to improved benefits for people.

It is desirable, moreover, to examine more than just how to reduce the costs of one particular policy measure or service. The critical question is whether the same objective—for example, meeting the nutritional needs of people at large or those of particular population segments—could be better achieved through an alternative, less expensive route. For food subsidies, a preferred policy option could be to adopt agricultural policy measures that help encourage and support the concerned population groups in increasing their own food production.

Many programmes, such as Indonesia’s nutrition support programme, seek to combine two approaches—meeting people’s nutritional needs through special programmes, whether food subsidy schemes or feeding programmes, *and* enabling people to increase their food production, for instance, through kitchen gardening.

Just as the balance between private and public delivery is important for increasing efficiency, so too is the degree of centralization and decentralization that marks a country’s development strategy. Decentralizing social services reduces costs, because it

encourages the use of local resources and often holds down administrative costs. It also has disadvantages. It makes it more difficult to maintain and control desired quality standards for the services to be delivered. It may perpetuate, even reinforce, disparities between various regions or local communities.

The pros and cons have to be weighed carefully. On the positive side, decentralization usually creates an atmosphere that encourages initiative at all levels, from bottom to top. It allows people to become more involved in decisions that affect their lives. It thus promotes development that is more people-oriented, more sustainable and more relevant to people’s needs and interests. Decentralization facilitates participatory development, which is much more than a means of enhancing efficiency and effectiveness. It is one of the main aims of human development.

A country’s overall policy framework creates the possibilities for public-private competition and complementarity, for decentralization and for other means of increasing efficiency, such as targeting. To show more concretely how various approaches have worked, the discussion here examines various ways to reduce costs in services of priority concern to human development and then discusses the recovery of costs through user charges.

Cost reductions in education

The opportunities for cost savings are considerable in education. A recent study for the “World Conference on Education for All” concluded that a feasible package of reforms could reduce the recurrent costs of educational systems by 25%. The package consists of, among other things, measures to reduce repetition, more efficient use of community

Decentralizing social services reduces costs

A feasible package of reforms could reduce the recurrent costs of education by 25%

resources, multiple shifts, selective increases in class size and some introduction of cost recovery at the tertiary level. But the quality of education should not be sacrificed to obtain savings in unit costs.

One way of making salary savings is to use teachers with less formal training and to seek more help from the community. In Senegal, assistant teachers have been introduced in greater numbers: their starting salaries are well below those of regular teachers, and the quality of education has not fallen. In Colombia, too, costs have been reduced by increasing the role of "teacher helpers".

Just \$15 per pupil is the annual cost of a non-governmental primary education system in Bangladesh. The Bangladesh Rural Advancement Committee (BRAC) provides a three-year functionally oriented curriculum, preparing children for the fourth year of the official primary education system. Village leaders and parents are actively involved, and very simple classrooms are being used. The teachers are not fully trained. But the schools are highly successful and have increased access for the children of poor families—particularly for girls, who make up 63% of the

pupils. Of course, the actual costs are greater than the money spent because of contributions "in kind" from parents and the rest of the local community.

Increasing the size of classes is another way of reducing costs. Achievement tests show no significant difference between children in classes of 25 and those in classes of 40.

Schools can also increase the number of pupils per teacher by operating double shifts in the same classrooms—one group of pupils gets schooling in the morning, another in the afternoon. Double shifts save on teachers (if they take both shifts) and on the capital costs of buildings, equipment, libraries and laboratories. With this system, Senegal has cut costs considerably and increased access to education (box 4.1). Zambia has also used double (and even triple) shifts to reduce capital costs in education by almost a half—and it also reduced the current cost per primary school student by an average of 4.1% between 1980 and 1984.

Multiple shifts have disadvantages as well. They put greater pressure on teachers—and on parents, who have to look after small children who are not at school. But multiple shifts do offer considerable scope for unit cost reduction.

The private sector is one route to greater efficiency in education. Comparisons between private and public schools are difficult to make because the different schools usually draw students from different backgrounds, and this is likely to have an influence on their performance. Even so, a study has shown that in the Philippines, private secondary schools spend, on average, about half as much per student as public schools—and their students achieve better results in both English and Tagalog (the national language of the Philippines), while public school pupils do better in mathematics. Studies on Colombia, Tanzania and Thailand also suggest that, at the secondary level, private schools are more cost-effective than public schools.

Research, based on evidence from several Asian countries, indicates that unit costs in higher education tend to decrease when the share of the costs financed through private contributions increases. Beyond recovery of 40%, however, the marginal decrease in unit costs becomes very small.

BOX 4.1

Double-shift schooling in Senegal

Primary education in Senegal cost \$117 per pupil in 1986—by far the highest of all low-income countries in Africa and almost twice the average for Sub-Saharan Africa. There were three reasons for this: high teachers' salaries (more than ten times the per capita GDP in 1980), low pupil-teacher ratios in the rural areas and high administrative costs.

To reduce costs, the government introduced double shifts in urban schools as part of its educational reform programme. In the pilot phase in 1982, each classroom was used twice a day with a different teacher. But now in the main phase of the programme, both morning and afternoon sessions are taken by the same teachers. They have to teach 40 hours a week instead of the 27 hours under the previous system, but for this they receive an additional 25% on their base salary. They are also teaching smaller classes—reduced from 70 to 100 pupils to 40 or 50.

Assistant teachers (who receive a shorter training programme) also play an

important part in the reform. The ratio of assistants to teachers increased from 0.9 to 1.2 between 1986 and 1988, without any drop in standards. Indeed, test results show that classes taught by assistants did better than those with fully qualified teachers. As a result, new appointments are more likely to be assistants than fully trained teachers. Administrative staff, too, are becoming more productive as they are redeployed into primary teaching.

Not everything has run smoothly. In a drive to increase the access to primary education, the programme was implemented faster than originally planned. Some teachers had to operate the new system without special training. And parents, uncertain about the changes, resisted them.

Overall, however, the programme is successful. Unit costs are being reduced. And gross primary enrolment increased from 46% in 1980 to 57% in 1985 and 59% in 1988—with no drop in the performance of the pupils.

There is evidence that schools whose financing and planning are managed in a decentralized way, and which are supervised by local committees, are more efficient than those that are part of a centralized system.

Cost reductions in health care

The health sector, too, offers considerable opportunities for savings. In the Americas, an estimated 25% of health expenditure is wasted. Most governments could make large savings by moving to lower-cost treatment, choosing more appropriate drugs and buying them more efficiently.

The drug bills for most health services are enormous—and wastage may be more than 50%. Concentrating more on basic drugs could help make considerable savings. Medicine consumption per head in developing countries was estimated at \$5.40 in 1985. Yet, basic and essential drugs cost around \$1.00 per person. An even more basic list could be provided for \$0.25. Between 1.5 and 2.5 billion people still have little or no regular access to essential drugs.

Many of the cheapest treatments are just as effective as the high-tech alternatives. Diarrhoeal diseases are one of the leading causes of death in developing countries. The conventional treatment is intravenous rehydration therapy. But oral rehydration is just as effective as intravenous—if not more so in some cases—and using it could cut costs by about 90%.

Rationalizing the buying policies for drugs could lead to further economies. Generic rather than brand-name drugs could be used—and purchased through competitive bidding. Sri Lanka saved considerably by centralizing the buying of pharmaceutical products through one state company. It obtained basic drugs at less than half the price paid by the private sector—sometimes less than one-third. Improved storage and distribution can also increase efficiency. The wastage in immunization campaigns has been estimated at 33%. Reducing it to 20% would cut the cost of vaccines and syringes from \$1.40 per child to \$1.15.

Taking some of these measures could reduce the foreign exchange costs of drugs by a third to a half. Savings have been even

greater in several countries with pharmaceutical industries—as in Argentina, Brazil, Egypt, India, the Republic of Korea and Mexico.

As in education, employing personnel with fewer formal qualifications could also offer considerable savings without jeopardizing standards. Health care workers and traditional birth attendants can be involved at the village level. And communities can help pay for, or build, health posts and clinics, especially if they are put in charge and if they see that their investments are for their direct benefit. More use could also be made of traditional healers and herbal medicines.

Finally, improved organization and management in health systems could lead to greater cost-effectiveness. Consider Malawi, where simple management improvements in the principal hospital could save two-fifths of non-salary recurrent expenditure.

Cost reductions in water and sanitation

New technologies and better management structures can make a great contribution. The International Drinking Water and Sanitation Decade helped identify many new approaches, including gravity-fed water supplies which can decrease costs and widen coverage in hilly areas. Water can now be treated with slow sand filtration processes, which purify moderately polluted surface water more cheaply.

Wells and pumps have also been improved. Small diameter wells can be operated for costs that range from \$5.00 to under \$0.50 per user. In a project in India, water is pumped from a deep well for capital costs of less than \$1.00 per user per year—with operating and maintenance costs of about \$0.10 per user. Similar low costs have been achieved in programmes in Ghana and Malawi. Several new kinds of water pumps have become available, including hand-pumps that allow communities to manage and maintain the water systems themselves.

Some governments and external donors have encouraged improvements in the area of cost control and financial management that are of vital importance to any water supply system. One of the ways to achieve these improvements is through the use of computers, facilitating billing and fee collection, in

Many of the cheapest medical treatments are just as effective as the high-tech alternatives

Food subsidies must be integrated into a clearly thought-out nutrition strategy

particular in urban areas.

The users themselves are one of the most important management resources. The involvement of the community and particularly the women—in decisions about the location of facilities, the most acceptable kinds of technology and the arrangements for use and maintenance—can help sustain a realistic programme of low-cost investment.

Cost reductions in food subsidies

Some 800 million people go to bed hungry each night. Over one-third of the children in the developing world—about 180 million—are severely underweight, putting their healthy development and lives at risk. In many countries, there may be absolute food shortages, but the real problem for many poor families is that they cannot afford to buy the food that is available.

Governments have tried to hold down the price of food, but this has reduced the incomes of farmers (many of whom are themselves poor and malnourished) and discouraged production.

A better solution is to subsidize basic foods. This has become an important “social service” in many developing countries. But food subsidies are expensive—in some cases amounting to over 15% of government budgets—so any assessment of public expenditure should examine ways of doing this more efficiently.

Food subsidies take four main forms:

- *Market-wide price reductions*—reducing prices of selected products for all consumers.
- *Food rationing*—distributing food to specific shops or households at concessionary prices.
- *Nutritional intervention*—operating feeding programmes for schoolchildren or other vulnerable groups.
- *Food-for-work*—giving food as payment to those taking part in public works schemes, often infrastructure or disaster-relief projects.

Market-wide reductions give relatively more help to the poorest families (particularly those in urban areas), since they spend a high proportion of their income on food. In Sri Lanka, the poorest 10% of the population spend almost 80% of their income on food—and the subsidies received by the poorest

fifth of low-income households effectively contributed about 16% of household income in the late 1970s. In Kerala in India, subsidies contributed as much as half the income of low-income households in the same period.

When a country is going through an economic adjustment programme, food subsidies have often been among the first items of government expenditure under attack. About one-third of the adjustment programmes in the mid-1980s involved reducing food subsidies. Generally, there was a decline in real spending on subsidies between 1980 and 1985, except for a few countries, like Bangladesh, Mauritius and Morocco, in which it increased.

Part of the reason for this is that food subsidies seem indiscriminate. Countries like Egypt, Morocco, Pakistan and Zambia provide across-the-board subsidies, which allow relatively wealthy people to benefit from low prices as well. In Morocco, 80% of the budgetary cost of food subsidies in the rural areas does not benefit the most needy.

The challenge in recent years has become to target the subsidies, so that they support the nutrition of the poor most efficiently. Obviously, there will be trade-offs: the more narrowly targeted a programme, the greater the risk that some of the most vulnerable may also miss out. And while the amount spent on food may fall, the administrative cost will generally rise. Moreover, there is the risk that food subsidy programmes will lose political support (see chapter 5).

It is important that food subsidies are integrated into a clearly thought-out nutrition strategy. Research has shown that food subsidies are more effective when combined with nutrition education and primary health care. In Tamil Nadu in India, food supplements complemented by nutrition education and primary health care have considerably raised the nutritional status of children at risk from malnutrition.

Economic and political circumstances determine what is appropriate and feasible in each particular case. Nevertheless, some general conclusions can be drawn from recent experience.

- *Targeting by income*—Such targeting tends to be ineffective in poor countries where income records are weak. Many of those in

need are omitted, and the administrative costs are high (box 4.2).

- *Targeting by region*—Making cheap food available at certain shops in selected areas can be effective if poverty is concentrated regionally. But this generally is not the case, and shops tend to be located more in the low-income districts of urban areas, reaching only a proportion of the poor.

- *Targeting by commodity*—Subsidizing only basic commodities that are mainly consumed by the poor can reach the poor without excessive wastage. But often the wrong commodities are subsidized—wheat or meat, for example, which are consumed more by high-income groups. If the right commodity is selected, such a “self-targeting” scheme can be very effective and efficient.

- *Offering free school meals*—This is a good way to reach children of school age, with the added advantage of encouraging school attendance.

- *Distributing through health clinics*—This is a very effective way of reaching vulnerable groups, including malnourished small children, and pregnant and lactating women. In Colombia, and in remote rural areas of the Philippines, the distribution of food stamps to low-income mothers bringing their pre-school children to health posts has been very successful.

Food subsidies can be a vital tool for helping the poor. But they should be an integral part of a larger strategy aimed at enabling poor households to meet their own needs—and at making the subsidies superfluous.

User charges

Basic social services in developing countries are often either free or provided at a very small charge. The justification for this is that society as a whole often gains, even when services are provided to individuals. A free health service treating people with communicable diseases clearly also benefits those who are not ill. And free education increases people’s capabilities—and can thus improve the income and welfare of the country as a whole. Moreover, offering the most basic services free permits greater equality of opportunity and fulfils a government’s respon-

sibility to provide for its citizens’ basic human rights. But people—even in low-income groups—are often willing to pay a fee if that provides them better services. Competition from the private sector provides that option in several cases.

Education in some countries is free, but only for a certain number of years. In Nepal and the Republic of Korea, for example, primary education is free. In the Philippines, secondary education has also been free since 1988. In other countries, including Mauritius, education is free at all levels.

Even when services are officially free, they can tack a considerable financial burden onto poor families. Teachers’ salaries are so low in some countries that parents may have to top them up through contributions to the teachers’ transport or food, if students are to see their teachers at all. Prescriptions, too, are often supposed to be free, but in reality patients may have to pay if they are not to discover that the drugs are mysteriously “out

BOX 4.2

Food subsidies bypass Sri Lanka’s poor

If a subsidy programme is targeted narrowly in the hope that only the poor will benefit, this will probably bring down the cost. But it runs two risks. First, some of the needy beneficiaries will be excluded. Second, it may be unpopular with other politically powerful groups, who may either block the programme or divert it to their own ends.

Sri Lanka’s experience illustrates some of the dangers. The government that came into power in 1977 inherited a food subsidy programme that combined a general rice subsidy with a rationing scheme. This was very expensive, accounting for around 15% of total government expenditure.

The new government was in a good position to introduce reforms. It had a large majority, foreign aid was plentiful, the weather was good, international prices were low and, after years of stagnation, growth had resumed. In 1978, the subsidy to the richest part of the population was removed, and in 1979, the rationing scheme was replaced by a food stamp system.

The targeting system certainly reduced costs: food subsidies fell from about 5% of GNP in the mid-1970s to

1.3% in 1984. But the poor benefited less under the new programme. The calorie consumption per head of the poorest 20% of the population declined from the already low level of 1,490 calories in 1979 to 1,368 in 1982. And the proportion of Sri Lankans in poverty rose from 23% in 1978 to 27% in 1987.

Why did the poor suffer? Because 30% of the households in the poorest half of the population were not receiving the stamps, and because inflation halved the real value of the stamps (which were not indexed). Meanwhile, 30% of the wealthiest half of the population *did* receive the stamps. The reason was that the distribution of stamps was based on declarations of income and these largely went unchallenged—especially in the rural areas. The distribution of income thus became even more unequal.

The government did try to check the income of claimants, but parliament opposed the move: aiding the poor may be acceptable, but cutting benefits to the middle class obviously is not.

The lessons are clear: it is not possible to benefit *all* the poor and *only* the poor. And if it comes to a choice, prefer excess coverage to deficient coverage.

The price mechanism should discourage unnecessary and excessive use of services

of stock” in the pharmacy.

A distinction has to be made between the provision and the financing of services (see chapter 3). Some services that the government pays for may be delivered by the private sector. People who use private schools and hospitals might pay, at least in part, with government vouchers, leaving them free to choose and encouraging competition by providers. Or the support can be more indirect—through tax relief on personal contributions for health or education.

There are also suggestions that people should pay at least something for the benefits they receive—this may, for example, encourage more careful use of services like water. And having parents pay for their children’s education might improve school attendance.

The current debate on user charges focuses on four issues: the extent to which *revenue* can be gathered, the possible increases in *efficiency*, the concerns for justice and *equity* and the danger of reducing *access* for the poor.

Revenue

Theoretically, user charges should bring in additional money for under-funded education and health services. But the revenue tends to be not very great. In health services, the average cost recovery through user charges in developing countries is estimated at only 5% of operating costs (as illustrated by tables 4.1 and 4.2). Only a few countries achieved reasonable rates.

In primary education, the levels are even lower, and only in secondary and higher education have rates beyond 10% been achieved—with some high levels in Asia (table 4.3).

None of these figures takes into account the cost of collection, so the net contributions are lower still. But the *potential* may still be great. The experience of some countries is that people are willing to pay for higher quality. In Ghana, 15% of recurrent government health expenditure is recovered through user charges. In Bolivia, 22% of government health expenditure is paid for in this way.

Efficiency

The price mechanism should discourage unnecessary and excessive use of services. And it might be more efficient than rationing, which is expensive to organize—and susceptible to corruption. Still, *any* form of charging users will have an administrative overhead.

There does not, as yet, seem to be much evidence that user charges give the right signals to patients about whether to use the service or not. In Senegal, charges were introduced at the primary health level rather than at the hospitals—and by discouraging preventive measures and low-cost health care, they increased overall health costs. Senegal’s experience shows that user charges should be introduced first at the top of the health referral pyramid, not at the bottom.

Equity

The government may be responsible for basic services—and want to ensure that rich and poor alike have good health and a reasonable standard of education. But making all of the services free could well be of greater benefit to the rich. Either through greater knowledge, or influence, or corruption, they can get a greater share of the highly subsidized high-cost services.

One way of trying to make sure that the poor do not suffer unduly would be to have different charges for different income groups—perhaps exempting the poorest altogether. But any system of differential charges based on income (for user charges or anything else) is administratively very difficult, especially in developing countries. Such systems may fail to discriminate effectively, so that some of the poor do pay while some of the rich do not. A more promising option would be to base the discrimination, instead,

TABLE 4.1
User charges

	Revenue from user charges as % of government expenditure			
	Education		Health	
	1980	1988	1980	1988
Bolivia	..	..	6.0 ^a	22.0
China	4.0 ^b	5.0	..	..
Costa Rica	1.9	0.0	1.4	0.0
India	2.2	1.5 ^c	8.7	4.5 ^c
Mauritius	3.1	0.0	0.2	0.2
Nigeria	0.1	5.1	0.2	0.6
Pakistan	5.9 ^d	1.4	6.0 ^d	2.6
Philippines	4.1	1.1	7.7	2.5
Zimbabwe	4.7	3.8	..	..

a. 1984 b. 1986 c. 1985 d. 1973

on the *type* of service—charges for tertiary education, for example, but not for primary.

Access

If there is an incentive for those providing the service to do their jobs properly, services will become more widely available and more responsive to user needs.

But would the introduction of charges discourage the poor? Even free services may be difficult for the poor to use. The clinic may be far away, and the transport too expensive. And sending children to school usually involves paying for uniforms and books, and losing their contribution as workers. In Sri Lanka, as elsewhere, the highest school avoidance rates are among the poorest families.

When user charges are introduced, there may be a drop in demand from the poor—this is confirmed by several studies. When Ghana introduced user charges in the mid-1980s, the use of health services decreased (box 4.3). Use did return to its previous levels in urban areas, but not in rural areas. The service had improved, but evidently not enough to re-attract those deterred by the price increase. Similarly in Lesotho, attendance in the lowlands crept back to its previous levels after an increase in charges, but attendance in the mountainous areas remained lower than before. In Zaire, a rapid increase in the price of health care caused the overall use rate to fall from 37% to 31%. Sharp falls were noted in prenatal and under-five visits.

The experience so far suggests some general conclusions on user charges.

Education

- *Primary*—Primary education is a basic human right and should be free. Books and uniforms and other real education costs should be subsidized for the poorest families—especially for families paying the additional opportunity costs of the loss of their children's labour.

- *Secondary*—There is a strong case for making this priority social service free as well, both for reasons of equity, and for the productivity benefits it brings. If there are fees,

an effective exemption system should be established for those unable to pay.

- *Tertiary*—Tertiary education covers only a small proportion of the population, generally in the upper-income groups, and the costs are very high. There is a strong case here for charges—combined with a system of scholarships for poor students.

Health

- *Primary health care*—Access should be universal and free, not just on the basis of equity, but because society and the economy benefit from a generally healthy population.

- *Medicines*—Levying some charges can probably improve the efficiency of use. But governments could save much more on drugs if they were to adopt an essential drugs programme, based on competitive bidding in the open market, combined with an effective distribution system.

- *Hospital care*—Hospital charges would encourage patients to go first to their free local clinics, who would only pass them on to the hospital if necessary. An effective “referral system” of this kind would provide overall health care more efficiently. Low-income households and children under five should, however, continue to be exempt.

Water and sanitation

It will require large increases in public sector expenditure, and in external assistance, to provide water and sanitation services to everyone in developing countries. User charges will not make much of an impact on such capital investment; the most they can do is to

TABLE 4.2
Health user charges in Africa

Revenue from user charges as % of health budget (early 1980s)

Ghana	15.0
Ethiopia	12.0
Mauritania	12.0
Mozambique	8.0
Rwanda	7.0
Lesotho	5.7
Burundi	4.0
Malawi	3.3
Côte d'Ivoire	3.1
Zimbabwe	2.2
Swaziland	2.1
Kenya	2.0
Burkina Faso	0.5

TABLE 4.3

Public education user charges in Asia

User charges as % of unit operating costs (mid-1980s)

	Primary	Secondary	Higher
Korea, Rep. of	0.0	34.2	45.9
Indonesia	7.1	27.4	18.9
Nepal	0.0	40.7	10.4
Papua New Guinea	8.7	39.8	0.0
Philippines	0.0	9.3 ^a	15.3
Thailand	0.1	18.3	5.0
India	..	11.6	4.9
Malaysia	3.7	4.0	5.8
Bangladesh	7.4	4.0	0.1
Sri Lanka	3.1	3.1	3.4
China	4.8	3.2	0.3

a. Charges were abolished in 1988.

contribute to maintenance and running costs.

All users should be fully involved in the initial investment decisions, such as the technology to be used, the service level and the location. Consulting the consumers (and especially women) has been shown to increase the chances of cost recovery and sustainability.

Using the revenues

In some cases, the revenues from user charges may be used by the central government to transfer funds from one type of spending to another. A ministry of education might, for example, want to transfer funds from the tertiary to the secondary or primary levels.

In other cases, and especially if charges exist for basic services, it is useful to keep a considerable share of the revenue within the institution or the community. People are more willing to pay for services if they see that the revenue these services helped generate is reinvested locally and helps directly in improv-

ing the quality of the services available to them.

But the planning of user charges must aim at both generating revenue and encouraging participation. Special care must be taken not to exclude poor households, at the cost of their children and of society as a whole.

Beyond statistics

Efficient public investment will require much more than effective management of money. It also requires that *people* use those resources wisely and well.

The data on public and private expenditure tell part of the story, but by no means all, in showing how governments and private institutions can have an impact on human development.

Many critical components of human development are not monetary at all. The time women give to their households, and to raising their children, never figures in any finance ministry's ledger. Yet the mother's efforts have a vital influence on the health and nutrition of the whole family.

And for the poorest families, the time their children spend in school can involve a considerable sacrifice of income, which should really be added to the government's expenditure on education.

Similarly, families in rural areas may have to travel great distances to reach a clinic to check on their children's health. In the cities, too, mothers may well have to stand in line from dawn at a health clinic and still leave without being attended to. Savings by the government can generate costs elsewhere.

Even government expenditure cannot be considered in isolation. Its impact depends not just on how much money is spent, but on how, and in what environment, it is spent. Without money, governments can do hardly anything. But even large amounts of cash sometimes achieve little.

Apart from the appropriateness of the policies governments pursue, much depends on the *institutions* that spend the money, on the *skills* of the workers and on the *attitudes* and *health* of all involved. If these work together, the money will be well spent.

Institutions have to enlist the energy, commitment and enthusiasm of both the

BOX 4.3

User charges raise money, but turn away rural patients, in Ghana

User charges were raised considerably in government health centres in Ghana in mid-1985. By 1987 the targeted income—15% of costs—was being reached, though fewer people were using the services.

In the Ashanti-Akim district, the charges initially caused the use of all health centres to drop. Use gradually returned to its original level in the urban areas, but not in the rural areas.

Some of the poorer people could no longer afford to attend clinics as frequently and tended to delay treatment until their conditions became more serious. There was a significant drop in the number of women using the clinics, though there was an increase in the proportion of children under five.

Exemptions were allowed for certain diseases, such as tuberculosis or leprosy, and the treatment was free for some other diseases—though patients had to pay for drugs. In addition, those running the clinics had discretion to exempt people based on their low income. But health workers found this difficult to implement, and they feared a large number of claims. So, they granted the exemptions only in a few cases.

The money that families used to pay the charges sometimes came from funds that might have been used to meet other basic needs—for food or school.

Another effect of the charges was to shift demand to the private sector—partly to traditional healers, but also to commercial pharmacies. Patients often found the drugs cheaper in the commercial stores, so they would go there first rather than have a (perhaps necessary) visit to the doctor. There was also the danger that unqualified shop assistants would give the wrong type or quantity of drugs. And some people went to unlicensed sellers subject to even fewer quality checks.

The money from the charges went in three directions. The Treasury received a half, and the Ministry of Health one-quarter. The clinic retained the remaining quarter, generally improving the service but not enough to win back patients deterred by the price increase.

Since those turned away were largely rural dwellers, and since the clinics had fewer opportunities to suggest preventive measures to them, the bias increased towards urban, curative care.

workers and the beneficiaries. If their decision-making is too centralized, they can become very expensive—or fail altogether. On the other hand, too much reliance on initiatives from the bottom up can slow things to a complete halt, or risk having the programmes be taken over by local power elites. The combination with the best results has to be chosen very carefully.

The skills and aptitudes of the teachers, village workers and health personnel are crucial in the delivery of their services. That is why training is of the utmost importance and people should be kept up to date.

Attitudes are not easy to measure, but that does not mean that they are unimportant. They spring from self-discipline, a pride in one's work, a willingness to cooperate. Human development is a question not just of literacy or numeracy, but of knowing how to do things—to make decisions, take initiatives, resolve conflicts and accommodate other people's views.

Health and general living standards determine the efficiency of doing most jobs. The dedication and commitment to work on

a health or education programme is more likely to be forthcoming from a well-nourished and alert group of people.

Each of these factors (which themselves interact) can be positive or negative from the viewpoint of human development. Positive institutions will draw on everyone's enthusiasm and energy. Negative ones will be distant and distrusted. If people have positive attitudes, they can be cooperative and self-reliant. If not, they can be reluctant to change things, or they will rely on others doing the job.

Each of these factors also depends on the level of human development. A society with high levels of nutrition, health and education already tends to have the institutions, skills and attitudes conducive to human development. In some ways, this conclusion is disturbing (human development depends on human development). It explains why it is often difficult to get such activities off the ground. But it also carries a message of hope. Once the process of human development gets started, it can be self-reinforcing, cumulative and resilient.

Once the process of human development gets started, it can be self-reinforcing



The politics of reform

Present political arrangements usually suit those in power—and their influential supporters

Governments can transfer substantial resources to the social sector—from defence to health, from subsidizing inefficient public enterprises to constructing water supplies. Even within the social sector, they can use resources much better.

Why have these changes not taken place already? Many people would argue that the present arrangements suit those in power—and their influential supporters. That is why there is university education for the children of the rich rather than primary education for farmers' children, luxury flats rather than low-cost housing for the urban poor, subsidized food for urban officials and the military rather than real incentives for poor farmers.

The self-interest or “public choice” school of political economy asserts that all the players—citizens, politicians and bureaucrats—seek to influence public policy to their own ends. Citizens use political influence to get access to government services. Politicians ensure that government resources are directed towards their supporters. And public officials exploit their official positions for personal reward.

This emphasis on the self-interested motivation of all agents stands in marked contrast to an earlier view of the state. The “platonian” theory was that government would be an essentially benevolent guardian of the public welfare, acting in a disinterested manner.

Such differing perceptions of government lead to contrasting proposals on what role the state should play in its citizens' lives. The increasingly popular view argues that the state, given its limitations, should intervene as little as possible. In the economic sphere in particular, it should leave most decisions to the “invisible hand” of the market-place. The reason is that when political pressure groups

intervene, they are liable to be an “invisible foot” trampling on the finely wrought work of the other limb.

The platonian view argued conversely that relying upon the market-place leaves much to be desired, and that the government's role was to step in to make up for the market's failures.

Which of these views is more realistic? There is evidence on either side. And this evidence has, in effect, contributed to the most current theory of the state—the notion that the state ought to provide an enabling framework for development rather than try to do development itself, through public sector enterprises or the direct provision of social services. The state is to function as an intermediary between competing interests and countervailing forces, between market efficiency and social responsibility, between the more powerful vocal groups and the less powerful, less organized segments of society.

As chapters 1 and 2 discussed, there is a broad-based movement towards greater human freedom throughout the world. One-party and military regimes are giving way to more democratic forms of government. An increasing number of people now have a political choice—the right to vote, the right to choose between different political parties, the right to assemble and the right to make their voice heard and their interests known. They also increasingly have the opportunity to hold their political representatives accountable.

For reasons of political economy, if not also for reasons of political commitment to such goals as poverty alleviation, greater equality and improved well-being of people, most governments today are, to some extent at least, responsive to public pressures—including pressures from, or on behalf of, the less-privileged segments of society.

Handling the political economy is not easy. Vested interests can prevent a government from taking the “optimum” path. But the problems are not insuperable. Nor should they be set aside as falling outside of the scope of development. A lot of practical experience shows what governments can do to balance countervailing forces and conflicting interests. This experience also covers the type of policy reforms favouring human development (and has been suggested in chapters 3 and 4).

The policy advice is clear. People are the best advocates of their own interests—if they have the opportunity to do so. Ensuring full participation in the community and in the nation is thus often the best route for reform-minded governments to take. But ensuring people’s participation cannot mean letting *them* be responsible for themselves. It requires active, enabling support from the government, and decentralizing the decision-making on development.

Participation and decentralization are usually linked. But devolving power from the central government may only pass it into the hands of local elites who may be even less responsive to the interests of the needy than central bureaucrats. In Nepal, local elites have used the system instituted under the 1982 Decentralization Act for their own benefit.

For participation, the remedy lies in empowering the poor, sometimes with the support of the central government. For decentralization, the remedy lies in education, accountability and designing appropriate structures and sequences of decision-making.

Decentralization can, however, increase the chances of corruption as central controls are loosened. In highly stratified societies—with an unequal distribution of land, income and access to education, and with strong client-patron relations—local elections tend to favour the rich and powerful.

In the longer term, however, if the poor can learn to read and write and gain more awareness of their ability to meet their needs through local government, they will be able to exercise their democratic rights more independently—and hold local officials more accountable for their actions.

The Panchayat Act of 1985 in the Indian state of Karnataka transferred to the district

a major part of its development funds. It also involved people at the grassroots level more directly in planning and implementing activities. The basic unit of empowerment is the *gram sabha*, or meeting of all voters in the village. This system has improved accountability at the local level—the attendance of teachers, for example, is reported to be much better now that they are accountable to district bodies.

Balancing political pressures

Balancing political pressures is a highly sensitive matter. Much depends on the specific circumstances, the people involved and the issue under discussion. But some actions have repeatedly been found to work when it comes to dealing with the politics of policy reform for human development.

- *Make policies and projects more responsive to people’s needs.* An essential part of any political process to benefit the poor is a high degree of participation. Encouraging the autonomy of citizens is, indeed, an end in itself. And participation is a means to ensure the efficient provision and more equitable distribution of goods and services. If people are involved in decision-making, policies and projects tend to be more realistic, more pragmatic and more sustainable. If people have a sense of ownership, they are more willing to volunteer a contribution. Participation can help reduce costs of construction, delivery and maintenance.

In Malawi, for example, there is a very successful community self-help water programme, based on strong government-community cooperation. Starting in 1969 in two villages with 3,000 participants, it now benefits over one million people. District development committees, comprised of local leaders and technical personnel, serve as a channel for requests for piped water and participate in the design. The government provides equipment and assistance in training, and the community, voluntary labour for construction and maintenance.

A high degree of participation by beneficiaries may not guarantee that a project will work, but it certainly increases the chances of success (box 5.1). A World Bank study found that of 25 completed agricultural projects,

*For participation,
the remedy lies in
empowering the
poor*

only 12 appeared to be showing long-term benefits. These were the ones that had strengthened the management capacity of the beneficiaries, who participated in planning and implementation.

An interesting example of participation, and the complementary role that national

governments can play, is the civil rights movement in the USA. This popular movement succeeded in pressing the federal government and the Supreme Court for civil rights legislation. No one concerned with the fate of the blacks would have wanted to decentralize power for civil rights to the state of Mississippi. But the mobilization of the blacks themselves, with the support of central legislation, has advanced their cause.

- *Argue for the common interest.* The simplest case is where the best course of action for human development can be shown to be in everyone's interest. Public health clearly falls into this category. Immunization and vaccination against infectious diseases, and spraying against vector-borne diseases, benefits everyone. These actions can often be relatively cheap: immunization for life against leading child-killing diseases in poor countries can be achieved by spending as little as \$0.50 per child. Such measures clearly offer an opportunity to court political popularity.

- *Use alliances between rich and poor.* On many issues, there are possible alliances between sections of the rich and sections of the poor. A familiar one is between rich and poor farmers. Both are interested in higher food prices—if both produce the same food crops. And both would be interested in the development of rural infrastructure if the fruits of such investment were equitably distributed. Pressure for irrigation in a district can raise the productivity of farmers, both rich and poor. Similarly in Brazil, an increased flow of resources to the North-East would benefit landowners there and, with higher employment, also the landless labourers. In reality, however, the borderline poor are much more likely to form alliances with better-off groups than with the poorest of the poor.

- *Recruit the support of influential groups.* One problem with promoting primary health care, even by an altruistic government, is the medical establishment's opposition. Doctors may block such emphasis, claiming the need to maintain high standards and centres of excellence. And speaking with professional authority, they often win the day.

The Mandwa project in India was a highly successful rural health project. Semi-literate village women were selected by village leaders as part-time health workers. The success

BOX 5.1

Participating in success

Most programmes are more successful if they contribute to local level initiatives, or if they are at least planned and run with the participation of the beneficiaries from the outset. But the levels of decision-making, the kinds of organization and the forms of finance that will be most appropriate vary from case to case. Here are just three examples of successful programmes with a high degree of participation.

- *Colombia—Participating in success* The Carvajal foundation, a Colombian NGO, is active in what was the largest slum of Cali, a settlement of 300,000 inhabitants called Aguablanca.

The foundation emphasizes the value of learning for advancing the poor. Learning is applied to the daily needs of the poor—health, housing, credit, education and the simple skills of running a small business—and it is participatory.

Its method is a dialogue between teachers, technicians and beneficiaries. Based on this dialogue, manuals are written and illustrated in ways that have practical meaning for the poor and grow out of their experience and needs.

When the foundation began its work 13 years ago, Aguablanca was the most crime-ridden area of Cali. Today, it is reported to be the least crime-ridden. The results of its teaching programme, built on interaction between teachers and taught, has transformed hopeless and helpless migrants to the city into self-confident and alert microentrepreneurs. They get credit only after they have attended courses in bookkeeping and simple cost-accounting, but what they learn often contributes to the success of the businesses so that borrowing is unnecessary.

The foundation shows that participatory forms of practical education can be very successful and that credit does not always have to precede education.

- *Bangladesh—The Grameen Bank* The Grameen Bank has achieved world

fame with its new approaches to credit for the landless and near-landless—and for women. Although the loans are to individuals, small groups are made responsible for repayment by each member, so there is considerable peer pressure for borrowers not to default—repayment levels are around 98%.

It was started in 1976 as a private voluntary organization, and within two years 300,000 poor people had raised their incomes on average by 30%. The key to its success is that it takes banking operations to the villages, rather than having villagers come to the bank.

Other countries—including Ghana, Cameroon, Malaysia and the Philippines, have taken similar approaches.

- *West Africa—The Six-S movement* In Burkina Faso there has been a long tradition of mutual cooperation and community work among the youth groups of the Mossi people. Building on this community spirit and with the assistance of some European organizers, some of these groups formed a movement in 1976 called *Se servir de la saison seche en savane et au Sabel (Six-S)*. Their main concern was to address the problem of high unemployment during the long dry season.

These community groups have now developed into the largest people's self-development movement in Africa—having more than 2,000 groups, with an average of 50 participants in each group. The movement has now spread to Senegal, Mali and Mauritania, and similar initiatives are being taken in Niger and Chad.

Six-S promotes a range of efforts—income-generating activities, such as vegetable gardening, and activities of communal benefit, such as constructing dams, afforestation and primary health care and education. It provides credit to partially support these activities and is in turn funded by members and from external sources.

was striking. Birth rates, death rates and infant mortality rates plummeted, and immunization coverage increased dramatically. But rich and powerful local leaders joined hands with the government health services and demanded that the project be abandoned.

Other interest groups can nevertheless be recruited in support of reform—including nurses and health educators, who themselves stand to benefit from an expansion of primary services.

The same is true in education. Primary school teachers are often better organized and more vocal than the recipients of their services. Kenya and Sri Lanka have powerful teachers' unions, which are both the result, and the cause, of the considerable resources devoted to primary education in those countries. In Peru, the expansion of primary education was largely the result of efforts by political parties to win teachers' votes.

In Costa Rica, the political influence of the public sector employees has helped strengthen welfare measures, just as the welfare measures have strengthened the position of these groups. There certainly are dangers in such influence, for some regard the public sector as overextended. Indeed, in the most recent elections, the president, while promising free housing and free food for the poor, also felt the need to create a new bureaucracy—the Ministry for the Reform of the State—to cut down the bureaucracy.

Similarly, bureaucrats in many countries have resisted pressures for the privatization of industry, banking and insurance—despite the broadening consensus that the earlier focus on public ownership and management has failed.

- *Compensate political opponents.* In any restructuring, there are likely to be losers. It may well be possible to ask (or force) them to accept the changes in the interest of the country as a whole. More realistically, however, they will have to be persuaded, and one option is to pay them for some of the losses they are likely to sustain. Compensation payments (probably short-term) can be particularly important in periods of transition—to conciliate opponents, maintain coalitions and appease hostile antagonists.

In economic adjustment programmes, for example, the urban wage earners can often

be the losers since food prices generally rise. They are a powerful and vocal group, however, so it may be necessary to offer them wage increases.

When overstuffed bureaucracies have to be reduced, civil servants face dismissal. Some of them have alternative sources of income, and others can return to farming. But again, for political reasons, compensation may be necessary—perhaps in the form of compensation payments, retraining schemes or redeployment payments.

- *Encourage public information.* The resistance to some reforms may be due not to political or professional opposition, but to the difficulty that a society has in absorbing new ideas. The bias in health services towards hospitals is due partly to public perception, which gives priority to curative rather than preventive medicine. A disease that needs curing is visible, while a disease prevented is only a shadowy statistic.

Overcoming such obstacles is a task of public information and education. And most reformist health movements need the support of the media. In Bangladesh, media campaigns have been critical to the success of family planning and child immunization programmes.

- *Build on indigenous values.* Any reform should take cultural values into account. In many developing countries, especially in Africa, traditional health care is the most important part of the health sector. This can be to the advantage of public policies. A public health project in Lesotho was trying to get across the ideas of preventive medicine, but not having much success. People still preferred to use the traditional healers. The problem was that the public health workers only gave lectures on preventive health, while the traditional healers offered cures. The solution was to integrate the traditional healers into the formal health system—and allow the government health workers to provide curative remedies.

- *Protect the vulnerable.* Other reasons for considering compensation, much more altruistic, stem from the sense that especially vulnerable groups should be protected, irrespective of their political power.

Typical of compensation schemes for the vulnerable are food subsidies and employ-

Professional interest groups can be recruited in support of reform

*It is not wise to
jump over an abyss
in two steps*

ment programmes. In Costa Rica, during the stabilization of 1982-83, the government set up a temporary food-aid programme that distributed food to 40,000 families—about one in 12 households—designated as needy by local committees. In Chile, employment programmes were expanded during the depression of 1983—engaging up to 13% of the labour force—and nutrition, health and subsidy programmes for poor children and mothers were strengthened. In Ghana in the late 1980s, adjustment was accompanied by a variety of compensatory interventions, including public works, health and nutrition programmes—all with strong involvement from communities and non-governmental organizations.

Such palliatives, however altruistic, also bring political benefits, which can be looked at in two ways. They can be seen as sops for the poor to keep them quiet and stave off the fundamental structural measures that would permanently and substantially improve their lot. Or they can be seen as small but important parts of the process of fundamental change.

Compensation measures also build constituencies that can eventually lead to the replacement of the old order by the new. They stand a much better chance of doing this if they are built into programmes of change from the outset, rather than tacked on after the event.

- *Harness altruism.* If everyone in a democracy voted exclusively in their self-interest, the poorest 49% of voters would always lose out. The top 49% need only bribe the middle 2% to gain a majority. No group is ever so calculating, but there nevertheless is some evidence of a tendency for democracies to redistribute benefits to the middle-income groups rather than the poor.

Not everyone, however, acts solely in his or her self-interest. Many people and groups, be they professional bodies or voluntary organizations, can behave in a more disinterested fashion. They can be recruited for two important functions. The first is to act as guardians of rationality—they can be an important influence on government policy, arguing for the long-term interests of the country and arguing against submitting to the pressures of expediency. The second is to act as advocates of the underprivileged, as trust-

ees for the poor, protecting their interests and ensuring that resources are not directed away from them.

One interesting contemporary example of altruism is the participatory development effort in the Indian state of Kerala. A massive literacy campaign, where thousands of volunteers—irrespective of caste, religion or party—are working together with no material incentive whatsoever, has experienced significant success. In one district, universal literacy has been attained.

The middle-income groups are likely to lose out in the short term in many forms of restructuring. Civil servants, military officers and such professionals as teachers, engineers and lawyers may well see their benefits from social services, their incomes and their other privileges reduced. But if it is evident that the burdens are being equitably shared, these groups can be more open to appeals to solidarity.

- *Phase the transition.* When significant changes in budgetary allocations and spending patterns are proposed, a choice also arises over the speed of introducing them. Should the transition be sudden or gradual?

It has been said that it is not wise to jump over an abyss in two steps. Rapid action can have political advantages—lending credibility to government resolve and minimizing the time in which opposition can form. Shock therapies have recently been recommended to Eastern European countries in their transition from centrally planned to market economies.

Developing countries have to decide on the pace of reform that is politically acceptable. Because the effects of public policies are never certain, and because a gradual approach may make it more likely to waver from the real direction, shock therapies may work in some cases. In other cases, particularly in weak economies such as those in Africa, shock treatment may be disruptive. Restructuring public expenditures may hurt those who benefited from them, such as employees of public enterprises, members of the armed forces and students attending universities without paying fees. In such cases, gradual change can be carried out with less pain and less opposition.

The conclusion is that managing political

and economic transition is an art, rather than a science. A successful strategy requires pragmatism, not an ideological stance.

The politics of aid

Domestic politics can be driven by self-interest and greed or by idealism and human solidarity—or by a combination of motives. The same is true of foreign assistance. International aid-giving may be guided by considerations of military security, or the opportunity to develop export markets—or by a generous feeling that wealthier countries have a moral responsibility to help the poor.

National self-interest—military, political or commercial—is sometimes thought to be an inevitable consideration for the donor country. It is often said that aid is merely an instrument for achieving foreign policy objectives. But this clearly is more true for some countries than others. As has been shown, the USA and the UK, for example, have lower aid priority ratios than the Netherlands, Denmark, Sweden and Norway.

When commercial considerations are paramount, they can present a significant obstacle to the restructuring of aid budgets. Primary education, primary health care and low-tech water systems offer fewer opportunities for businesses to export capital-intensive technologies. To manage such pressures, Denmark and Sweden have “bought off” the business lobby by earmarking a fixed percentage of the aid programme to satisfy its interests.

The aid ministries may also object to devoting more aid to human development programmes. Primary education or family planning, for example, demands a high proportion of recurrent expenditure—which may imply a bottomless pit of indefinite donor commitment. The answer here should be to design programmes so that the recipient country makes a steadily increasing contribution. This could be accompanied, where appropriate, by user charges or, where this is not possible, by investigating new sources of tax revenue.

While there may be influential voices against directing more aid to human development, there fortunately are other voices, just as loud (though not as well financed), in

favour of a more positive strategy.

Non-governmental organizations (NGOs) frequently agitate for more and better allocated aid. They also argue that this is just the kind of aid that they have been administering for many years. As a result, many governments have been channelling a proportion of their aid through NGOs (box 5.2). There is a concern, however, that NGOs might become too dependent on government funds—and government objectives.

Rich societies can be persuaded to do more for the world's poor if they are doing enough for their own poor. A way to press for improvements on both fronts would be to set up human development committees in each country, using key parliamentarians as the nucleus and recruiting other important opinion-makers as members. These committees should take up the cause of human development in their own societies and around the globe—and help influence the politics of international relations, including trade and aid.

Moving human development to the top of the agenda

An increasing proportion of aid in recent years has been conditional on the recipients changing domestic policy in line with the donors' views. If human development is to move to the top of the agenda, should donors similarly require recipient countries to adopt such policies if they are to receive aid?

Combining development aid with policy

Managing political and economic transition is an art, rather than a science

BOX 5.2

International NGOs

Non-governmental organizations (NGOs) in industrial countries have become important in international development assistance. There are over 2,200 NGOs, whose assistance during the 1980s was equivalent to 8% of official development assistance (ODA).

Trends in NGO assistance vary greatly from one country to another. In some countries, including the UK and the Netherlands, it has increased markedly in the 1980s—relative to total ODA.

Three-quarters of the money that NGOs spend comes from funds they have raised themselves—through private voluntary contributions and commercial ac-

tivities. But they also receive significant amounts from governments, who believe NGOs can reach the poor better. And much NGO aid is indeed directed to social priority areas.

On average, 5.4% of the ODA from the OECD countries in 1988 was channelled through non-governmental organizations. Again, there are significant variations among donors—ranging from 12% in the USA and nearly 14% in Switzerland to less than 1% in the UK and Australia.

Beyond their financial role, NGOs also do much to mobilize public support for international cooperation and development.

Human adjustment assistance

It is not easy to change existing priorities in favour of human development—particularly for governments that have neglected human development in the past. They face a difficult period of transition.

But such countries should be able to count on widespread international support. A well-designed human development strategy, directed at basic health and education, should have a powerful international appeal.

The difficulties encountered are likely to be economic, social and political. Shifting government expenditure towards human development priorities is likely, for example, to impose additional burdens on the budget and on administration.

Inflation is another danger. If income is redistributed to the poor, they are likely to spend it on certain basic goods—especially food. But it may be difficult to increase output rapidly enough to meet this rising demand.

This increase in demand can then lead to balance of payments difficulties, as imports of food and other basic goods increase. And capital flight can make such problems worse if the private sector loses confidence and starts to send money abroad.

There could also be serious political problems. Those who do not agree with the reforms—the defence establishment, some bureaucrats, and other vested interests—may seek to thwart the process. Dissatisfied groups may organize strikes, sabotage, or even coups d'état. All these are familiar problems for governments that wish to change the policy in favour of the poor.

In such critical situations, the inter-

national community can help make the transition less painful and disruptive—and increase the chances of success. Just as structural adjustment loans have been made to countries going through periods of economic restructuring, so *human adjustment assistance* should be considered for countries taking positive steps towards human development.

Such assistance would have dual objectives: promoting human well being—enhancing the health and education of the people—and promoting economic growth by raising skills, productivity and employment.

It could, for example, be used for investment in social infrastructure, such as clinics or schools. It could help finance current expenditure—meeting the salaries of healers, doctors, nurses, and community workers, or purchasing medical or school supplies, or the materials for nutrition programmes.

The assistance could also be used for activities that promote employment—including skill formation and retraining programmes, and the provision of credit.

Like economic adjustment loans, human adjustment aid would need to be based on clear and well defined strategies. Their progress should be carefully monitored—it must be known where the money is going, and what it is being used for.

Human adjustment assistance would not merely help people cope with difficult economic circumstances. It would be a positive investment in the future—in the eradication of poverty, and in development that focuses on people, promotes their well being, and achieves sustainable economic growth.

reform, including social objectives and political freedom, has become quite popular among bilateral and multilateral donors. But this is a controversial matter. Some people complain that the foreigners' conditions (beyond those for repaying of loans) are intrusive and incompatible with national sovereignty. Others point out that the conditions are unlikely to be effective, either because they are easily evaded or because they can discredit domestic groups aligned with such reforms, and thus become counter-productive.

It is also said that human development objectives are likely to be achieved only in countries that are already politically committed to such objectives. Some donors argue that a more realistic and more effective approach may be to direct social priority aid mainly to countries that support human development, signalling unobtrusively to everyone the conditions for receiving aid.

One useful form of this quiet style in aid-giving would be "human adjustment assistance" (box 5.3). Just as structural adjustment loans are made to help governments to adjust to more liberal economic policies, so human adjustment assistance could smooth the transition to giving higher priority to human concerns. But aid need not be confined to easing the transition. International contributions can also support good domestic efforts in the medium and longer term. To give such support would be an expression of international solidarity. It would also be in the enlightened self-interest of all.



A new human order

The task for the 1990s is to put human development strategies into practice. Broad concepts must be translated into concrete plans, and words into practical action, both nationally and internationally.

Country strategies for human development

Developing countries will need to make sustained national efforts—based on well-defined, comprehensive and feasible strategies. For most countries, this strategy should have at least four essential elements: compiling a human development profile, setting human development goals, preparing budget restructuring plans and formulating a viable political strategy.

A human development profile

Human development issues can be placed explicitly at the centre of the development dialogue by formulating a “human development profile” for each country—highlighting past achievements, continuing deprivation and disparities, and intended goals and objectives. The profile would address a broad range of national concerns—from child mortality to child malnutrition, from maternal mortality to female literacy and from homelessness to environmental degradation. It would also reflect important differences among various population groups—rural-urban, female-male and poor-rich—as well as ethnic and regional differences.

The human development profile for each country could also include comparisons with other countries in the region and show how these change over time. An illustrative, though incomplete, profile for Pakistan is an annex to this chapter.

One difficulty many countries will face when preparing such profiles is that their data on human development are partial, inadequate and out of date—and thus misleading for most forms of systematic and constructive public action. This situation could change if developing countries were to devote at least as much investment and administrative energy to the improvement of social data systems as they do to the preparation of national income accounts. The payoff through improved public policies and more efficient monitoring systems would be enormous.

Human development goals

Improved data on where human development stands today would make it possible to define more clearly the long-term (say, ten-year) goals for the high priority items—including education, health, nutrition, housing, water, sanitation and other basic social services—as well as significant economic targets, such as those for productive jobs.

For each goal a realistic target should then be established and costed, with a list of alternative means of implementation. Investment and budget priorities could next be reviewed to incorporate these targets into policies at every level. And GDP growth targets could be worked out so that the human development goals are accommodated in the overall national strategy.

Human development is a cross-sectoral concern—it is a perspective on development. To ensure that economic growth translates into improved human lives and increased development choices for people, human development must form an integral part of overall development planning. It must be built into programmes and projects from the outset,

Broad concepts must be translated into plans, and words into practical action

The crucial question about any development activity must be: how does it affect people's lives?

not stuck on as an afterthought. Appraisal techniques should go beyond technical and financial viability and answer other, more pertinent questions: Who will really benefit from the project? Will the effort reduce or widen existing socio-economic or gender disparities? What will be the effects on the environment?

The focus of the appraisal and monitoring of development activities should not merely be on what is being produced, and what it costs. A crucial question about any development activity must instead be: How does it affect people's lives?

The goal, for example, cannot be simply to improve health as such. It must be more specific—health for *all*, or *children's* health or health care in *rural areas*. And it is not enough to aim at improved housing. It must be specified that housing is for the *poor*. Similarly, just to aim at credit expansion may not be a sufficiently well-defined objective. It should be credit for *small-scale entrepreneurs* or credit for *women*.

Human development needs its own specific goals like literacy or basic education for all. And it needs to be an overall goal—the main focus of development.

Budget restructuring plans

Each country will, of course, set its own human development goals. And it will have to formulate its own national strategy to attain these goals. A human development strategy should be a staple item for each country in the 1990s.

One critical issue for this strategy to address is the role of the market. Governments increasingly acknowledge that many activities are best left to the private sector and that they should withdraw from those activities. They confine themselves to ensuring that infrastructure is adequate, that costs, price and profit incentives work and that competition prevails. At the same time, however, governments must assume their share of responsibility, especially their responsibility for financing social services for those most deprived. National human development strategies must be for private (including NGO and community) implementation as well as for public implementation.

A viable political strategy

The strategy, once formulated, requires support—financial and political. The government's first priority will be budgetary restructuring along the lines suggested earlier in this Report. For this to succeed, a viable political consensus has to be achieved—broad-based enough to commit the nation to the necessary economic, social and political reforms.

The combination of budgetary restructuring and firm political commitment would add up to nothing less than a new "national compact for human development".

A new global agenda for human development

The strategy that each country prepares could not only form the basis of national development planning and programming. It could also provide a framework for future international assistance dialogues.

But before an attempt is made to mobilize international support, there should be an honest reappraisal of the failures of the North-South dialogues. Much of the debate on a new international economic order has been sterile and counter-productive. This is not to say that fundamental changes in economic relations are unnecessary—they are vital. But they will have to be achieved by less confrontational means.

Neither the developing nor the industrial countries have been very clear about their responsibilities for either global or domestic reform. They have often pursued abstract global schemes for finance or trade. But the impact of such schemes on ordinary people has never been explicit.

What is really needed in the 1990s is a new human order. Its starting point would be the people in each country and the aim would be to improve their conditions, especially the plight of the poor people. Mobilizing international support on this basis could guarantee that international cooperation does not transfer resources from the poor in the rich countries to the rich in the poor countries.

This new human order would recognize that we are all one community on an increasingly crowded planet. This interdependence implies more than economic links. Environ-

mental threats respect no national boundaries—and poverty is the driving force behind many of them. Nor can the international peace process be limited to that between East and West—violence can erupt in any part of the world and affect us all. And how can 80% of the world's people be denied the resources they need without inviting unprecedented waves of international migration?

In developing a new human order, all partners must recognize their obligations. Developing countries must recognize that much of the responsibility rests on their own shoulders. They can expect international support, but there is no alternative to a sensible restructuring of their priorities.

The industrial nations must recognize that they, too, have urgent problems of poverty at home. But they must also see that improving the human condition all over the globe is in their own interest. Their task is to help stimulate global trade and economic growth, help ensure peace and stability in the world and help protect the environment—and thus also help remove the need for people to migrate in search of economic opportunity.

With people at the centre of development, the analysis of familiar issues acquires a different dimension. Instead of looking at each subject in its own compartment—resource flows, debt, trade and foreign investment—the world should see what global economic opportunities are being generated each year, see who is getting them and then consider how they could be better distributed. Each familiar issue thus becomes a means towards an agreed goal: greater equality of opportunity for all.

This approach will help make more sense of our environmental concerns. Poverty causes much of the deforestation, desertification and salination—as well as produces polluted and unsafe water in many parts of the Third World. And this same environmental destruction then reinforces poverty. So, any plans for environmental action must also be plans to reduce poverty. This approach is not merely better—it is the only approach that stands a chance of working (box 6.1).

International migration is another problem that can be resolved only through an attack on poverty and an expansion of productive employment. If new, better educated

generations in the developing world cannot improve their lives by liberal access to international trade, to overseas capital markets and to international assistance, the compulsion to migrate will be overwhelming (box 6.2).

A durable solution to the external debt crisis of the developing countries is urgent for the same reason (box 6.3). It must be an early solution—because the debt burden continues to be high (\$1.3 trillion in 1989) and debt service payments are siphoning off large amounts of financial resources (\$170 billion) badly needed for investment and growth. The solution to the developing coun-

Sustainable development

BOX 6.1

Each generation must meet today's needs without incurring debts it cannot repay—and without compromising the lives of future generations. A society can incur four kinds of debt.

- *Financial*—by borrowing heavily over a long period, externally or domestically.
- *Social*—by neglecting to invest in human development.
- *Demographic*—by permitting unchecked growth in population.
- *Environmental*—by exhausting natural resources or polluting the land, the water or the air.

These debts rob our children. Human development must allow each generation to balance its own budget in each of these four areas.

The environmental balance is one that has been increasingly disturbed. But the environment should not be considered in isolation. Ultimately, it is people, not trees, whose future options have to be protected. Indeed, if people are not protected, the trees will stand very little chance.

The reason is that poverty and environmental degradation are bound closely together. It is poverty that causes the open sewers, the polluted water, the urban slums and the deforestation. For millions of people, the problem is day-to-day survival—and the result is environmental destruction.

The Third World's environmental priorities can be different from those of the industrial countries. Poorer communities will want to protect their water (whose pollution, or disappearance, is a threat to human life) and land (whose

degradation will destroy the livelihoods of farmers all over the world).

These differences have two implications for the international community. The first is to recognize that the way to save the environment is to tackle poverty. Developing countries do not need lectures on the global commons. They need the resources to finance environmentally sound development.

The second is that environmental soundness depends on the current stage of development. While many developing countries are concerned about water and land, they are less preoccupied with air pollution, which is a greater anxiety for industrial countries. And when new projects are being considered, whether for power plants or factories, the environmental standards may have to be different from those in richer countries. Those standards should be as high as possible, to protect the environment for all, but not so expensive as to divert resources that might, for example, have saved children dying from malnutrition. The standards for Australia might not be appropriate as minimum standards in Paraguay or Nigeria.

Most of the resources for tackling environmental problems should come from the industrial countries—partly because they have more funds to do so, but mainly because they cause most of the problems. The mechanisms for securing these resources should be one of the results of the UN Conference on Environment and Development in 1992. Environmental concerns might even produce the first international tax—on pollution or on fuel consumption.

tries' debt crisis must be growth-oriented. It must also be linked to improved international trade relations, because the decline in commodity prices and terms of trade during

the 1980s has taken a heavy toll on the developing countries' financial resources. In Africa, the losses from deteriorating terms of trade in recent years have amounted to about 10% of its GDP. The problem of making up for income losses and mobilizing resources for the financial transfer abroad has largely been a problem of public finance, since governments hold the biggest share of external debt. Debt repayments, as shown, have been one of the fiercest competitors for spending on human development, especially for spending on the basic needs of the less privileged, less vocal, less organized and less powerful groups.

Are such issues as debt *and* human development, trade *and* human development or environment *and* human development really at the top of the international agenda? From time to time, yes. The 1990 Global Summit for Children is an example. But much more needs to be done in this respect. The 1992 United Nations Conference on Environment and Development provides a good forum for that. And human development must also be emphasized in the debate on disarmament and the peace dividend.

The peace dividend

The Gulf crisis has made the peace dividend more urgent than ever (figure 6.1).

- Arms agreements—disarmament and arms control treaties have been concluded between NATO and Warsaw Pact countries.
- Global military spending declined from \$1,016 billion in 1987 to \$950 billion in 1989—about 6% in two years.
- Third World military spending was reduced from \$173 billion in 1987 to \$146 billion in 1989—a reduction of 16% in two years. This was partly due to the end of the Iran-Iraq war, but there were reductions elsewhere, too.
- Arms sales stopped increasing during the 1980s—after the dramatic growth of the 1970s. Third World countries now import fewer weapons than in 1987.
- Armed conflicts—the number dropped from 36 in 1986 to 32 in 1989.

The remarkable steps taken at the end of the 1980s may still continue the hopeful trends in military spending into the 1990s.

BOX 6.2

International migration—poverty on the move

The pressures for international migration are building rapidly, and the next few decades could well see unprecedented movements across international borders—movements that could exceed the migrations from Europe that settled in the USA, Canada and Australia. The pressures have many sources.

- *Population growth*—The world's demographic balance is changing fast. The South's share of global population is expected to rise to 84% in 2025—compared with only 68% in 1960. Of the babies born last year, 93% were in the Third World.

- *Increasing skills*—People in the South are acquiring more education and a range of skills—and are travelling more easily in a world shrunk by the communications and transportation revolution.

- *Few opportunities*—This larger number of skilled people do not see a matching increase in economic opportunities. The South has 77% of the world's people but earns only 15% of its income.

- *Migrating money*—Money now flows from South to North. Net transfers were \$50-60 billion in 1989—compared with \$43 billion in the other direction in 1981.

- *Trade barriers*—Protectionism is estimated to cost developing countries \$100 billion annually in lost revenues for agricultural products, and a further \$50 billion for textiles.

If financial resources and economic opportunities do not travel towards people, one major result is that people travel towards opportunities. The industrial countries already have 14 million economic refugees from developing countries, and the ranks are swelling.

A second result can be the despair of those left behind. This, too, can travel—as war, as terrorism, as drugs or as environmental destruction.

The answer is to provide greater economic opportunities in the developing countries themselves—an issue that *Human Development Report 1992* will discuss at length.

BOX 6.3

From debt to investment in people

One way to switch resources directly from debt servicing to social priorities is to swap debt for human investment. Creditors can donate part or all of their outstanding claims on debtor governments to allow those resources to be used to directly improve the welfare of the poor.

Commercial banks and official creditors can effectively donate the debt, in full or in part, to be used for social investment. This could be done through, for example, a special account of the government or a donor fund, to be used solely for financing priority social expenditures. The debtor government effectively "repays" part or all of the debt in local currency into this account, thereby financing priority expenditure. In doing this, the creditors avoid the high administrative costs associated with rescheduling, and gain favourable publicity. The commercial banks also gain significant

tax relief.

Alternatively, donor governments or agencies could provide the debtor government with the resources necessary to buy back their debt at a discount rate in the secondary market. The donation is conditional, though, on the debtor government earmarking an agreed amount of expenditure on social priority programmes.

These schemes directly serve a dual role: in terms of both alleviating the burden of debt repayment, and promoting priority social expenditures. Both UNICEF and the Inter-American Development Bank (IDB) have embarked upon such initiative under the "Debt for Child Development" and the "Social Investment Fund". In 1988, the Midland Group (UK) became the first bank to participate, when it donated its total loan exposure in the Sudan to UNICEF.

The end of the cold war—and the growing cooperation between East and West—points to a more peaceful future. Also, there are financial pressures in the USA and the USSR. Both countries have urgent, and potentially expensive, social problems to attend to. And these, on top of existing budgetary deficits, will demand defence cuts. At the same time, a continuing military presence of the USA and its allies in the Gulf will impose a heavy financial burden. The rising tension between the Islamic and the non-Islamic world, aggravated by large discrepancies in wealth, threatens to replace the tensions of the cold war, both between and within nations. If the Soviet Union were to reassert its military power, this would be another setback to the hopes for peace. In a situation as fluid as today's, all bets need to be hedged. Many industrial countries have already reduced military spending—as shown by the reductions between 1987 and 1989. In the USSR, the decline was from \$303 billion to \$285 billion, in Eastern Europe, from \$364 billion to \$306 billion, and in the USA, from \$296 billion to \$289 billion. In the other OECD nations, however, there was a slight increase—from \$495 billion to \$504 billion.

The key to future spending cuts will be the evolving situation in Europe and the Gulf area. The legacy of confrontation in Europe last year absorbed \$600 billion of the world's total of \$950 billion for military spending—60% of US expenditure and 80% of that for the USSR. These enormous figures put the cost of the Gulf war into perspective.

That war reinforces the case for seeking new peace structures—regional and global for all countries including the Third World. And it shows that the real peace dividend may lie in a more distant future than we thought. But it might be rash to conclude that the Gulf crisis drowns out the favourable developments for disarmament in Europe, or that it clouds forever the chances of reduced military spending all over the globe.

For the industrial countries, it looks as though military spending could be reduced by 2% to 4% a year during the 1990s, if the present understandings between the superpowers come to fruition and if a lasting peace in the Gulf comes soon. This would translate into savings of \$200–300 billion a year by the

year 2000, and savings during the decade of as much as \$2 trillion.

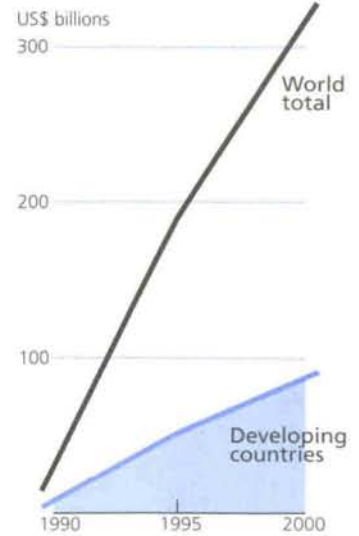
Not all these savings will release funds for other areas. Deep cuts in armed forces and in hardware spending would require significant retraining costs for labour diverted to other sectors, as well as significant payments for unemployment benefits. The defence industries themselves would have considerable capital investment to write off—and would face reduced production along with falling sales. But all these costs are essentially shortterm—no different from those incurred in other forms of adjustment.

Because the idea of a peace dividend is to divert the savings from demilitarization to more productive development, the costs of retraining and alternative investment should not really be deducted from the savings as “costs”. They should be regarded as the purpose to which the savings are put.

Two prime candidates for the peace dividend are the urgent social problems in many industrial nations, from homelessness to drug addiction, and the wide range of development needs in the Third World.

The most immediate prospect, however, is that the peace dividend will get soaked up

FIGURE 6.1
The peace dividend



BOX 6.4

The peace dividend

The reduction in tension between the superpowers offers the opportunity to release funds—a peace dividend that could be put to constructive use. Far from happening automatically, this will need to be argued and pressured for.

Industrial countries could aim at:

- *Military spending cuts*—of 3% to 4% per year.
- *Increased social spending*—using military savings to deal with urgent social problems at home.
- *An earmarking for aid*—of at least 25% of the savings.

This would produce a doubling of aid in the 1990s to 0.7% of donors' GNP, as well as \$1 trillion for use at home.

In the developing countries a peace dividend would involve:

- *Promoting more democratic regimes*—which need fewer arms to repress their people.
- *Settling regional disputes*—with as-

sistance from the UN and other partners, where necessary.

- *Freezing military spending*—rather than doubling it by the year 2000.
- *Increasing social spending*—on priority areas of human development.

The result could be savings of \$15 billion a year in prospective increases.

But peace is a global arrangement. New security arrangements must include all countries, developing and industrial.

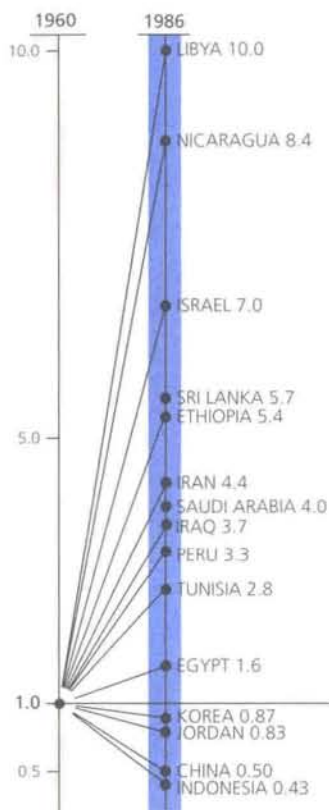
The agenda for negotiation and co-operation includes the following:

- *Dismantling the cold war legacy*—particularly military bases and assistance.
- *Restricting arms shipments*—from the industrial countries.
- *Strengthening security arrangements*—global and regional, primarily through the UN.
- *Taking arms reductions into aid talks*—donors and recipients should discuss existing military spending.

FIGURE 6.2

The military's changing claim on GNP

1960 SHARE = 1.0



in national accounts as a budget balancing item that reduces, or prevents, deficit spending. This should not raise too much concern, for the alternative might have been cuts in either domestic social programmes or in foreign assistance budgets.

To go beyond this, and make a serious commitment to investing the peace dividend as productively as possible, will require much more positive action. Lobbying groups in industrial countries will have to work hard if they are to see military spending diverted to social investment, for it will not happen automatically. The savings are large, and the opportunity is considerable. Needed now is spirited dialogue to put these potential savings to beneficial uses.

If the industrial nations start attending to their neglected human agenda, there is a real hope that they might also attend to the global agenda for human development. An effort should be made to persuade the rich nations to earmark at least 25% of their peace dividend for increasing their current levels of external assistance.

The prospects for peace in the Third World

The situation in the Third World is much less certain. A peace dividend is some way off because peace there is more elusive.

The Third World has not been involved in the recent East-West negotiations, or in disarmament talks or in the design of a new framework for world peace. Nor does the Third World have any of its own institutionalized forums for a discussion of military expenditure.

This exclusion is tragic. The recent events in the Gulf have shown that there can be no peace for the industrial countries while conflicts are allowed to build up among the 80% of people in the rest of the world.

There have been over 120 conflicts in the Third World since 1945, with 20 million deaths, more than in the second world war. In many cases—from Korea to Afghanistan—these have been cold-war struggles between the superpowers carried out by proxy on Third World soil. Yet Third World concerns hardly ever figure into the Geneva talks on disarmament—or into superpower summits.

Few people seem to have noticed the speed with which military spending in developing countries has risen—three times faster than in the industrial countries over the last three decades. Between 1960 and 1987, it rose from \$24 billion to \$173 billion, at 7.5% per year. Many poor countries of South Asia and Sub-Saharan Africa now spend two or three times as much on arms as on education or health (figure 6.2). Such spending often comes from unrepresentative regimes that invoke spurious threats to national security as a justification for such spending. In reality, those regimes are usually more interested in using the hardware to suppress their own people.

But a lot of the spending is also the result of external sales pressure. The South's combined GDP is only 15% that of the North's. Yet it buys 75% of the arms traded every year.

Even if Third World military spending were merely frozen for the next few years, rather than rising annually at 7.5%, this would release \$10-15 billion each year for human development—a peace dividend that would take care of many essential items on the human agenda for the 1990s (box 6.4).

The peace process in the Third World must have a high priority on the global agenda. The following three lines of action need to be seriously considered.

Reduce military transfers from the North

Much of the impulse for Third World militarization comes from industrial countries. Concrete proposals should now be made to phase out military bases in the Third World, to convert military aid into economic aid and to place collective restraints on shipment of sophisticated arms to developing countries.

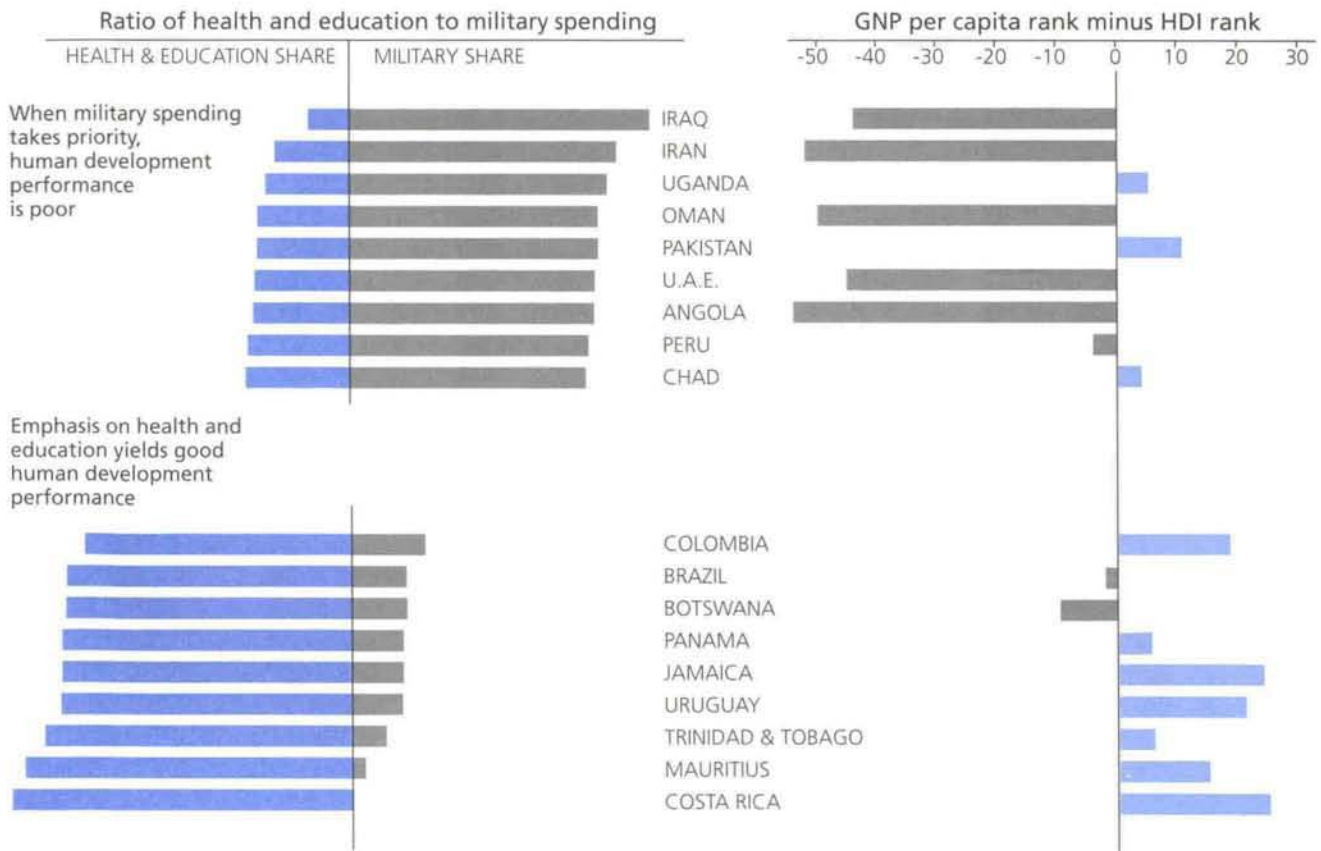
There should also be a systematic attempt to liberate the South from the consequences of the cold war—all the more urgent now, since arms manufacturers will be tempted to export even more of their hardware to the Third World, as markets shrink in industrial countries.

Develop new methods of conflict resolution

The tragedy in the Gulf demonstrates the need for much more effective methods of

FIGURE 6.3

Military spending and human development performance



resolving Third World conflicts. The UN machinery will have to be strengthened for this purpose and regional peace mechanisms, which in some regions have begun to emerge, need to be developed—more cooperation between the superpowers can greatly facilitate this process.

Bring arms reductions into aid dialogues

If a government chooses to spend more on its army than on its people, it cannot be regarded as committed to human development, and this bias should certainly count against it in aid negotiations. High military expenditure should be a legitimate area of policy dialogue in all forums of development cooperation.

The World Bank and the International Monetary Fund would also need to ensure that their adjustment programmes follow much the same principle. If the budget needs to be balanced, this should be achieved by

squeezing military—rather than social expenditures. The experience of the 1980s shows that it is short-sighted to balance budgets by unbalancing the lives of poor people.

The size of the potential peace dividend in the Third World can only be a matter of conjecture. It would be optimistic to expect an absolute decline in military spending. But if it were frozen at its current level, the annual savings could be as much as \$150 billion by the year 2000.

There is no inherent drive yet in the developing countries towards a major reduction in arms expenditure. Establishing a peace machinery and encouraging more active peace negotiations could provide the necessary impetus. Peace and human development go together (figure 6.3). Restructuring budgets to advance human development as recommended in this Report would call for the attainment and use of the peace dividend. And enhanced human development would help stabilize peace.

Peace and human development go together

A global compact for human development

The 1990s could be the decade of the peace dividend—probably in the industrial world, and possibly in the Third World. The opportunity must be fully exploited, not just to establish the world on a more peaceful path, but also to pave the way to new levels of human development.

With these resources at its disposal, the world community could establish a new global compact for human development, designed around four strategic elements.

Pursuing shared goals for the year 2000

The goals could arise from the national human development strategies suggested earlier. Targets should include universal primary education and primary health care, safe water for all and the elimination of serious malnutrition. Achieving these goals would cost an additional \$20-30 billion a year. Another aim should be the expansion of employment opportunities, an objective that can only be realistically costed country by country.

Sharing the costs

A peace dividend could provide many of the resources needed. Additional funds could come from the restructuring of existing budget priorities. But additional resources would also have to be mobilized. Developing and industrial countries could agree on a notional sharing of the additional costs—in a ratio of, say, two-thirds to one-third.

Making a mutual commitment to aid

New agreements should be reached on the use of international assistance for human development (box 6.5). For donor countries, this will imply a reassessment of their aid priorities—a strengthened commitment to improving the lives of all people. And for the recipients, requests for aid would be accompanied by the national human development compacts and by budgetary plans, including plans to cut back military and other unproductive expenditures to increase spending on social priorities. Aid for human development would then be a shared concern—a mutual commitment.

A global compact along these lines is a necessary complement of the national human development compacts and indispensable to putting human development into practice in the next decade. The notion of a national and global compact may be only an idea at this point in time, only a statement of principles. But such an idea can help stimulate the formation of new coalitions and new commitments—and perhaps eventually lead to a new political consensus on the future of humanity.

Creating a favourable international environment

A favourable international economic and financial environment is critical to enhanced human development in the South—to resolving the international debt crisis, to restoring adequate capital flow, to creating a more open world trading system, to sustained economic expansion and to enhanced private and public spending on human development.

BOX 6.5

Aid—a mutual commitment

If recipient countries adopt human development as their priority and if donors commit themselves to the provision of the necessary external assistance support, the way would then be open to a new and productive era for official development assistance.

Some of the areas to be considered are:

Country allocations of aid—Donors should base their allocations not just on income, population and poverty, but also on progress in human development—as measured by the human development index or other indicators.

Military expenditure—There should be a cut-off point, a proportion of GNP spent on the military, beyond which aid is not given — or if a country spends more on the military, say, than on the education and health of its people.

Social spending—Donors and recipients should agree on a percentage of GNP to go to the social sectors — for most developing countries, this would need to be

5% to 7% of GNP. Allocations for human priority concerns (the human expenditure ratio) should, in particular, be protected in budget balancing exercises.

Donor social allocations—Each donor should earmark at least 20% of aid for the social sectors, and within this, at least 40% to priority areas. Donors should be prepared to finance recurring as well as capital expenditure, perhaps on a matching basis.

Social reform—Donors should be prepared to discuss with recipient governments—and provide assistance for — such fundamental structural issues as land reform, income distribution, credit systems, family planning and participatory patterns of development.

Aid in the 1990s should be discussed much more frankly between both parties. Candid dialogues between donors and recipients, in all relevant forums, could offer many new opportunities to promote human development.



Sample human development profile: Pakistan

PAKISTAN

Population	122.6 million
Land area	77 million ha.
GDP	US\$34.1 billion
HDI rank (among 160 countries)	120
HDI value (on a scale from zero to one)	0.311
Human development group	Low
Income group	Low
Region	South Asia



HUMAN DEVELOPMENT

Life expectancy (years)	1990	57.7
Access to health (%)	1986	55
Access to safe water (%)	1987	45
Access to sanitation (%)	1987	20
Daily calorie supply (as % of requirements)	1985	97
Adult literacy (% 15+)	1985	31
Prim. & sec. enrolment ratio (%)	1987	29
GNP per capita (US\$)	1988	350
Real GDP per capita (PPP\$)	1988	1,790

LIFE EXPECTANCY AND HEALTH

		Earlier year	Latest year
Life expectancy (years)	1960/1990	43.1	57.7
Fertility rate	1990		6.2
Crude birth rate	1960/1990	48.6	44.4
Crude death rate	1960/1990	22.1	11.6
Total population (million)	1960/1990	50.0	122.6
Annual growth rate	1960-90		3.0
Urban population (%)	1960/1990	22.1	32.0
Annual growth rate	1960-90		4.3
Dependency ratio	1990		94
Contraceptive prevalence rate	1985-87		11.0
Infant mortality rate	1960/1989	163	106
Maternal mortality rate	1980-87		500
Under-five mortality rate	1960/1989	276	162
One-year-olds immunized (%)	1981/1989	5	72
Access to health services (%)	1985-87		55
Access to safe water (%)	1975-80/1985-88	25	45
Access to sanitation (%)	1985-88		20
Births attended by health serv. (%)	1983-88		24
Population per doctor	1984		2,910
Population per nurse	1984		4,900
Low-birth-weight babies (%)	1988		25
Malnourished children (%)	1980-88		52
Daily calorie supply (as % of requirements)	1965/1985	76	97
Food import dependency ratio	1970/1987	3.6	13.7

EDUCATION AND COMMUNICATION

Adult literacy (% 15+)	1970/1988	21	31
Mean years of schooling (25+)	1980		1.7
Scientists/technicians (per 1,000)	1980-88		..
Primary enrolment ratio	1986-88		40
Primary dropout (%)	1985-87		51
Secondary enrolment ratio	1986-88		19
Combined prim. & sec. enrolment ratio	1970/1986-88	26	29
Secondary technical as % of secondary	1986-88		1.6
Tertiary enrolment ratio	1986-88		5
Radios (per 1,000)	1986-88		86
Televisions (per 1,000)	1986-88		14

HUMAN DEPRIVATION

	1990 (mils)
Without access to health	54.6
Without access to safe water	67.5
Without access to sanitation	97.6
Deaths of children under five	0.9
Malnourished children under five	12.0
Illiterate adults	46.0
Children out of school	25.7
Female children out of school	14.5
People below poverty line	36.8
Rural people below poverty line	24.2

International comparisons, latest year

	Pakistan	South Asia	Developing countries	Industrial countries
Life expectancy (years)	57.7	58.4	62.8	74.5
Adult literacy (% 15+)	31.0	42.0	60.0	99.0
Years of schooling (25+)	0.7	2.2	3.5	9.1
Comb. prim. & sec. enrol. ratio	29	60	70	97
Under-five mortality (per 1,000)	162	151	116	18
GNP per capita (US\$)	350	388	706	12,508
Real GDP per capita (PPP\$)	1,790	1,086	2,167	14,345
Educ. expend. as % of GNP	2.2	3.4	3.7	5.2
Health expend. as % of GNP	0.2	1.0	1.4	4.7
Mil. expend. as % of GNP	6.7	7.2	5.5	5.4
Ratio mil. expend./ed. & health	279	164	109	38

INCOME

		Earlier year	Latest year
Labour force (% of population)	1988-89		28.8
Labour force in agriculture (%)	1965/1985-88	60	41
Labour force in industry (%)	1965/1985-88	18	10
Labour force in services (%)	1965/1985-88	22	49
People below poverty line (%)	1988		30
Lowest 40% households (% share of income)	1980-88		19.0
Lowest 20% households (% share of income)	1980-88		7.8
Top 20% lowest 20% (ratio)	1980-88		5.8
Real GDP per capita (PPP\$)	1960/1988	560	1,790
GNP per capita (US\$)	1976/1988	170	350
Annual growth rate	1965-80/1980-88	1.8	3.0
Annual rate of inflation	1980-88		6.5
Total ODA (US\$ million)	1989		1,119
ODA as % of GNP	1989		3
ODA for social investment as % of total	1989		9.0
Total debt as % of GNP	1988		37
Debt service as % of exports	1988		23.5
Terms of trade (1980=100)	1988		106
Current account balance (US\$ million)	1988		-1,685
Education expenditure as % of GNP	1960/1986	1.1	2.2
Health expenditure as % of GNP	1960/1986	0.3	0.2
Military expenditure as % of GNP	1960/1986	5.5	6.7
Ratio of military expenditure to education and health	1960/1986	393	279

DISPARITIES

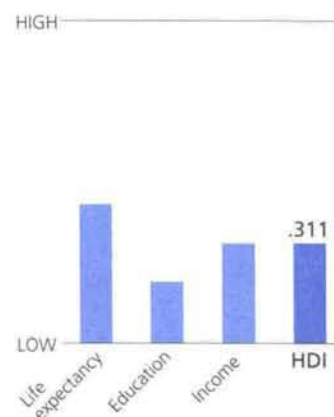
(100 = PARITY)

Female-male		(F/M)
Life expectancy	1990	100 (57.7/57.7)
Literacy	1985	41 (18/43)
Years of schooling	1980	25 (0.7/2.7)
Primary enrolment	1987	55 (28/51)
Secondary enrolment	1987	42 (11/26)
Tertiary enrolment	1987	46 (3.1/6.8)
Labour force	1989	7 (6.8/93.2)
Parliament	1988	10
Rural-urban		(R/U)
Access to health	1986	35 (35/99)
Access to water	1987	33 (27/83)
Access to sanitation	1987	12 (6/51)

HDI

The human development index (HDI) is a composite index of three variables: life expectancy, education and income. All three components have equal weight. The HDI ranks 160 countries (industrial and developing) on a scale ranging from 0.000 to 1.000. The components of Pakistan's HDI are illustrated in the figure to the right.

The components of Pakistan's HDI



Technical notes

1. The human development index—key components and robustness

Human Development Report 1990 defined human development as the process of increasing people's options. It stressed that the most critical choices that people should have include the options to lead a long and healthy life, to be knowledgeable and to find access to the assets, employment and income needed for a decent standard of living.

Development, thus defined, cannot be adequately measured by income alone. The 1990 Report therefore proposed a new measure of development, the human development index (HDI), composed of three indicators: life expectancy, education and income.

For each of these three dimensions, the 1990 Report identified minimum achievements worldwide: the lowest national life expectancy, the lowest national level of adult literacy and the lowest national level of income per capita. It also established a maximum or desirable adequate level of attainment.

The HDI was constructed in three steps. The first step was to define a country's measure of deprivation for each of the three basic variables—life expectancy (X_1), literacy (X_2) and (the log of) per capita GDP (X_3). A maximum and a minimum value was identified for the actual values of each of the three variables. The deprivation measure then placed the country in the 0-1 range defined by the difference between the maximum and the minimum. Thus I_{ij} was the deprivation indicator for the j th country with respect to the i th variable, defined as:

$$I_{ij} = \frac{(\max_j X_{ij} - X_{ij})}{(\max_j X_{ij} - \min_j X_{ij})}$$

The second step was to define an average deprivation indicator, (I_j), by taking a simple average of the three indicators.

$$I_j = \frac{1}{3} \sum_{i=1}^3 I_{ij}$$

The third step was to measure the human development index (HDI) as one minus the average deprivation index.

$$(HDI)_j = (1 - I_j)$$

The HDI has attracted a lot of attention among policy-makers, development professionals, academics, the press

and the public. Many questions have been asked, especially about the construction and robustness of the index. The following discussion tries to provide answers to some of these questions.

Why an unweighted sum of three variables?

Human development cannot take place without human life and health; people do not just want to be alive; they want to know their way around in life. They want to be knowledgeable; and they certainly may want a decent life, one that is not constantly undermined by extreme poverty and constant worry about sheer physical survival. All three of the HDI components thus deserve equal weight. And that is why the HDI proposes an unweighted average of a country's rank on the life expectancy, literacy and income scale.

Alternative methods of calculating the HDI were undertaken, and the ranks of the countries according to these alternative methods were compared with the rank set by the original HDI. To determine the significance of any difference in ranks, a standard method of comparing ranks was used—the Spearman rank-correlation coefficient, which produces a value between zero and one. The closer this value is to one, the less the contradiction between the methods used to rank the data.

One alternative was to leave the three variables separate but add up the ranks that a country has for each of the three. This is called the BORDA rule.

The ranking of the countries by the BORDA rule is somewhat similar to that by the HDI. The Spearman rank-correlation coefficient, R , is 0.996. The maximum absolute deviation between the two sets of ranks is for Australia (8.3). Only 21 of the 130 countries ranked in the 1990 Report had absolute rank deviations of 5 or more. Thus the BORDA rule does not contradict the HDI ranking.

Another way to check the index is to try a different weighting. Suppose we take the product of the three measures and then take the cube root—that is, the geometric rather than the arithmetic mean. This is the same as the equally weighted sum of the logarithms of all three variables. Taking the log of life expectancy, the log of literacy and the log of income (as before)—and arranging them—gives a new index that also has an extremely high rank correlation with the original HDI, $R = 0.998$. The maximum absolute deviation is 8 (for the United Arab Emirates), but only five countries have absolute deviations exceeding 5.

Why treat income differently from the other three variables?

By taking the log of income and putting a cap at the poverty level as the maximum, the HDI assumes a sharply diminishing marginal contribution of income to human development. It also asserts that any income above the poverty line should get a zero weight. Modifying this assumption produces the following results:

Dropping the logarithm—If we drop the logarithm of income but keep the cap at poverty level, once again the rank correlation is very high, $R = 0.994$. The maximum absolute deviation is much higher than before. It is 15 (South Africa and Saudi Arabia), and 13 countries have absolute deviations of their rank exceeding 5.

Removing the cap—Keeping income in log form, we find once again a very high rank correlation, $R = 0.997$. The maximum absolute deviation is 13 (the USA and Kuwait), but only four countries have absolute deviations above 5.

Remove the cap and drop the log—This variation, the most interesting, implies that we drop the assumption of diminishing returns to income in producing human development and take the full value of per capita real GDP. There are 36 countries with incomes above the poverty line, and these show a lot of movement in their ranks. United Arab Emirates has the maximum absolute deviation, moving up 25 ranks. Other double-digit jumps are for Kuwait (19), the USA (18), Zaire (18), Singapore (16) and Tanzania (10). The USA ranks at the top. Nevertheless, the rank correlation is still extremely high—0.994—so the overall picture does not change. In all, 24 countries move their ranks up or down by more than 5.

Different weights for income above and below poverty line

In the HDI, income up to the poverty line (y^*) has a full weight, and income above it has a zero weight. In the variations discussed above, all income has the same weight. To explore alternatives between these two extremes, we tried using a full weight for income up to the poverty line and a fractional weight above it. The new variable (call it W) was:

$$W = y \text{ for } y \leq y^* \quad (1a)$$

$$W = y + \alpha(y - y^*)^{\frac{1}{\epsilon}} \text{ for } y > y^* \quad (1b)$$

The fractional weight assigned to income above the poverty line comes from a general formula:

$$W(y) = \frac{1}{1 - \epsilon} \times y^{1 - \epsilon}$$

In this formula $\epsilon = 0$ puts full weight on all income, with no diminishing returns. As ϵ gets close to 1, $W(y)$ becomes $\log y$. In (1a) and (1b), the assumption is that $\epsilon = 0$ for $y < y^*$ and $\epsilon = 1/2$ for $y > y^*$.

Once again, the rank correlation is high, 0.994. Compared with the variation just above, this variation is moving closer to the HDI. Saudi Arabia has the maximum absolute deviation of 16, South Africa and Libya 14 each, Zaire 13 and United Arab Emirates 12. In all, 13 countries move more than 5 in their rank.

Varying the assumption about income thus shows the most variation in ranks relative to the HDI, but the overall pattern remains pretty highly correlated with the original one. The movement in individual countries' ranks is interesting. Consider the USA. Its rank is 19 in the HDI, 9 by the BORDA ranking, 6 if one removes the cap but keeps the log, and 1 if the cap is removed and the log is dropped. Once we begin to discount income above the poverty line, the movements in the USA's rank are small: it moves up only three places in the fractional weighting discussed above.

What happens if we change weights between variables and within the income variable?

Remove the cap but log all the variables—This is a multiplicative (log additive) rather than additive exercise, which also drops the assumption about diminishing returns. The rank correlation hardly changes, at 0.994. The maximum movement is for United Arab Emirates (20), but also high for Kuwait (19), the USA (14), Singapore (13) and Saudi Arabia (12). In all, eight countries move more than 5 ranks.

Fractional weight to income above poverty line, but log all the variables—The rank correlation is again high, at 0.998. United Arab Emirates moves up 10 points, the only two-digit change. In all, 12 countries move 5 points or more.

These experiments show that trying alternative weighting schemes, and changing the assumption about the effect of income on human development, makes some difference, but this difference is small. The HDI, simple as it is, stands up as a robust device for making intercountry comparisons.

2. Improvements in the basic HDI

The HDI, as originally computed, is robust, as is seen from the exercises described in technical note 1. But this does not mean that it cannot, or should not, be improved.

The longevity variable

The original HDI included three key components: longevity, knowledge and income. Longevity is measured by life expectancy. Imperfect as it is, this is the accepted, and most readily available, measure. Until a simple way of improving on life expectancy becomes available, the current life expectancy measure has to be used.

The knowledge variable

For knowledge, adult literacy measures only the most basic level of educational attainment. Although literacy is no doubt a basic requirement for the capability to acquire and to use information, there is more to knowledge and communication than literacy alone. This fact needs to be reflected in the HDI.

In this year's Report, the knowledge variable thus has two aspects: *adult literacy* is combined with *mean years of schooling*. The data on mean years of schooling refer to 1980 and therefore do not capture recent change. Remarkable as this fact is, it should be seen as encouraging—showing the need for urgent action in improving social statistics (a question discussed in greater detail in technical note 8).

The two knowledge variables—adult literacy and mean years of schooling—have been combined to produce a synthetic measure of educational achievement by assigning weights to the two components:

$$E = a_1 \text{ LITERACY} + a_2 \text{ YEARS OF SCHOOLING}$$

In the original HDI, we have $a_1 = 1$ and $a_2 = 0$.

In this year's HDI, we put $a_1 = 2/3$ and $a_2 = 1/3$.

The income variable

The other modification in this year's refined HDI is the treatment of income.

The original HDI was based on the premise of diminishing returns from income for human development (or human well-being). Last year, this fact was reflected by using the logarithm of income and giving a zero weight to income above the poverty line. A more systematic way is to use an explicit formulation for the diminishing return. A well-known, and frequently used, form is the Atkinson formulation for the utility of income:

$$W(y) = \frac{1}{1-\epsilon} \times y^{1-\epsilon}$$

Here $W(y)$ is the utility or well-being derived from income, and the parameter measures the extent of diminishing returns. It is the elasticity of the marginal utility of income with respect to income. If $\epsilon = 0$ there are no diminishing returns. As ϵ approaches 1, the equation becomes:

$$W(y) = \log y$$

The modification adopted in this HDI is to let the value of ϵ rise slowly as income rises. For this purpose, the full range of income was divided into multiples of the poverty line y^* . Thus, most countries are between 0 and y^* , some between y^* and $2y^*$, even fewer between $2y^*$ and $3y^*$ and so on. Now for all countries for which $y < y^*$, that is, the poor countries, ϵ is set equal to 0. There are no diminishing returns here. For income between y^* and $2y^*$ ϵ is set equal to 1/2. For income between $2y^*$ and $3y^*$, ϵ is set at 2/3. In general, if $\alpha y^* \leq y \leq (\alpha+1)y^*$, then $\epsilon = \alpha / (\alpha+1)$. This gives:

$$\begin{aligned} W(y) &= y \text{ for } 0 < y \leq y^* \\ &= y^* + 2\left(y - y^*\right)^{\frac{1}{2}} \text{ for } y^* \leq y \leq 2y^* \\ &= y^* + 2\left(y^*\right)^{\frac{1}{2}} + 3\left(y - 2y^*\right)^{\frac{1}{3}} \text{ for } 2y^* \leq y \leq 3y^* \\ &\text{and so on.} \end{aligned}$$

So, the higher the income relative to the poverty level, the more sharply the diminishing returns affect the contribution of income to human development. Income above the poverty line thus has a marginal effect, but not a full dollar-for-dollar effect. This marginal effect is enough, however, to differentiate significantly among industrial countries. The original HDI formulation, by comparison, was:

$$\begin{aligned} W(y) &= \log y \text{ for } 0 < y \leq y^* \\ W(y) &= \log y^* \text{ for } y > y^* \end{aligned}$$

The revision thus does not take $\epsilon = 1$, but allows it to vary between 0 and 1.

For example, the Bahamas has a real GDP per capita of \$10,590. With the poverty line set at \$4,829, there are three terms in the equation to determine the well-being of the Bahamas:

$$\begin{aligned} W(y) &= y^* + 2\left(y^*\right)^{\frac{1}{2}} + 3\left(y - 2y^*\right)^{\frac{1}{3}} \\ &= 4,829 + 2(4,829)^{\frac{1}{2}} + 3(10,590 - 9,658)^{\frac{1}{3}} \\ &= 4,829 + 139 + 29 = \$4,997 \end{aligned}$$

In calculating the HDI of the Bahamas using the improved variables and applying the steps described at the beginning of technical note 1, the following steps are taken:

Maximum country life expectancy	=	78.6	Bahamas life expectancy deprivation	=			
Minimum country life expectancy	=	42.0	=	$(78.6 - 71.5)/(78.6 - 42.0)$	=	0.193	
Maximum country educational attainment	=	70.1	Bahamas educational attainment deprivation	=			
Minimum country educational attainment	=	9.1	=	$(70.1 - 68.1)/(70.1 - 9.1)$	=	0.032	
Maximum country adjusted real GDP per capita	=	5,070	Bahamas GDP deprivation	=			
Minimum country adjusted real GDP per capita	=	350	=	$(5,070 - 4,997)/(5,070 - 350)$	=	0.015	
Bahamas life expectancy	=	71.5	Bahamas average deprivation	=			
Bahamas educational attainment	=	68.1	=	$(0.193 + 0.032 + 0.015)/3$	=	0.080	
Bahamas adjusted GDP per capita	=	4,997	Bahamas human development index (HDI)	=	$1 - 0.080$	=	0.920

3. Making the overall HDI sensitive to gender disparity

Of the many inequalities in human development, the most striking is that along gender lines. Women typically live longer than men once they have gone beyond the age when differential treatment of boys and girls makes life shorter for girls. They work hard—harder and more hours than men—but they often do work that is unpaid or underpaid. Women cook, take care of children, the elderly and the sick, look after the upkeep of the house and work on the farm or in the shop. Only a small proportion of women find that their work gets paid and recorded as participation in the labour force. Labour force participation as a concept and in its measurement grossly understates women's work even in the productive (commodity-producing) sphere. It completely leaves out much work that is useful to the continuing existence of the household.

Any attempt to measure gender inequalities in human development is thus bound to err on the low side. Even allowing for that, the inequalities are striking. An attempt is made here to calculate the ratio of female income to male income. We do not have data on income, but for 30 countries we do have data on the relative wage ratios and the relative ratios for labour force participation.

These data reveal a remarkable pattern of discrimination. The female-male wage ratio ranges from a low of 51.8% (Japan) to a high of 96.6% (Paraguay). In labour force participation, the lowest ratio is 26% (Paraguay) and the highest is 87% (Czechoslovakia). Multiplying these two ratios gives the female-male wage-income ratio.

This wage-income ratio combines two identifiable correlates of gender discrimination. The male wage is greater than the female wage, and the gap in labour force participation rates is even wider. When this is translated into absolute income levels, we see the profound consequences. (In order to do this, a basic assumption has to be made which is clearly gender biased—that the ratio of non-wage income to wage income is the same for men and women. This ratio therefore will understate the inequality.)

In adjusted real GDP per capita, female incomes as a percentage of male incomes range from a low of 19% (Costa Rica) to a high of 67% (Denmark and Finland). But of the 30 countries for which we have comparable

data, only nine have a ratio of 50% or above, while eight are below 30%. So, even in a statistic that understates the inequality, the differences are stark.

The female HDI gains from the near equal or better ratio in life expectancy but loses somewhat from unequal access to education. In education, the developed countries show practically no gender difference, though the values for female achievement, as a proportion of male, are usually below rather than above 100%. But in poorer countries, the differences become substantial. Women's educational attainment in Kenya shows a low ratio of 69% and in Myanmar 78%. On the other hand, Costa Rica shows a figure over 100%.

The overall HDI for men and women calculated separately reflects this pattern (technical note table 1). Much of our data—20 of 30 countries—relates to the industrial countries. So the table does not capture the full extent of gender inequality. Even then, the female HDI as a percentage of the male HDI is as low as 52% in Kenya, 65% in Singapore and 66% in Myanmar. Of the 30 countries, nine have ratios below 75%, and only four countries—Finland, Sweden, Denmark and Czechoslovakia—have ratios of 90% or more. No country attains full gender equality even in this biased measure, though Finland comes close with a ratio of 94%.

How should this inequality be reflected in the overall HDI for any country? A simple approach is to multiply the overall HDI for any country by the ratio of female-to-male HDI. If a country has full equality, its HDI is unaffected. Although Japan has the highest overall HDI (0.993), it is brought down to being 17th of 30 countries with a gender-adjusted HDI of 0.764. Finland, by contrast, has a high female-to-male ratio of 90% and gains one rank, from 3 to 2—indicating a high overall HDI with a low degree of gender inequality. Among the ten less developed countries, there is both a low HDI and a high degree of gender discrimination, indicated by the low ratio of the female-to-male HDI.

These results reinforce observations in *Human Development Report 1990*: although gender discrimination is a worldwide problem, its effects are particularly harsh in poorer countries. To quote: "poor rural women in developing countries suffer the gravest deprivation" (p. 33).

TECHNICAL NOTE TABLE 1
Gender-sensitive HDI

	Female as % of male				Female HDI	Male HDI	Gender-sensitive HDI	Percentage difference between HDI and gender-sensitive HDI
	Life expectancy ^a	Educational attainment	Adjusted real GDP	Human development index				
Finland	103.8	99.7	67.0	93.7	0.789	0.842	0.902	-6.3
Sweden	101.1	99.7	64.7	90.2	0.802	0.889	0.886	-9.8
Denmark	101.2	99.4	67.3	90.8	0.783	0.863	0.878	-9.1
France	104.2	99.7	49.5	87.5	0.774	0.885	0.849	-12.5
Norway	102.1	99.5	51.9	86.4	0.779	0.902	0.845	-13.6
Australia	102.3	99.0	53.3	86.6	0.773	0.892	0.843	-13.6
Austria	103.1	99.3	52.3	86.9	0.750	0.863	0.832	-13.1
Czechoslovakia	103.9	99.3	59.6	90.2	0.721	0.800	0.830	-9.9
Canada	102.5	100.0	41.7	82.7	0.765	0.925	0.813	-17.3
USA	103.0	99.9	41.8	82.8	0.754	0.910	0.809	-17.2
Switzerland	101.9	99.8	39.3	81.0	0.753	0.930	0.794	-19.0
Germany, Fed. Rep. ^b	102.1	99.6	43.9	82.6	0.737	0.892	0.792	-17.5
United Kingdom	101.2	99.9	41.6	81.0	0.737	0.910	0.783	-19.1
New Zealand	101.6	99.8	41.0	80.9	0.726	0.898	0.776	-19.1
Netherlands	102.1	99.7	34.5	78.9	0.738	0.935	0.770	-21.1
Belgium	102.3	99.8	38.0	80.2	0.721	0.899	0.768	-19.8
Japan	100.9	99.7	31.6	77.0	0.748	0.972	0.764	-23.0
Italy	102.1	97.6	37.4	78.5	0.709	0.903	0.750	-21.5
Ireland	100.9	99.9	25.6	72.8	0.673	0.923	0.688	-27.2
Portugal	102.8	90.6	43.8	76.6	0.612	0.800	0.673	-23.5
Hong Kong	100.6	84.6	37.2	70.0	0.643	0.918	0.654	-30.0
Costa Rica	99.8	100.4	19.1	69.8	0.603	0.864	0.612	-30.2
Korea, Rep. of	102.4	91.5	27.0	67.9	0.574	0.845	0.600	-32.1
Singapore	101.1	84.5	29.7	64.6	0.551	0.854	0.568	-35.4
Paraguay	100.0	94.2	25.3	72.9	0.449	0.616	0.486	-27.1
Sri Lanka	99.5	87.3	27.6	72.8	0.470	0.646	0.484	-27.2
Philippines	99.5	98.8	27.8	77.5	0.417	0.539	0.475	-22.5
El Salvador	104.1	90.1	28.3	75.4	0.315	0.417	0.395	-24.6
Myanmar	99.3	78.1	51.5	66.1	0.249	0.377	0.289	-33.8
Kenya	100.2	68.5	54.0	51.5	0.163	0.317	0.205	-48.5

a. Adjusted for the natural biological life expectancy advantage of females.
b. Data for former German Democratic Republic not included.

4. Making the HDI sensitive to income distribution

The HDI is a national average, very much like per capita income, one of its components. The use of any such overall average hides the considerable differences in the distribution of the basic indicators, whether by gender, race, region, ethnicity or simply among individuals. The HDI therefore needs to be made sensitive to these distributions.

Although distributional sensitivity is important, the HDI has the advantage that two of its three basic variables—life expectancy and educational attainment—are naturally distributed much less unequally than is income, the third variable. Thus, life expectancy in any population is not likely to be distributed more unequally than, say, three to one. A rich person cannot live a thousand times longer than a poor person, though their incomes may be in that ratio. Across countries, the range of life expectancy is 42 to 79, less than 2:1.

The same is true in educational attainment. The range of the percentage of adults who are literate varies from 13% to 99%—a range under 8:1. Mean years of schooling show a variation from 0.1 to 12.2—more unequal than life expectancy—and hide even greater variations in the within-country distribution.

Apart from per capita income, all the other variables used in the HDI have an obvious maximum. Life expectancy will rarely go beyond 100, literacy never beyond 100% and mean years of schooling beyond, say, 15. Income, however, has no upper bound. For GNP per capita the intercountry range is \$100 to \$27,500, a range of 275:1. As for real GDP per capita, the range is \$350 to \$19,850, or 57:1. Such inequalities in income are reproduced even more sharply within countries.

Thus a high average value for life expectancy or educational attainment can be obtained only by a reasonably equitable spread among individuals, a result of the fixed maximum possible. Although it is of great interest to know the distributions of those variables, an average is a better statistic for these variables than for income, where it can be very misleading.

As last year's Report showed, countries' ranking by per capita income could be reversed if per capita income were multiplied by a factor indicating distributional inequality—1 minus the Gini coefficient. This method can

be extended to all the countries having statistics on distributional inequality. Some 45 countries have data on the ratio of the income share of the highest 20% to the lowest 20%. Of these 45 countries, 17 have data on the Gini coefficient as well, and there was found to be a very strong association between the two—the logarithm of the ratio being a good predictor of the Gini coefficient. This regression result was used to interpolate the Gini coefficient for the remaining 28 countries. Some countries had data only on the Gini coefficient. In all, 53 countries with directly estimated or interpolated Gini coefficients were available.

A word of caution is in order. The Gini coefficients are registered for various years between 1967 and 1985, and the ratio of the top 20% to the lowest 20%, for years between 1975 and 1986. This is not a serious problem, since these coefficients are unlikely to change quickly. But the Gini coefficient is not always truly representative of the entire country. It is sometimes only for a subsection, such as the urban population. These caveats have to be borne in mind before interpreting the results.

Adjusted income (see technical note 2) was multiplied by $(1 - G)$ —with G being the Gini coefficient—to modify income even further. Because this was done for the adjusted income, $W(y)$, rather than for the actual income, the diminishing return effect could be incorporated before the distributional adjustment modifies incomes further. This modified income $W(y)[1 - G]$ is then used as the third variable in addition to life expectancy and educational attainment to compute a distribution-adjusted HDI (technical note table 2).

For all but two countries the HDI is reduced by making it sensitive to income distribution, and in over a third of them, it is reduced by 5% or more. This is particularly marked in Africa, where all four of the countries show this reduction, and in the Americas, where three-quarters of the countries show this reduction.

Much better data are needed to pursue the issue of distribution sensitivity more thoroughly. The analysis shows that caution is needed in interpreting a country's HDI value as a measure of achieved well-being for all its people.

TECHNICAL NOTE TABLE 2
Distribution-adjusted HDI

	HDI value	Distribution-adjusted HDI value	Percentage difference between HDI and distribution-adjusted HDI
Japan	0.993	0.990	-0.3
Netherlands	0.976	0.972	-0.3
Sweden	0.982	0.963	-1.9
Switzerland	0.981	0.961	-2.0
Norway	0.978	0.956	-2.3
Belgium	0.958	0.951	-0.7
Canada	0.983	0.948	-3.5
United Kingdom	0.967	0.948	-2.0
USA	0.976	0.944	-3.3
Finland	0.963	0.941	-2.3
France	0.971	0.938	-3.4
Denmark	0.967	0.936	-3.1
Australia	0.973	0.935	-3.9
Spain	0.951	0.928	-2.4
Ireland	0.945	0.928	-1.8
Italy	0.955	0.923	-3.4
Israel	0.950	0.923	-2.8
New Zealand	0.959	0.921	-4.0
Korea, Rep. of	0.884	0.897	+1.5
Hungary	0.911	0.896	-1.7
Hong Kong	0.934	0.891	-4.6
Yugoslavia	0.893	0.868	-2.8
Singapore	0.879	0.865	-1.5
Costa Rica	0.876	0.852	-2.7
Chile	0.878	0.831	-5.3
Portugal	0.879	0.827	-5.9
Argentina	0.854	0.812	-4.9
Venezuela	0.848	0.793	-6.5
Mauritius	0.831	0.779	-6.2
Mexico	0.838	0.767	-8.4
Malaysia	0.802	0.743	-7.4
Colombia	0.757	0.720	-4.8
Panama	0.796	0.705	-11.4
Thailand	0.713	0.670	-6.0
Jamaica	0.761	0.665	-12.6
Brazil	0.759	0.652	-14.1
Sri Lanka	0.665	0.636	-4.3
Syrian Arab Rep.	0.681	0.631	-7.3
Turkey	0.694	0.629	-9.4
Philippines	0.613	0.584	-4.7
Tunisia	0.588	0.572	-2.7
Iran, Islamic Rep. of	0.577	0.538	-6.9
El Salvador	0.524	0.508	-3.1
Indonesia	0.499	0.503	+0.8
Honduras	0.492	0.436	-11.4
Egypt	0.394	0.383	-2.9
Kenya	0.399	0.372	-6.8
Zambia	0.351	0.325	-7.2
Pakistan	0.311	0.304	-2.5
India	0.308	0.288	-6.2
Côte d'Ivoire	0.311	0.268	-13.8
Bangladesh	0.186	0.170	-9.0
Nepal	0.158	0.128	-18.8

5. Measuring progress in human development

The human development index (HDI) ranks countries relative to each other for a particular period. The maximum and minimum values that define the maximum distance to be travelled for each variable are specific to that year. Over time, the actual achieved values of life expectancy, literacy and income change, as will the maximum and minimum values of these variables across all countries.

For example, Ruritania's life expectancy in year 1 may be 40, halfway between a minimum of 20 and a maximum of 60. By year 10, Ruritania may have improved its life expectancy to 50, but the minimum may now be 30 and the maximum 80. In such a case, the numerical value of the index indicating Ruritania's life expectancy will drop in the HDI calculations from $0.5 [= (40 - 20) / (60 - 20)]$ to $0.4 [= (50 - 30) / (80 - 30)]$, despite the 25% improvement in life expectancy.

Thus improvements in the components of human development in any country over time may be reflected as a decline in its HDI value, if in the meantime its relative position has deteriorated. To combine a measure of progress over time with intercountry comparisons at one point of time, the HDI has to be modified.

The way to tackle this problem, without changing the logic of the HDI, is to say that the minimum and maximum should be defined, not for each point of time, but over a period of time. Thus if we are measuring progress between 1960 and 1990, the minimum would be the minimum of all values of, say, life expectancy for all countries over the 30 years. Similarly for the maximum. Thus the distance to be travelled is stretched out as the maximum over the 30-year period.

In the example of Ruritania, the minimum stays at 20 but the maximum is now 80. In year 1, the life expectancy variable is $0.33 \left(\frac{40 - 20}{80 - 20} \right)$ and in year 10 it is $0.5 \left(\frac{50 - 20}{80 - 20} \right)$.

With this adaptation, the human development index becomes comparable over time as well as across countries. The difference in the value of the human development index over time can be shown to be a weighted sum of the growth rates in the three variables: the weights are given by the ratio of the initial value of a variable to the maximum range.

To express this algebraically—with X_1 as life expectancy, X_2 as literacy and X_3 as income—the contribution of each variable to the HDI can be written as Z_i , where:

$$Z_{it} = \frac{\left[X_{it} - \min_{j,t} X_{jt} \right]}{\left[\max_{j,t} X_{jt} - \min_{j,t} X_{jt} \right]}$$

In the formula, j denotes country, t the time period. Note now that the denominator will remain unchanged for all time periods and for all countries.

$$MHDI_{it} = \frac{1}{3} \sum Z_{it}$$

MHDI stands for the modified HDI since we have a new definition of the maximum and minimum.

In technical note table 3, countries are ranked by the size of the difference between the 1970 and 1985 values for the *MHDI*. These differences range from 0.343 for Saudi Arabia to -0.022 for Jamaica. Jamaica is, however, a country where the HDI in 1970 was already quite high, 0.797, and the lack of change does not reflect absolute deterioration.

A summary of the differences between the 1970 and 1985 HDI values follows:

HDI difference	Number of countries
> 0.300	1
0.200 to 0.299	12
0.100 to 0.199	69
0.000 to 0.099	27
< 0.000	1
Total	110

At the bottom, above Jamaica, are 27 countries that register a change of between 0 and 0.099. Seventeen of these countries are from Sub-Saharan Africa, four from Latin America, five from Asia and one from the Arab States. These low achievers are only exceptionally countries with a high initial HDI value—only the Philippines (0.542 in 1970) and Peru (0.595) would qualify as such. The remainder are poor initially, and 18 of them remained below 0.300 in 1985. Many of these countries experienced low rates of growth of real GDP per capita over this period, or even had a negative growth. Thus income growth may not be sufficient for achieving a high HDI, but it cannot be dispensed with.

Sixty-nine countries show a moderate improvement, between 0.1 and 0.2. Since the maximum distance to traverse is 1.0, this shows that starting at different levels, around two-thirds of the countries covered 10% to 20% of the maximum distance. Almost all the countries with high HDIs in 1985 are in this group. They have continued to improve despite their already high levels for 1970.

TECHNICAL NOTE TABLE 3
Changes in the HDI over time

	HDI 1970	HDI 1985	Difference		HDI 1970	HDI 1985	Difference
Saudi Arabia	0.386	0.729	0.343	Sri Lanka	0.573	0.699	0.125
Malaysia	0.538	0.828	0.290	Belgium	0.846	0.971	0.125
Korea, Rep. of	0.589	0.874	0.285	Senegal	0.124	0.249	0.125
Tunisia	0.335	0.610	0.275	Uruguay	0.799	0.924	0.124
Syrian Arab Rep.	0.432	0.698	0.265	United Kingdom	0.850	0.974	0.124
Botswana	0.319	0.569	0.250	Paraguay	0.607	0.729	0.122
Jordan	0.428	0.677	0.249	New Zealand	0.848	0.970	0.122
Brazil	0.569	0.807	0.237	Netherlands	0.866	0.988	0.122
Gabon	0.370	0.604	0.235	Norway	0.870	0.991	0.120
Iran, Islamic Rep. of	0.464	0.695	0.231	Romania	0.798	0.918	0.120
Turkey	0.492	0.712	0.220	Ireland	0.840	0.959	0.119
Indonesia	0.316	0.531	0.215	Sweden	0.873	0.991	0.118
Algeria	0.358	0.572	0.214	Zaire	0.232	0.347	0.116
Yemen Arab Rep.	0.093	0.292	0.199	Denmark	0.864	0.979	0.114
Ecuador	0.542	0.737	0.195	Togo	0.170	0.284	0.114
Portugal	0.710	0.900	0.189	India	0.258	0.370	0.112
Mexico	0.675	0.864	0.189	Nicaragua	0.549	0.660	0.111
Hong Kong	0.762	0.947	0.185	Burundi	0.135	0.244	0.108
Singapore	0.730	0.914	0.184	Bulgaria	0.815	0.923	0.108
Mauritius	0.525	0.707	0.182	Czechoslovakia	0.836	0.944	0.107
Kenya	0.253	0.432	0.179	Poland	0.829	0.936	0.107
Chile	0.736	0.912	0.176	Costa Rica	0.759	0.865	0.106
Iraq	0.489	0.661	0.172	Nigeria	0.189	0.293	0.104
Thailand	0.535	0.706	0.170	Niger	0.054	0.158	0.104
Colombia	0.617	0.786	0.169	USSR	0.821	0.925	0.104
Morocco	0.268	0.432	0.164	Hungary	0.831	0.932	0.101
Yugoslavia	0.757	0.917	0.161	Myanmar	0.384	0.484	0.100
Venezuela	0.715	0.874	0.159	Guatemala	0.416	0.515	0.099
Greece	0.793	0.949	0.156	Mali	0.054	0.151	0.097
Israel	0.806	0.958	0.152	Malawi	0.149	0.243	0.094
Côte d'Ivoire	0.212	0.363	0.151	Philippines	0.542	0.634	0.092
Panama	0.703	0.853	0.150	Zimbabwe	0.365	0.457	0.092
Dominican Rep.	0.513	0.663	0.150	Nepal	0.126	0.217	0.092
Cameroon	0.228	0.378	0.150	Bangladesh	0.174	0.265	0.091
Spain	0.819	0.968	0.149	Central African Rep.	0.138	0.224	0.086
Haiti	0.200	0.349	0.149	Ghana	0.246	0.331	0.086
Trinidad and Tobago	0.784	0.928	0.144	Bolivia	0.383	0.468	0.085
Japan	0.853	0.997	0.144	Afghanistan	0.083	0.166	0.083
Congo	0.278	0.419	0.141	Zambia	0.320	0.402	0.081
Lesotho	0.317	0.457	0.140	Rwanda	0.184	0.263	0.078
Egypt	0.286	0.426	0.140	Angola	0.147	0.224	0.077
Italy	0.830	0.969	0.139	Somalia	0.061	0.138	0.077
Finland	0.838	0.973	0.135	Burkina Faso	0.073	0.149	0.076
Madagascar	0.292	0.426	0.134	Liberia	0.194	0.269	0.075
Honduras	0.385	0.518	0.133	Papua New Guinea	0.342	0.415	0.073
Australia	0.849	0.982	0.133	Peru	0.595	0.668	0.072
USA	0.848	0.980	0.132	Chad	0.083	0.151	0.068
Canada	0.860	0.990	0.130	Sudan	0.155	0.220	0.065
Pakistan	0.226	0.355	0.130	Guinea	0.074	0.128	0.055
Luxembourg	0.841	0.970	0.129	Benin	0.117	0.169	0.053
Switzerland	0.863	0.992	0.129	Sierra Leone	0.060	0.104	0.044
Austria	0.838	0.967	0.129	El Salvador	0.483	0.524	0.041
Argentina	0.784	0.912	0.128	Uganda	0.241	0.273	0.033
France	0.854	0.981	0.127	Mozambique	0.205	0.205	0.000
Iceland	0.866	0.993	0.127	Jamaica	0.797	0.775	-0.022

6. The human freedom index measurements and estimation

The importance attached to issues of human rights and political freedom by many individuals, countries, national and international organizations, governmental and non-governmental entities is considerable. That makes it surprising to find that the availability of data is a problem in this field—and that only a limited number of studies have so far tried to address the issue of measuring human rights and political freedom in a systematic way.

Such journals as the *Human Rights Quarterly* (1986) and *Studies in Comparative International Development* (1990) have devoted attention to this question. These attempts differ in philosophy, definitions, coverage and dates—as well as in concepts and quantifiers. No one attempt has gained universal, or even common, approval.

The major indices are:

1. Freedom House, in New York, produces an annual survey of *Freedom in the World*, based on two seven-point ranking scales for political freedoms and civil liberties.
2. *The World Handbook of Economic and Social Indicators*, by Charles Taylor and David Jodice, includes one series on government sanctions on political dissent and another on state coercive behavior.
3. David Cingranelli and Thomas Pasquerello produced an index of human rights practices based on content analysis of the US State Department's *Country Reports on Rights Practices*. The types of violations to which the content analysis was applied were chosen by use of principal components techniques. But they covered only Latin America and only the years 1979 and 1980.
4. *The World Guide to Human Rights*, by Charles Humana, evaluates the human rights performance of 88 countries according to 40 subindices based on international human rights documents, such as the Universal Declaration on Human Rights and the two associated covenants—the International Covenant on Economic, Social and Cultural Rights and the International Covenant on Civil and Political Rights.

This last index, the Humana index, provides the starting point for the human freedom index (HFI).

The subindices of the Humana index are arranged into five groups of rights or freedoms: (1) six questions on rights, or "freedoms to"; (2) 12 on "freedoms from"; (3) ten on "freedoms for"; (4) seven on legal rights; and (5) five on personal rights. The performance of each country is on a scale from zero (no rights) to three (guaranteed rights). These scores are then aggregated. The evaluation is that of the author, however.

Seven "freedoms from," relating to respect for the personal integrity of the individual, are weighted at three times those of the rest. Thus, the maximum possible score a country can receive is 162 ($33 \times 3 + 7 \times 3 \times 3$). Each country's score out of 162 is converted to a percentage, to give its final human rights score.

Starting with the Humana index

The strengths of the Humana index are threefold. Each question is based on an internationally recognized human right. It has clear and reproducible computational procedures. And the final scale has good discrimination. The ranked countries are fairly evenly distributed all the

way along the scale from 0% to 100%, and not simply grouped into "good" at one end and "bad" at the other.

The disadvantages of the Humana procedure lie in its subjectivity and its data intensity. Any ratings scale, including this one, is inevitably subjective. Although the manipulations of data are clear and reproducible, the evaluations of data are less so—at what point, for example, do "some violations or infringements" become "substantial oppression"? Further, a 40-question, four-scale index requires a considerable amount of data, which is very difficult to compile consistently for all 160 countries covered by the *Human Development Report*. The *World Guide* covers only 88 countries plus Taiwan, the Province of China.

The weighting of the first seven "freedoms from" differentiates between these countries' human rights performances more precisely but not necessarily more accurately. The decision to weight certain questions begs a number of questions. First, are not the weightings inevitably arbitrary, even if changing the weightings does not affect the final rank outcomes very much? Second, why stop at a different weighting of only seven questions? Why not have a different weight for every question? On the other hand, if the weightings do not affect the rankings very much, why weight at all?

Adjusting the Humana index

Chapter 1 of the Report presents a revised human freedom index, based on the Humana index but eliminating the weights assigned to certain questions and reducing Humana's four-point scale of observations to a two-point scale, or simple "yes" (=1) and "no" (=0) scale. The resultant ranking of the 88 countries covered by the Humana index is shown in table 1.5 in Chapter 1. It is a revised 1985 ranking of countries.

During the past five years, however, the human rights and political freedom situation in many countries has changed. Clearly, an update of the 1985 human freedom index is more than urgent. Nevertheless, lack of data did not permit this at present. There can be marked deviations from one source of information to the other.

Given this situation, it was felt that for the time being it might therefore be best not to give the impression of precision where precision cannot exist, to make quantitative assessments where even qualitative judgements are hampered by lack of reliable information. Accordingly, the 1985 human freedom index has been updated in a cautious way: based on information available from a variety of country reports, a triangle has been placed against countries that are known to have held multiparty elections since 1985 and continue to follow a democratic system of government.

Clearly, there is an urgent need for more systematic work on human freedom: the issue of data availability needs to be addressed; the concept of human freedom needs clarification—especially its historical and socio-cultural traditions and implications; and methods of measuring various human freedoms have to be designed. We are still very much at the beginning of a systematic analysis and debate of human freedom.

7. The construction of the expenditure ratios

In presenting expenditure ratios for the first time in this Report, our objective is to provide a method for examining current patterns of public spending on human development priorities. Logically, this analysis can be applied both to national governments' spending on their own people, and that of donor country governments' on the people of recipient countries.

Such pioneering efforts inevitably face problems, however. Our foremost concern has been to develop a useful methodology, and to the extent that the required information was not available, the figures derived should be regarded as illustrative rather than complete. This note highlights the data limitations faced in the construction of the ratios.

In the domestic context, the following qualifications must be borne in mind:

- Figures on total government spending are sometimes available only for central government. The omission of provincial and local expenditures results in ratios that are underestimates for federally structured states (such as India) or where expenditure is decentralized to a significant extent (as in Indonesia).
- Again, for data reasons, the priority items considered are limited to basic education and primary health care. This thereby excludes certain expenditures that could be regarded as priority—such as family planning, food subsidies for the poor and rural water supply and sanitation.
- Using a standard definition of priority neglects the important point that priority needs vary according to the levels of development and existing human development achievements. For many Latin American countries and

the Philippines, for example, high literacy rates justify the extension of education priorities to tertiary levels.

In the analysis of aid allocations, the data constraints differ.

- The aid expenditure ratio includes total donor commitments to overseas development assistance and does not distinguish between contributions to multilateral institutions and bilateral assistance.
- Using the OECD data base, it was possible to include further items in the aid priority ratio—specifically, rural water and sanitation and family planning.
- Only countries for which a sufficient breakdown is available from the OECD are included. Japan and Norway had to be dropped.

The limitations of the only data available—the OECD Credit Reporting System—necessitated two further assumptions in the construction of the aid ratios in figure 3.4 and table 3.13.

1. In the absence of detailed information, it is assumed that the allocations of multilateral agencies have a breakdown of priority expenditures that is similar to that of bilateral assistance. The literature suggests that this assumption may well overestimate multilateral priority allocations.
2. A detailed breakdown of aid allocations is available only with respect to loans, not grants. These figures would be seriously misleading, insofar as grants are likely to be more significant in areas regarded as priority. As a corrective measure, therefore, it is assumed that the priority allocation in the grant element is twice as high as that of the loan element recorded in the CRS.

8. Improving human development statistics

Human Development Report 1990 relied on readily available data, and this limited the scope and depth of its analysis. Many concerns were not adequately reflected through existing statistics. And the coverage of countries was often very inadequate, with many data seriously lacking in timeliness.

Last year's Report also made a plea for improving social statistics—for investing at least as much in the production of social data as has been invested in the production of economic statistics. Otherwise, planning and programming for human development would never be as systematic as that for economic growth. And that would mean that it would continue to be extremely difficult to truly integrate economic and social concerns in the design, monitoring and review of development efforts, policies and programmes.

The strengthening of national statistical capacities cannot be completed in one year. This year's Report, therefore, faced many of the same problems that confronted the 1990 Report. This is particularly true for the special focus topic of the Report—the financing of human development. Very little information is readily avail-

able on the *total* picture of spending on human development. To overcome this problem, special country case studies were launched in over 30 countries to collect data that would provide the necessary information.

National authorities in charge of development planning, finance and budgets may find it useful to complete these tables for their respective countries for their own purposes. Many of the data for these tables may not be readily available internationally. But nationally, there often are more data than one expects. And even today, with the currently available data, it is possible to prepare a much better overview of spending on human development than is normally done.

In some countries, it may be desirable to shorten or to expand the list of tables annexed here. For example, some governments may want to include expenditures on multisectoral poverty eradication programmes, expenditures on initiatives intended to support women in development or expenditures on employment creation. Whether doing this makes sense depends on the country's circumstances and development priorities.

Total spending on human development: Design for data collection

Table 1: Basic financial table

GNP (US\$ mils)
 GNP per capita (US\$)
 Tax revenue (as % of GNP)
 Government expenditure (as % of GNP)
 Overall deficit/surplus (as % of GNP)

Table 2: Tax summary

Direct tax (as % of GNP)
 Indirect tax (as % of GNP)
 Domestic production tax (as % of GNP)
 Import tax (as % of GNP)
 Total tax revenue (as % of GNP)

Table 3: Decentralization of revenue/total autonomy

Central revenue (as % of GNP)
 Provincial revenue (as % of GNP)
 Local revenue (as % of GNP)
 Central expenditure (as % of central revenue)
 Provincial expenditure (as % of provincial revenue)
 Local expenditure (as % of local revenue)

Table 4: Subsidies budget

Total subsidies (as % of GNP)
 Social subsidies (as % of GNP)
 Education subsidies (as % of social subsidies)
 Health subsidies (as % of social subsidies)
 Food subsidies (as % of social subsidies)
 Housing subsidies (as % of social subsidies)
 Other subsidies (as % of social subsidies)

Table 5: Government expenditure

Government expenditure on combined military/
 internal security (as % of GNP)
 Government expenditure on debt (as % of GNP)
 Government expenditure on administration
 (as % of GNP)
 Government expenditure on social sectors
 (as % of GNP)
 Government expenditure on economic sectors
 (as % of GNP)

Table 6: Government expenditure in the social sectors

Total government expenditure (US\$ mils)
 Total government social expenditure (US\$ mils)
 Total government social expenditure (as % of GNP)
 Government expenditure on education (as % of GNP)
 Government expenditure on health and nutrition
 (as % of GNP)
 Government expenditure on housing, water, sanitation
 and other amenities (as % of GNP)
 Government expenditure on social security, welfare, etc.
 (as % of GNP)

Table 7: Total social sector expenditure by level

Total social sector expenditure (as % of GNP)
 Expenditure by central government (as % of GNP)
 Expenditure by provincial and local governments
 (as % of GNP)
 Expenditure by total public sector (as % of GNP)
 Expenditure by private sector (as % of GNP)

Table 8: Total social sector expenditures by major areas

Total expenditure on education (as % of GNP)
 Total expenditure on health and nutrition
 (as % of GNP)
 Total expenditure on housing, water, sanitation and
 other amenities (as % of GNP)
 Total expenditure on social security, welfare, etc.
 (as % of GNP)
 Total social sector expenditure (as % of GNP)

Table 9: Expenditure on education

Expenditure on primary education (as % of total
 education expenditure)

Expenditure on secondary education (as % of total
 education expenditure)

Expenditure on tertiary education (as % of total
 education expenditure)

Expenditure on general education (as % of total
 education expenditure)

Expenditure on technical education (as % of total
 education expenditure)

Expenditure on public education (as % of total
 education expenditure)

Expenditure on private education (as % of total
 education expenditure)

Table 10: Expenditure on health, housing and other amenities

Expenditure on primary health care (as % of total
 health expenditure)

Expenditure on curative and other services (as % of
 total health expenditure)

Expenditure on public health (as % of total health
 expenditure)

Expenditure on private health (as % of total health
 expenditure)

Expenditure on public housing (as % of total housing
 expenditure)

Expenditure on private housing (as % of total housing
 expenditure)

Expenditure on urban water and sanitation (as % of
 total water and sanitation expenditure)

Expenditure on rural water and sanitation (as % of
 total water and sanitation expenditure)

Table 11: Distribution of household expenditure

Percentage share of household expenditure on food
 Percentage share of household expenditure on rent
 Percentage share of household expenditure on health,
 including pharmaceuticals
 Percentage share of household expenditure on
 education, including books
 Percentage share of household expenditure on clothing
 Percentage share of household expenditure on fuel
 Percentage share of household expenditure on
 transport
 Percentage share of household expenditure on other
 items

Table 12: Total debt

Total debt (as % of GNP)
 Domestic debt (as % of total debt)
 External debt (as % of total debt)
 Total debt service (as % of GNP)
 Total debt service (as % of government expenditure)
 Domestic debt service (as % of total debt service)
 External debt service (as % of total debt service)

Table 13: Total ODA

Total ODA received (US\$ mils)
 ODA received per capita (US\$)
 ODA received (as % of GNP)

Table 14: ODA for social sectors

ODA for education (as % of total ODA)
 ODA for health and nutrition (as % of total ODA)
 ODA for population and family planning (as % of total
 ODA)
 ODA for education (as % of total education
 expenditure)
 ODA for health and nutrition (as % of total health and
 nutrition expenditure)
 ODA for population and family planning (as % of total
 population and family planning expenditure)
 ODA for housing, water, sanitation, etc. (as % of total
 housing, water and sanitation expenditure)

Bibliographic note

Chapter 1 draws on the following: Haq and Kirdar 1988 and 1989; Haq 1990; Humana 1986; Pronk 1990; and United Nations 1948, 1966a and 1966b.

References for the boxes are as follows: box 1.1, UNDP 1990a; box 1.2, Humana 1986.

Chapter 2 draws on the following: Aghevli, Boughton and others 1990; Ascadi and Johnson-Ascadi 1990; Bartelmus 1990; Bruce 1989; Carlson and Wardlaw 1990; Cohen 1990; Feuerstein and Lovel 1989; GATT 1989; Goldemberg and others 1988; Gonzales 1990; Holzman 1990; Hueting 1990; ILO 1990a and 1990b; Larson 1990; Latin American and Caribbean Commission on Development and Environment 1990; Lloyd and Brandon 1990; Lowe 1990; Organisation for Economic Co-operation and Development 1986, 1989, 1990a and 1990b; Over and others 1988; Postel 1990; Scitovsky and Over 1988; Sen 1990; The South Commission 1990; Topping 1990; UNDP 1991; UNICEF 1990a and 1990b; United Nations 1989, 1990a-m and forthcoming; United Nations Conference on Trade and Development 1990; United Nations Economic Commission for Africa 1991; United Nations Industrial Development Organization 1990; United States Department of Commerce 1990; World Bank 1989 and 1990a; World Resources Institute 1990; and WHO 1990b.

References for the boxes are as follows: box 2.3, Sen 1990; box 2.4, United States Department of Commerce 1990; box 2.5, Central Statistical Office 1990, and Greve and Currie 1990; box 2.6, Larson 1990, and WHO 1990b.

References for the figures are as follows: figure 2.4, ILO 1987; figure 2.5, Statistical Office of the European Community 1990; figure 2.6, Carlson and Wardlaw 1990; figure 2.8, United Nations 1990i.

Chapter 3 draws on the following: Anderson 1989; Ball 1985; Bayley 1985; Cassen and others 1987; Cornia, Jolly and Stewart 1987; Cornia and Stewart 1990; Faber and Griffith-Jones 1990; Grimmit 1988; Gulhati 1990; Humphreys and Underwood 1989; Knight 1991; Lewis and others 1988; Lipton and Toye 1990; MacAndrews 1986; Mesa-Lago 1983; Newbery and Stern 1987; Organisation for Economic Co-operation and Development 1990c; Sivard 1989; UNDP 1990d; UNICEF 1990b; United Nations 1990e; United Nations Economic Commission for Latin America and the Caribbean 1990; Urrutia, Ichimura and Yukawa 1989; Vogel 1990a; Williamson 1990; World Bank 1988b, 1990a, 1990b and 1990d.

References for the boxes are as follows: box 3.1, Lessard and Williamson 1987, Pastor 1990, and

Rodriguez 1987; box 3.2, Theobald 1990, and United Nations 1990e; box 3.4, Bobiash 1988.

References for the figures are as follows: figure 3.2, UNDP 1990d.

References for the tables are as follows: table 3.4, Vogel 1990a; table 3.8, UNDP 1990d; table 3.9, UNDP 1990d; table 3.10, Tan and Mingat 1989; table 3.11, Vogel 1990a.

Chapter 4 draws on the following: Berstecher and Carr-Hill 1990; Blakney and others 1989; Colclough and Lewin 1990; Colclough forthcoming; Cornia, Jolly and Stewart 1987; Creese 1990; Edirisinghe 1987 and 1988; Griffin 1988 and 1990; Jimenez, Paqueo and Lourdes de Vera 1988a and 1988b; Jimenez, Lockheed and Paqueo 1988; Jimenez 1987 and 1990; Karim, Majid and Levison 1980; Kumar and Stewart 1987; Lewin with Berstecher 1989; Mateus 1983; Organisation for Economic Co-operation and Development 1990a; Patel 1989; Pfeffermann and Griffin 1989; Pinstrup-Andersen 1985, 1988 and 1989; Stewart 1988; Tan and Mingat 1989; UNDP 1990b; UNICEF 1989; Vogel 1988, 1990a, 1990b and forthcoming; Waddington and Enyimayew 1989; WCEFA 1990; and Winkler 1989.

References for the boxes are as follows: box 4.1, Colclough and Lewin 1990; box 4.2, Edirisinghe 1987 and 1988; box 4.3, Waddington and Enyimayew 1989, and Creese 1990.

References for the tables are as follows: table 4.1, UNDP 1990d; table 4.2, Vogel 1990a; table 4.3, Tan and Mingat 1989.

Chapter 5 draws on the following: Antia 1985; Bienen and others 1990; Cernea 1985 and 1987; Chowdry 1990; Cornia, Jolly and Stewart 1987; Daremblum 1990; de Valk and Wekwete 1990; Dreze and Sen 1989; Edirisinghe 1987; Gordon Drabek 1987; Grant 1990; Hossein 1988; Hirschman 1984 and 1991; Isaac 1991; Lewis and others 1988; Mosley 1990; Nelson 1984 and 1989; Nelson and others 1989; Nozick 1968; Paul 1983; Pradhan 1980; Rondenelli and others 1983; Salmen (undated) and 1990; Sutton 1990; Sanyal 1990; Sen 1982; Taylor, Horton and Raff 1980; Tilakaratra 1987; Uphoff 1985, 1986 and 1988; Waterbury 1989; Whitehead 1990; and Yudelman 1987.

References for the boxes are as follows: box 5.1, Hossein 1988, Sanders 1983a and 1983b, and Tilakaratra 1987; box 5.3, Cernea 1988, Gordon Drabek 1987, and Organisation for Economic Co-operation and Development 1990c.

Chapter 6 draws on the following: Faber and Griffith-Jones 1990; Haq 1990; Humphreys and

Underwood 1989; Renner 1989 and 1990; UNICEF 1990b; United Nations 1990; Williamson 1990; and Wulf 1990.

References for the boxes are as follows: box 6.3, Griffith-Jones 1990; box 6.4, Wulf 1990.

References for the figures are as follows: figure 6.2, Sivard 1989; figure 6.3, Sivard 1989.

Technical note 2 refers to Atkinson 1970.

Technical note 6 refers to the following: Bollen

1986, 1989 and 1990; Cingranelli and Pasquerello 1985; Claude and Jabine 1990; Gastil 1987; Humana 1986; Lopez and Stohl 1990; Studies in Comparative International Development 1990; Symposium: Statistical Issues in the Field of Human Rights 1986; Taylor and Jodice 1983; United Nations 1948, 1966a and 1966b; United States Department of State 1990; Lawyers Committee for Human Rights 1990; and Ines de Neufville 1986.

References

- Aghevli, Bijan, James Boughton and others. 1990. *The Role of National Saving in the World Economy: Recent Trends and Prospects*. IMF Occasional Paper 67. Washington, D.C.: International Monetary Fund.
- Akder, Halis. 1990. "Turkey: Country Profile; Human Development Indices for all Turkish Provinces." Middle East Technical University Department of Economics. Ankara: UNDP. Mimeographed.
- Alderman, Harold. 1988. "The Twilight of Flour Rationing in Pakistan." *Food Policy* August: 245-56.
- Amnesty International. Various years. *Amnesty International Report*. London: Amnesty International Publications.
- Anderson, Dennis. 1989. "Infrastructure Pricing Policies and the Public Revenue in African Countries." *World Development* 17(4): 525-42.
- Antia, N.H. 1985. "An Alternative Strategy for Health Care: The Mandwa Project." *The Economic and Political Weekly* 20: 51-52.
- Ascadi, George, and Gwendolyn Johnson-Ascadi. 1990. "Safe Motherhood in Africa: Socio-cultural and Demographic Aspects of Maternal Health." Mimeographed.
- Atkinson, A.B. 1970. "On the Measurement of Inequality." *Journal of Economic Theory* 3.
- Ball, Nicole. 1985. "The Security Sector, the Budget and Development." *IDS Bulletin* 16(4).
- Bartelmus, Peter. 1990. "Sustainable Development; a Conceptual Framework." DIESA Working Paper Series. New York: United Nations. Mimeographed.
- Bayley, D. 1985. *Patterns of Policing*. New Brunswick: Rutgers.
- Berg, Alan. 1987. *Malnutrition: What Can Be Done? Lessons from World Bank Experience*. Baltimore: Johns Hopkins University Press.
- Berstecher, Dieter, and Roy Carr-Hill. 1990. *Primary Education and Economic Recession in the Developing World since 1980*. Special Study for the WCEFA. Paris: UNESCO.
- Besley, Timothy, and Ravi Kanbur. 1988. "Food Subsidies and Poverty Alleviation." *The Economic Journal* 98: 701-19.
- Bienen, Henry, Devest Kapur, James Parks and Jeffrey Riedinger. 1990. "Decentralization in Nepal." *World Development* 18(1): 61-75.
- Blakney, Richard B., Jennie I. Litvack and Jonathan Quick. 1989. *Financing Primary Health Care. Experiences in Pharmaceutical Cost Recovery*. Arlington, Virginia: Management Sciences for Health.
- Bobash, Donald J. 1988. "South-South Trade: West African Case Studies." Oxford University. Unpublished thesis.
- Bollen, Kenneth A. 1986. "Political Rights and Political Liberties in Nations: an Evaluation of Human Rights Measures, 1950 to 1984." *Human Rights Quarterly* 8(4): 567-91.
- _____. 1989. *Structural Equations with Latent Variables*. London: John Wiley and Sons.
- _____. 1990. "Political Democracy: Conceptual and Measurement Traps." *Studies in Comparative Social Development* 25(1): 7-24.
- Bruce, Judith. 1989. "Homes Divided." *World Development* 17(7): 979-91.
- Buhmann, Brigitte, Lee Rainwater, Guenther Schmaus and Timothy M. Smeeding. 1988. "Equivalence Scales, Well-Being, Inequality, and Poverty: Sensitivity Estimates Across Ten Countries Using the Luxembourg Income Study LIS Database." *The Review of Income and Wealth* 34(2): 115-42.
- Carlson, Beverley A. 1985. "The Potential of National Household Survey Programmes for Monitoring and Evaluating Primary Health Care in Developing Countries." *World Health Statistics Quarterly* 38(1): 38-64.
- Carlson, Beverley A., and Tessa M. Wardlaw. 1990. "A Global, Regional and Country Assessment of Child Malnutrition." UNICEF Staff Working Paper 7. New York: UNICEF.
- Cassen, Robert, and others. 1987. *Does Aid Work?* New York: Oxford University Press.
- Central Statistical Office. 1990. *Social Trends 20*. London: HMSO.
- Cernea, Michael. 1987. "Farmers' Organizations and Institutions Building for Sustainable Development." *Regional Development Dialogue* 8(2): 1-19.
- _____. 1988. *Nongovernmental Organizations and Local Government*. World Bank Discussion Paper 40. Washington, D.C.: World Bank.
- _____, ed. 1985. *Putting People First: Sociological Variables in Rural Development*. New York: Oxford University Press.
- Chowdry, Kamla. 1990. "Poverty, Environment, Development." In Sutton (1990).
- Cingranelli, David L., and Thomas F. Pasquerello. 1985. "Human Rights Practices and the Distribution of U.S. Foreign Aid to Latin American Countries." *American Journal of Political Science* 29: 539-63.
- Claude, Richard P., and Thomas Jabine, eds. 1990. *Statistics and Human Rights*. Philadelphia: University of Pennsylvania Press.

- Cohen, Desmond. 1990. "Human Development in Industrial Countries: the UK and the USA." Study prepared for UNDP. New York. Mimeographed.
- Colclough, Christopher. Forthcoming. "Who Should Learn to Pay? An Assessment of Neo-liberal Approaches to Educational Policy." In C. Colclough and J. Manor, eds., *States or Markets? Neo-liberalism and the Development Policy Debate*. Oxford: Oxford University Press.
- Colclough, Christopher, and Keith Lewin. 1990. "Educating All the Children: the Economic Challenge for the 1990s." Jomtien, Thailand. Unpublished paper presented at the WCEFA.
- Cornia, G. Andrea. 1989. "Investing in Human Resources: Health, Nutrition and Development for the 1990s." *Journal of Development Planning* 19: 159-87.
- Cornia, G. Andrea, Richard Jolly and Frances Stewart, eds. 1987. *Adjustment with a Human Face*. Volume I. New York: Oxford University Press for UNICEF.
- Cornia, G. Andrea, and Frances Stewart. 1990. *The Fiscal System, Adjustment and the Poor*. Queen Elizabeth House Development Studies Working Paper 29. Oxford.
- Cornia, G. Andrea, Rolph van der Hoeven and Thandika Mkandawire, eds. Forthcoming. *Adjustment, Stagnant Economic Structures and Human Development in Sub Saharan Africa: Policy Conflicts and Alternatives*. UNICEF Study. London: McMillan.
- Creese, Andrew L. 1990. *User Charges for Health Care: A Review of the Recent Experience*. Strengthening Health Services Paper 1. Geneva: WHO.
- Darembaum, Jaime. 1990. "Costa Rica Needs Lower Taxes and a Leaner State." *The Wall Street Journal*. Friday, October 5.
- de Valk, P., and K. H. Wekwete, eds. 1990. *Decentralising for Participatory Planning*. Aldershot: Gower Publishing.
- Delfs, Robert. 1990. "Pay As You Go; Improved Health Care Means Higher Costs." *Far Eastern Economic Review*, 26 July, 21-23.
- Dreze, Jean, and Amartya K. Sen. 1989. *Hunger and Public Action*. WIDER Studies in Development Economics. Oxford: Clarendon Press.
- Edirisinghe, Neville. 1987. *The Food Stamp Programme in Sri Lanka: Costs, Benefits and Policy Options*. International Food Policy Research Institute Research Report 58. Washington, D.C.: IFPRI.
- _____. 1988. "Food Subsidy Changes in Sri Lanka: the Short-Run Effect on the Poor." In Pinstrup-Andersen (1988).
- Faber, Mike, and Stephanie Griffith-Jones, eds. 1990. "Approaches to the Third World Debt Reduction." *IDS Bulletin* 21(2).
- Feuerstein, Marie-Terese, and Hermione Lovel. 1989. "Seeing Light at the End of the Tunnel." *Community Development Journal* 24(3): 164-70.
- Gastil, Raymond D. 1987. *Freedom in the World 1987-1988*. Freedom House. Westport, Connecticut: Greenwood Press.
- GATT. 1989. *International Trade 1988-89*. Volume I. General Agreement on Tariffs and Trade. Geneva.
- Gertler, Paul, and Jacques van der Gaag. 1988. *Measuring the Willingness to Pay for Social Services in Developing Countries*. Living Standards Measurement Study Working Paper 45. Washington, D.C.: World Bank.
- Gertler, Paul, and Paul Glewwe. 1989. *The Willingness to Pay for Education in Developing Countries: Evidence from Rural Peru*. Living Standards Measurement Study Working Paper 54. Washington, D.C.: World Bank.
- Goldemberg, José, and others. 1988. *Energy for a Sustainable World*. Wiley Eastern India.
- Gonzales, Pablo. 1990. "The Relative Earnings of Women: Theory, Trends and Causes." Paper prepared for ILO and UNDP. Cambridge. Mimeographed.
- Gordon Drabek, A. 1987. "Development Alternatives: The Challenge for NGOs—An Overview of the Issues." *World Development* Special Issue. Development Alternatives: The Challenge for NGOs. Autumn.
- Grant, James. 1990. "Comments on Nancy Birdsall's Essay." In Sutton (1990).
- Greve, John, and E. Currie. 1990. *Homelessness in Britain*. York: Joseph Rowntree Memorial Trust.
- Griffin, Charles C. 1988. *User Charges for Health Care in Principle and Practice*. EDI Seminar Paper 37. Washington, D.C.: World Bank.
- _____. 1990. "Health Sector Financing in Asia." Asia Regional Series Internal Discussion Paper. Washington, D.C.: World Bank.
- Griffith-Jones, Stephanie. 1990. "Debt Relief for Child Development." *IDS Bulletin* 21(2): 78-81.
- Grimmit, Richard F. 1988. "An Overview of US Military Assistance." CRS Report for the U.S. Congress. Washington, D.C.: Congressional Research Service.
- Gulhati, Ravi. 1990. *The Making of Economic Policy in Africa*. EDI Seminar Series. Washington, D.C.: World Bank.
- Hallak, Jacques. 1990. *Investing in the Future; Setting Educational Priorities in the Developing World*. Study prepared for UNDP. Paris: UNESCO/International Institute for Educational Planning/Pergamon Press.
- Ham, Chris, Ray Robinson and Michaela Benzeval. 1990. *Health Check: Health Care Reforms in an International Context*. London: King's Fund Institute.
- Haq, Khadija, and Uner Kirdar, eds. 1986. *Human Development: the Neglected Dimension*. North-South Roundtable and UNDP Development Study Programme. Volume I. Islamabad.
- _____, eds. 1987. *Human Development: Adjustment and Growth*. North-South Roundtable and UNDP Development Study Programme. Volume II. Islamabad.
- _____, eds. 1988. *Managing Human Development*. North-South Roundtable and UNDP Development Study Programme. Volume III. Islamabad.
- _____, eds. 1989. *Development for People: Goals and Strategies for the Year 2000*. North-South Roundtable and UNDP Development Study Programme. Volume IV. Islamabad.
- Haq, Mahbub ul. 1988. "People in Development." Paul G. Hoffman Lecture. New York: UNDP.

- _____. 1990. "Human Development: Old Myths and New Insights." In UNDP (1990c).
- Hirschman, Albert O. 1984. *Getting Ahead Collectively: Grassroots Experiences in Latin America*. New York and Oxford: Pergamon Press
- _____. 1991. *The Rhetoric of Reaction*. Cambridge: Belknap Press of Harvard University Press.
- Holzman, Elizabeth. 1990. *Poverty and Breast Cancer in New York City*. New York: Office of the Comptroller.
- Hoppers, Wim. 1989. "The Response from the Grassroots: Self-reliance in Zambian Education." *IDS Bulletin* 20(1): 17-23.
- Hossein, Mahabub. 1988. *Credit For Alleviation of Rural Poverty: The Grameen Bank in Bangladesh*. International Food Policy Research Institute Research in collaboration with the Bangladesh Institute of Development Studies. Research Report 65. Washington, D.C.: IFPRI.
- Hueting, Roefie. 1990. "The Brundtland Report: A Matter of Conflicting Goals." *Ecological Economics* 2: 109-17
- Humana, Charles. 1986. *The World Guide to Human Rights*. New York: Facts on File.
- Humphreys, Charles, and John Underwood. 1989. "The External Debt Difficulties of Low Income Africa." In I. Husain and I. Diwan, eds., *Dealing With the Debt Crisis*. Washington, D.C.: World Bank.
- ILO. 1987. "Background Document for the High-Level Meeting on Employment and Structural Adjustment." Geneva.
- _____. 1990a. "Colombia in the Eighties: Growth with Equity." Programa Regional del Empleo para America Latina y el Caribe. World Employment Programme. Paper prepared for UNDP. Mimeographed.
- _____. 1990b. *Employment and Equity; the Challenge of the 1990s*. Programa Regional del Empleo para America Latina y el Caribe. Santiago: ILO World Employment Programme.
- Ines de Neufville, Judith. 1986. "Human Rights Reporting as a Policy Tool: an Examination of the State Department Country Reports." *Human Rights Quarterly* 84: 681-99.
- Isaac, Thomas. 1991. "Kerala's Verdict." *Frontline* 8(4): 34-38.
- Jimenez, Emmanuel. 1987. *Pricing Policy in the Social Sectors: Cost Recovery for Education and Health in Developing Countries*. Baltimore: Johns Hopkins University Press.
- _____. 1990. "Social Sector Pricing Policy Revisited: A Survey of Some Recent Controversies." Proceedings of the World Bank Annual Conference on Development Economics 1989. Supplement to the *World Bank Economic Review* and *World Bank Research Observer*. Washington, D.C.: World Bank.
- Jimenez, Emmanuel, Marlaine Lockheed and Vicente Paqueo. 1988. "The Relative Efficiency of Public Schools in Developing Countries." PPR Working Paper 72. Washington, D.C.: World Bank.
- Jimenez, Emmanuel, Marlaine Lockheed and Nongnuch Wattanawaha. 1988. "The Relative Efficiency of Private and Public Schools: The Case of Thailand." *World Bank Economic Review* 2(2): 139-64.
- Jimenez, Emmanuel, Vicente Paqueo and Ma. Lourdes de Vera. 1988a. "Student Performance and School Costs in the Philippines High Schools." PPR Working Paper 61. Washington, D.C.: World Bank.
- _____. 1988b. "Does Local Financing Make Primary Schools More Efficient? The Philippine Case." PPR Working Paper 69. Washington, D.C.: World Bank.
- Kanbur, Ravi. 1988. "The Principles of Targeting." Paper presented at the World Bank symposium on poverty and adjustment, April 11-13. Warwick: Development Economics Research Center.
- Kanda, Chiyo. 1990. "Trends in Bilateral Official Resource Flows to the Social Sectors, 1985-88." Paper prepared for UNICEF. New York.
- Kanji, Najmi. 1989. "Charging for Drugs in Africa: UNICEF's Bamako Initiative." *Health Policy and Planning* 42: 110-20.
- Karim, Rezaul, Manjur Majid and F.J. Levison. 1979. "Targeting a Consumer Food Subsidy Programme: the Bangladesh Sorghum Experiment." Dacca: USAID. Mimeographed.
- _____. 1980. "The Bangladesh Sorghum Experiment." *Food Policy* 5(February): 61-63.
- Killick, Tony. 1989. *A Reaction Too Far: Economic Theory and the Role of the State in Developing Countries*. ODI Development Policy Studies. London: Overseas Development Institute.
- Knight, John. 1991. "Parastatals in Africa." In Stewart, Lall and Wangwe (1991).
- Kumar, Gopalakrishna, and Frances Stewart. 1987. "Tackling Malnutrition: What Can Targeted Nutrition Interventions Achieve?" Working Paper 225. Center for Development Studies. Trivandrum.
- Larson, Ann. 1990. "The Social Epidemiology of Africa's AIDS Epidemic." *African Affairs* 89(354): 5-25.
- Latin American and Caribbean Commission on Development and Environment. 1990. *Our Own Agenda*. Inter-American Development Bank and United Nations Development Programme. Washington, D.C. and New York.
- Lawyers Committee for Human Rights. 1990. *Critique: Lawyers Committee for Human Rights Review of the Department of States' Country Reports on Human Rights Practices in 1989*. New York.
- Lessard, Donald, and John Williamson, eds. 1987a. *Capital Flight and Third World Debt*. Washington, D.C.: Institute of International Economics.
- _____. 1987b. "The Problem and Policy Responses." In Lessard and Williamson (1987a).
- Lewin, Keith, with Dieter Berstecher. 1989. "The Costs of Recovery: Are User Fees the Answer?" *IDS Bulletin* 20(1): 59-71.
- Lewis, John P., and others. 1988. *Strengthening the Poor: What Have We Learned*. U.S. Third World Policy Perspectives 10. Overseas Development Council. New Brunswick: Transaction Books.
- Lipton, Michael, and John Toye. 1990. *Does Aid Work in India?* London: Routledge.
- Lloyd, Cynthia B., and Anastatia Brandon. 1990. "Women's Role in the Maintenance of Families, Poverty and Inequality in Ghana." Mimeographed.

- Lopez, George A., and Michael Stohl. 1990. "Problems of Concept and Measurement in the Study of Human Rights." In Claude and Jabine (1990).
- Lowe, Marcia D. 1990. "Alternatives to the Automobile: Transport for Livable Cities." Worldwatch Paper 98. Washington, D.C.: Worldwatch Institute.
- MacAndrews, Collin, ed. 1986. *Central Government and Local Development in Indonesia*. Oxford: Oxford University Press.
- Mandl, Pierre-E. 1988. "Annotated Bibliography on Community Financing for Local Health Services." UNICEF Staff Working Paper 3. New York: UNICEF.
- Mateus, Abel. 1983. "Targeting Food Subsidies to the Needy: The Use of Cost-Benefit Analysis and Institutional Design." World Bank Staff Working Paper 617. Washington, D.C.: World Bank.
- Meerman, Jacob. 1979. *Public Expenditure in Malaysia: Who Benefits and Why*. World Bank Research Publication. New York: Oxford University Press.
- Mesa-Lago, Carmelo. 1983. "Social Security and Extreme Poverty in Latin America." *Journal of Development Studies* 12: 83-110.
- Mosley, Paul. 1990. "Increased Aid Flows and Human Resource Development in Africa." UNICEF International Child Development Center. Innocenti Occasional Paper 5. Florence: UNICEF.
- Nelson, Joan M. 1984. "The Political Economy of Stabilization: Commitment, Capacity and Public Response." *World Development* 12(10): 983-1006.
- _____. 1989. "The Politics of Pro-Poor Adjustment." In Nelson and others (1989).
- Nelson, Joan, and others. 1989. *Fragile Coalitions: the Politics of Economic Adjustment*. U.S. Third World Policy Perspectives 12. Overseas Development Council. New Brunswick: Transaction Books.
- Newbery, David, and Nicholas Stern, eds. 1987. *The Theory of Taxation for Developing Countries*. New York: Oxford University Press.
- Nozick, Robert. 1968. *Anarchy, State and Utopia*. New York: Basic Books.
- Organisation for Economic Co-operation and Development. 1986. "Living Conditions in OECD Countries: A Compendium of Social Indicators." OECD Social Policy Studies 3. Paris: OECD.
- _____. 1990a. "Health Care Systems in Transition: the Search for Efficiency." OECD Social Policy Studies 7. Paris: OECD.
- _____. 1990b. "Lone-parent Families: the Economic Challenge." In OECD Social Policy Studies 8. Paris: OECD.
- _____. 1990c. "Development Co-operation; Efforts and Policies of the Members of the Development Assistance Committee DAC." Report by Joseph C. Wheeler, Chairman of the DAC. Paris: OECD.
- Over, Mead, and others. 1988. *The Direct and Indirect Cost of HIV Infection in Developing Countries: The Cases of Zaire and Tanzania*. Paper presented at IVth International AIDS Conference. Stockholm.
- Pastor, Manuel. 1990. "Capital Flight from Latin America." *World Development* 18(1): 1-18.
- Patel, Mahesh S. 1989. *Eliminating Social Distance Between North and South: Cost Effective Goals for the 1990s*. UNICEF Staff Working Paper 5. New York: UNICEF.
- Paul, Samuel. 1983. *Managing Development Programs: The Lessons of Success*. Boulder: Westview Press.
- Pfeffermann, Guy P., and Charles C. Griffin. 1989. *Nutrition and Health Programmes in Latin America: Targeting Social Expenditures*. A World Bank Publication in Association with the International Center for Economic Growth. Washington, D.C. and Panama City.
- Pinstrup-Andersen, Per. 1985. "Food Prices and the Poor in Developing Countries." *European Review of Agricultural Economics* 12: 69-81.
- _____. 1989. *Approaches to Targeting Food, Nutrition and Health Programmes; Assessment of Country Experience*. Document prepared for the World Food Council's Fifteenth Ministerial Session. Cairo.
- _____, ed. 1988. *Food Subsidies in Developing Countries: Costs, Benefits and Policy Options*. Baltimore: Johns Hopkins University Press.
- Postel, Sandra. 1990. "Toward a New Economics." *World Watch* 3(5): 20-28. Washington, D.C.: Worldwatch Institute.
- Pradhan, Pranchanda. 1980. *Local Institutions and People's Participation in Rural Public Works in Nepal*. New York Rural Development Committee. Ithaca: Cornell University.
- Pronk, Jan. 1990. "The Management of Interdependence." In UNDP (1990c).
- Psacharopoulos, George, and Maureen Woodhall. 1985. *Education for Development: an Analysis of Investment Choices*. New York: Oxford University Press for the World Bank.
- Renner, Michael. 1989. "National Security: The Economic and Environmental Dimensions." Worldwatch Paper 89. Washington, D.C.: Worldwatch Institute.
- _____. 1990. "Swords into Plowshares: Converting to a Peace Economy." Worldwatch Paper 96. Washington, D.C.: Worldwatch Institute.
- Rodriguez, Miguel A. 1987. "Consequences of Capital Flight for Latin American Debtor Countries." In Lessard and Williamson (1987a).
- Ron, Aviva, Brian Abel-Smith and Gionanni Tamburi. 1990. *Health Insurance in Developing Countries; the Social Security Approach*. Geneva: ILO.
- Rondenelli, Dennis A., and others. 1983. "Decentralization in Developing Countries: a Review of Recent Experience." World Bank Staff Working Paper 581. Washington, D.C.: World Bank.
- Salmen, Lawrence F. Undated. "Popular Participation and Development." Washington D.C.: World Bank. Mimeographed.
- _____. 1990. "Institutional Dimensions of Poverty Reduction." Policy, Research and External Affairs Working Paper 411. Washington, D.C.: World Bank.
- Sanders, Thomas G. 1983a. "Promoting Social Development: Private Sector Initiatives in Cali, Colombia." *University Field Staff International Inc. Reports*. 21 South America. Hanover, New Hampshire: UFSI.

- _____. 1983b. "Micro-business: Innovative Private Sector Development in Colombia." *University Field Staff International Inc. Reports*. 22 South America. Hanover, New Hampshire: UFSI.
- Sanyal, Bishwapriya. 1990. "Sailing Against the Wind: A Treatise in Support of Poor Countries' Governments." Cambridge, Massachusetts: Massachusetts Institute of Technology. Typescript.
- Schieffelbein, Ernesto. 1987. "Education Costs and Financing Policies in Latin America." Discussion Paper. Education and Training Series 60. Washington, D.C.: World Bank.
- Scitovsky, Anne A., and Mead Over. 1988. "AIDS: Costs of Care in the Developed and the Developing World." *AIDS* 2(1): 571-81.
- Sen, Amartya K. 1982. "How is India Doing?" *New York Review of Books* 29(20): 41-45.
- _____. 1990. "More than 100 Million Women are Missing." *New York Review of Books* 37(20): 61-66.
- Sivard, Ruth L. 1989. *World Military and Social Expenditures*. Washington, D.C.: World Priorities.
- The South Commission. 1990. *The Challenge of the South; the Report of the South Commission*. New York: Oxford University Press.
- Statistical Office of the European Community. 1990. "Inequality and Poverty in Europe." *Rapid Reports: Population and Social Conditions* 7. Luxembourg: EUROSTAT.
- Stewart, Frances. 1988. "Adjustment with a Human Face: the Role of Food Aid." *Food Policy* 13(1): 18-26.
- Stewart, Frances, Sanjaya Lall and S. Wangwe. 1991. *Alternative Development Strategies in Sub-Saharan Africa*. London: MacMillan.
- Stockholm International Peace Research Institute. 1990. *World Armaments and Disarmament*. SIPRI Yearbook 1990. Oxford: Oxford University Press.
- Studies in Comparative International Development*. 1990. Special Issue on Measuring Democracy. 251(Spring).
- Summers, Robert, and Alan Heston. 1988. "A New Set of International Comparisons of Real Product and Prices: Estimates for 130 Countries, 1950-1985." *The Review of Income and Wealth* 34(1): 1-26.
- _____. Forthcoming 1991. "Panworld Table Mark 5: An Expanded Set of International Comparisons, 1950-88." *Quarterly Journal of Economics* (May).
- Sutton, Francis X., ed. 1990. *A World to Make, Development in Perspective*. New Brunswick: Transaction Publishers.
- _____. 1986. "Symposium: Statistical Issues in the Field of Human Rights." *Human Rights Quarterly* 84.
- Tan, Jee-Peng, and Alain Mingat. 1989. "Educational Development in Asia: A Comparative Study Focusing on Cost and Financing Issues." Asia Regional Series Internal Discussion Paper. Washington, D.C.: World Bank.
- Taylor, Charles L., and David A. Jodice. 1983. *World Handbook of Economic and Social Indicators*. Volume II. 3rd edition. New Haven: Yale University Press.
- Taylor, Lance, Susan Horton and Daniel Raff. 1980. *Food Subsidy Programs: A Survey*. Report prepared for the Ford Foundation. Cambridge, Massachusetts: Massachusetts Institute of Technology.
- Temporary Working Group on Financial Resources Generation. 1990. *Financing Water Supply and Sanitation Services*. Conference Paper 1. Global Consultation on Safe Water and Sanitation. New York: UNDP.
- Theobald, Robin. 1990. *Corruption, Development and Underdevelopment*. London: MacMillan.
- Tilakaratna, S. 1987. *The Animator in Participatory Rural Development; Concept and Practice*. World Employment Programme Technical Co-operation Report. Geneva: ILO.
- Topping, John. 1990. "Likely Impact of Global Warming on Developing Countries." Paper prepared for the Roundtable on Global Development Challenges. Antalia. 7-9 September 1990. UNDP Development Studies Programme. New York. Mimeographed.
- UNDP. 1990a. *Human Development Report 1990*. New York: Oxford University Press.
- _____. 1990b. "Background Paper." Global Consultations on Safe Water and Sanitation for the 1990s in New Delhi, September 1990.
- _____. 1990c. "Development Challenges for the 1990s." An Anniversary Issue to Commemorate 40 Years of Multilateral Technical Co-operation for Development in the United Nations System. New York.
- _____. 1990d. "Human Development Country Studies in Selected Countries." New York. Mimeographed.
- _____. 1991. "Antalia Statement on Change: Threat or Opportunity for Human Progress?" UNDP Development Studies Programme. Round Table on Global Development Challenges, 7-9 September 1990. New York.
- UNDP and World Bank. 1990. *Water and Sanitation Program; Annual Report 1989-90*. Washington, D.C.
- UNICEF. 1989. *The State of the World's Children, 1990*. New York: Oxford University Press.
- _____. 1990a. *The State of the World's Children, 1991*. New York: Oxford University Press.
- _____. 1990b. *Children and Development in the 1990s—a UNICEF Sourcebook*. On the occasion of the World Summit for Children. New York.
- United Nations. 1948. "Universal Declaration of Human Rights." GA Res 217 III 10 December.
- _____. 1966a. "The International Covenant on Economic, Social and Cultural Rights."
- _____. 1966b. "The International Covenant on Civil and Political Rights."
- _____. 1989. "1989 World Survey on the Role of Women in Development." United Nations Office at Vienna, Centre for Social Development and Humanitarian Affairs. New York. E. 89, IV, 2.
- _____. 1990a. "Population and Human Rights." Proceedings of the Expert Group Meeting on Population and Human Rights. Geneva, 3-6 April 1989. ST/ESA/SER.R/107.
- _____. 1990b. "High Commissioner for Refugees' Overview of UNHCR Activities." Report for 1989-90. Geneva. A/AC.96/753.
- _____. 1990c. "Report of the Committee on the Functioning and Programme of Work of the United Na-

- tions in Crime Prevention and Criminal Justice." Economic and Social Council Committee on Crime Prevention and Control. Eleventh Session, 5-16 February 1990. New York. E/AC.57/19890/L.32.
- _____. 1990d. "Third United Nations Survey of Crime Trends, Operations of Criminal Justice Systems and Crime Prevention Strategies." Report prepared by the Secretariat. Eighth United Nations Congress on the Prevention of Crime and the Treatment of Offenders. Havana, 27 August to 7 September 1990. A/CONF.144/6.
- _____. 1990e. "Justice in the Context of Development: Realities and Perspectives of International Co-operation. Practical Measures Against Corruption." Report prepared by the Secretariat. Eighth United Nations Congress on the Prevention of Crime and the Treatment of Offenders. New York. A/CONF.144/8.
- _____. 1990f. "Effective National and International Action Against: a) Organized Crime; b) Terrorist Criminal Activities." Working paper prepared by the Secretariat. Eighth United Nations Congress on the Prevention of Crime and the Treatment of Offenders. New York. A/CONF.144/15.
- _____. 1990g. "Social and Economic Policy Issues in Female Leadership and Vulnerability." Division for the Advancement of Women. Vienna. EGM/VB/1990/WP.1.
- _____. 1990h. "Report of the Secretary-General on the Work of the Organization." New York. A/45/1.
- _____. 1990i. "Overall Socio-economic Perspective of the World Economy to the Year 2000." Department of International Economic and Social Affairs. New York. E.90.II.C.2.
- _____. 1990j. "Developing Human Resources for Development." Report of the Secretary-General. New York. A/45/451.
- _____. 1990k. "World Economic Survey 1990: Current Trends and Policies in the World Economy." Department of International Economic and Social Affairs. New York. E.90.II.C.1.
- _____. 1990l. "Net Transfer of Resources from Developing Countries." Report of the Secretary-General. New York. A/45/487.
- _____. 1990m. "Ceremony for the Presentation of the Declaration and Plan of Action Adopted by World Leaders at the World Summit for Children." Note by the Secretary-General. New York. A/45/625.
- _____. Forthcoming. "Women and Social Trends 1970-1990." Department of International Economic and Social Affairs, Statistical Office and United Nations Office at Vienna, Centre for Social Development and Humanitarian Affairs. New York.
- United Nations Conference on Trade and Development. 1990. "The Least Developed Countries 1989." Report prepared by the UNCTAD Secretariat. Geneva. E.90.II.D.4.
- United Nations Economic Commission for Africa. 1990. *African Charter for Popular Participation in Development and Participation*. International Conference on Popular Participation in the Recovery and Development Process in Africa. Arusha, 12-16 February 1990. E/ECA/CM.16/11. Addis Ababa: ECA.
- _____. 1991. "Human Development in Africa." Addis Ababa: ECA. Mimeographed.
- United Nations Economic Commission for Latin America and the Caribbean. 1990. *Balance Preliminar de la Economia de America Latina y el Caribe*. Santiago: ECLAC.
- United Nations Industrial Development Organization. 1990. "Global Report 1990/91." Vienna. ID/371.
- United States Department of Commerce. 1990. "Money, Income and Poverty Status in the United States, 1989." Advance report *Current Population Reports: Consumer Income*. Series P-60 no 168. Washington, D.C.: Bureau of the Census.
- United States Department of State. 1990. *Country Report on Human Rights Practices for 1989*. Washington, D.C.
- Uphoff, Norman. 1985. *Fitting Projects to People*. In Cernea (1985).
- _____. 1986. *Local Institutional Development: an Analytical Sourcebook*. West Hartford, Connecticut: Kumarian Press.
- _____. 1988. *Assisted Self-reliance: Working With, Rather than For the Poor*. In Lewis and others (1988).
- Urrutia, Miguel, Shinichi Ichimura and Setsuko Yukawa, eds. 1989. *The Political Economy of Fiscal Policy*. Tokyo: United Nations University.
- van de Walle, Nicolas. 1989. "Privatization in Developing Countries: A Review of the Issues." *World Development* 1(5): 601-15.
- Vilby, Knud. 1990. "Primary Flows from the Nordic to the South." Paper Commissioned by UNICEF. Copenhagen: Center for Alternative Social Analysis.
- Vogel, Ronald J. 1988. *Cost Recovery in the Health Care Sector; Selected Country Studies in West Africa*. World Bank Technical Paper 82. Washington, D.C.: World Bank.
- _____. 1990a. "Trends in Health Expenditures and Revenue Sources in Sub-Saharan Africa." Paper prepared in conjunction with the World Bank Sub-Saharan Africa Health Policy Study. Washington, D.C.: World Bank.
- _____. 1990b. "The Costs of Health for All: an Economic Analysis." Paper prepared for UNDP. New York. Mimeographed.
- _____. Forthcoming. "On the Allocation of Revenues from User Fees: The Case of Health Budgeting in Sub-Saharan Africa." *Public Budgeting and Financial Management*.
- Waddington, C.J., and K.A. Enyimayew. 1989. "A Price to Pay: the Impact of User Charges in Ashanti-Akim District, Ghana." *International Journal of Health Planning and Management* 4: 17-47.
- Walsh, Julia A. 1988. *Establishing Health Priorities in the Developing World*. Study prepared for UNDP. Boston: Adams Publishing Group.
- Waterbury, John. 1989. "The Political Management of Adjustment and Reform." In Nelson and others (1989).
- WCEFA. 1990. *Meeting Basic Learning Needs: Strategies for the 1990s*. Background Document for World Conference on Education for All. New York.

- Whitehead, Laurence. 1990. "Political Explanations of Macroeconomic Management: A Survey." *World Development* 18(8): 1133-46.
- WHO. 1989. "Tropical Diseases; Progress in International Research, 1987-88." Ninth Programme Report of the UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases. Geneva.
- _____. 1990a. *Tropical Diseases 1990*. UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases. WHO Division of Tropical Diseases. Geneva.
- _____. 1990b. *Update: AIDS Cases Reported to Surveillance, Forecasting and Impact Assessment Unit SFI*. Global Programme on AIDS. Geneva.
- Williamson, J. 1990. "The Debt Crisis at the Turn of the Decade." *IDS Bulletin* 21(2): 4-6.
- Winkler, Donald R. 1989. "Decentralization in Education: an Economic Perspective." PPR Working Paper 143. Population and Human Resources Department. Washington, D.C.: World Bank.
- World Bank. 1986a. *Poverty and Hunger: Issues and Options for Food Security in Developing Countries*. A World Bank Policy Study. Washington, D.C.
- _____. 1986b. *Financing Education in Developing Countries: An Exploration of Policy Options*. Washington, D.C.
- _____. 1987a. *Financing Health Services in Developing Countries: An Agenda for Reform*. A World Bank Policy Study. Washington, D.C.
- _____. 1988a. *Education Policies for Sub-Saharan Africa: Adjustment, Revitalization, and Expansion*. A World Bank Policy Study. Washington, D.C.
- _____. 1988b. *Argentina: Social Sectors in Crisis*. A World Bank Country Study. Washington, D.C.
- _____. 1989. *Sub-Saharan Africa: From Crisis to Sustainable Growth*. A Long-term Perspective Study. Washington, D.C.
- _____. 1990a. *World Development Report 1990*. New York: Oxford University Press.
- _____. 1990b. "Indonesia Poverty Assessment and Strategy Report." Asia Regional Office, Country Department V. Washington, D.C.
- _____. 1990c. "China: Long-Term Issues and Options in the Health Transition." Volume I. Asia Regional Office, Country Department III. Washington, D.C.
- _____. 1990d. *Primary Education*. A World Bank Policy Paper. Washington, D.C.
- World Resources Institute. 1990. *World Resources 1990-91*. In collaboration with the United Nations Environment Programme and the United Nations Development Programme. New York: Oxford University Press.
- Wulf, Herbert. 1990. "The Peace Dividend." Study prepared for UNDP. New York. Mimeographed.
- Yoder, Richard A. 1989. "Are People Willing and Able to Pay for Health Services?" *Social Science and Medicine* 29(1): 35-42.
- Yudelman, Sally W. 1987. "The Integration of Women Into Development Projects." *World Development* 15 (Supplement, Autumn): 179-87.

Selected definitions

Births attended The percentage of births attended by physicians, nurses, midwives, trained primary health care workers or trained traditional birth attendants.

Budget surplus/deficit Current and capital revenue and grants received, less total expenditure and lending, minus repayments.

Calorie supply See *Daily calorie supply*.

Child malnutrition See *Underweight*.

Child mortality See *Under-five mortality*.

Contraceptive prevalence rate The percentage of married women of childbearing age who are using, or whose husbands are using, any form of contraception: that is, modern or traditional methods.

Current account balance The difference between (a) exports of goods and services (factor and non-factor) as well as inflows of unrequited private transfers but before official transfers and (b) imports of goods and services as well as all unrequited transfers to the rest of the world.

Daily calorie requirement per capita The average number of calories needed to sustain a person at normal levels of activity and health, taking into account the distribution by age, sex, body weight and environmental temperature.

Daily calorie supply per capita The calorie equivalent of the net food supplies in a country, divided by the population, per day.

Death rate (crude) The annual number of deaths per 1,000 population.

Debt service The sum of repayments of principal (amortization) and payments of interest made in foreign currencies, goods or services on external public, publicly guaranteed and private non-guaranteed debt.

Dependency ratio The ratio of the population defined as dependent, under 15 and over 64 years, to the working-age population, aged 15-64.

Direct tax Taxes levied on the actual or presumptive net income of individuals, on the profits of enterprises and on capital gains, whether realized on land sales, securities or other assets.

Disability days Average number of days in a year in which usual activities had to be

restricted by illness or injury.

Domestic investment (gross) Outlays in addition to the fixed assets of the economy plus net changes in the level of inventories.

Domestic savings (gross) The gross domestic product less government and private consumption.

Drop-out The proportion of the children entering the first grade of primary school who do not successfully complete that level in due course.

Earnings per employee Earnings in constant prices derived by deflating nominal earnings per employee by the country's consumer price index.

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 homeworkers.

Enrolment ratio (gross and net) The gross enrolment ratio is the number enrolled in a level of education, whether or not they belong in the relevant age group for that level, expressed as a percentage of the population in the relevant age group for that level. The net enrolment ratio is the number enrolled in a level of education who belong in the relevant age group, expressed as a percentage of the population in that age group.

Expenditures See *Government expenditures*.

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 import dependency ratio The ratio of food imports to the food available for internal distribution: that is, the sum of food production, plus food imports, minus food exports.

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 Population under 15 divided by one-third of the population age 15 to 59.

Gigajoule See *Joule*.

Gini coefficient A measure that shows how close a given distribution of income is to absolute equality or inequality. Named for Corrado Gini, the Gini coefficient is a ratio of the area between the 45° line and the Lorenz curve and the area of the entire triangle. As the coefficient approaches zero, the distribution of income approaches absolute equality. Conversely, as the coefficient approaches one, the distribution of income approaches absolute inequality.

Government expenditures Expenditures by all central government offices, departments, establishments and other bodies that are agencies or instruments of the central authority of a country. It includes both current and capital or developmental expenditures but excludes provincial, local and private expenditures.

Greenhouse index Net emissions of three major greenhouse gases (carbon dioxide, methane and chlorofluorocarbons), weighting each gas according to its heat-trapping quality, in carbon dioxide equivalents and expressed in metric tons of carbon per capita.

Gross domestic product (GDP) The total for final use of output of goods and services produced by an economy, by both residents

and non-residents, regardless of the allocation to domestic and foreign claims.

Gross national product (GNP) The total domestic and foreign value added claimed by residents, calculated without making deductions for depreciation. It 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.

GNP per capita and growth rates The gross national product divided by the population. Annual GNPs per capita are expressed in current US dollars. GNP per capita growth rates are annual average growth rates that have been computed by fitting trend lines to the logarithmic values of GNP per capita at constant market prices for each year of the time period.

Gross enrolment ratio See *Enrolment ratio*.

Habitable room See *Persons per habitable room*.

Health expenditures Expenditures on hospitals, health centres and clinics, health insurance schemes and family planning.

Health services access The percentage of the population that can reach appropriate local health services on foot or by the local means of transport in no more than one hour.

Immunized The average of the vaccination coverages of children under one year of age for the four antigens used in the Universal Child Immunization Programme (UCI).

Income share The income both in cash and kind accruing to percentile groups of households ranked by total household income.

Infant mortality rate The annual number of deaths of infants under one year of age per 1,000 live births. More specifically, the probability of dying between birth and exactly one year of age.

Inflation rate The average annual rate of inflation measured by the growth of the GDP implicit deflator for each of the periods shown.

Internal renewable water resources See *Water sources*.

International reserves (gross) Holdings of monetary gold, special drawing rights (SDRs), the reserve positions of members in the IMF, and holdings of foreign exchange under the control of monetary authorities expressed in terms of the number of months of imports of goods and services these could pay for at the

current level of imports.

Joule A basic unit of energy in the metric system: a megajoule is a million joules, and a gigajoule is a billion joules.

Labour force The economically active population, including the armed forces and the unemployed, but excluding homemakers and other unpaid caregivers.

Least developed countries A group of developing countries established by the United Nations General Assembly. Most of these countries suffer from one or more of the following constraints: a GNP per capita of around \$300 or less, land-locked, remote insularity, desertification and exposure to natural disasters.

Life expectancy at birth The number of years a newborn infant would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life.

Literacy rate (adult) The percentage of persons aged 15 and over who can, with understanding, both read and write a short simple statement on everyday life.

Low birth weight The percentage of babies born weighing less than 2,500 grammes.

Malnutrition See *Underweight, Wasting and Stunting*.

Maternal mortality rate The annual number of deaths of women from pregnancy-related causes per 100,000 live births.

Mean years of schooling Average number of years of schooling received per person aged 25 and over.

Megajoule See *Joule*.

Military expenditures Expenditures, whether by defence or other departments, on the maintenance of military forces, including the purchase of military supplies and equipment, construction, recruiting, training and military aid programmes.

Net enrolment ratio See *Enrolment ratio*.

Official development assistance (ODA) The net disbursements of loans and grants made on concessional financial terms by official agencies of the members of the Development Assistance Committee (DAC), the Organisation for Economic Co-operation and Development (OECD), the Organization of Petroleum Exporting Countries (OPEC) and so on, to promote economic development and welfare including technical cooperation and assistance.

ODA for social investment Official development assistance for the combined areas

of health, education, social services, rural and urban development and water and sanitation.

Persons per habitable room The number of persons in housing units divided by the number of habitable rooms in those housing units. A habitable room is a space in a housing unit, or other living quarters enclosed by walls reaching from the floor to the ceiling or roof covering, at least to a height of two metres, of a size large enough to hold a bed for an adult.

Population density The total number of inhabitants divided by the surface area.

Population growth rate The annual growth rate of the population calculated from mid-year.

Poverty line That income level below which a minimum nutritionally adequate diet plus essential non-food requirements are not affordable.

Primary education Education at the first level (International Standard Classification of Education [ISCED] level 1), the main function of which is to provide the basic elements of education such as elementary schools and primary schools.

Purchasing power parities (PPP) See *Real GDP per capita*.

Real GDP per capita (purchasing power parities [PPP]) The use of official exchange rates to convert the national currency figures to US dollars does not attempt to measure the relative domestic purchasing powers of currencies. The United Nations International Comparison Project (ICP) has developed measures of real GDP on an internationally comparable scale using purchasing power parities (PPP) instead of exchange rates as conversion factors, and expressed in international dollars.

Real per capita expenditures The expenditures for each item in each country expressed in relation to those in the United States, based on the national currency total for each item converted to international dollars by the purchasing power for that item. This comparison of quantities for each item is based on the common set of international prices applied across all the countries that is used in the International Price Comparison Project. (See *Real GDP per capita*.) These expenditures are then expressed in relation to the corresponding average expenditures of the industrial countries, which are indexed to equal 100.

Rural population The percentage of the population living in rural areas as defined according to the national definition used in the most recent population census.

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 waters, or untreated but uncontaminated water such as that from springs, sanitary wells and protected boreholes.

Sanitation access The percentage of the population with access to sanitary means of excreta and waste disposal, including outdoor latrines and composting.

Scientists Persons with scientific or technological training—usually completion of third-level education in any field of science—who are engaged in professional work on research and development activities, including administrators and directors of such activities.

Science graduates Tertiary education graduates in the natural and applied sciences.

Secondary education Education at the second level (ISCED levels 2 and 3), based upon at least four years' previous instruction at the first level, and providing general or specialized instruction or both such as middle schools, secondary schools, high schools, teacher-training schools at this level and schools of a vocational or technical nature.

Secondary technical education Education provided in those second-level schools that aim at preparing the pupils directly for a trade or occupation other than teaching.

Social security benefits Compensation for loss of income for the sick and temporarily disabled; payments to the elderly, the permanently disabled 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 the figures are expressed in relation to the corresponding average figures for all the industrial countries, which are indexed to equal 100.

Stationary population A population in

which the birth rate is constant and equal to the death rate, the age structure is constant and the growth rate is zero.

Stunting The percentage of children, between 24 and 59 months, below minus two standard deviations from the median height-for-age of the reference population.

Technicians 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.

Terms of trade The ratio of a country's index of average export prices to its average import price index.

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.

Trade dependency Exports plus imports as a percentage of GDP.

Under-five mortality rate The annual number of deaths of children under five years of age per 1,000 live births. 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 the age of five, below minus two standard deviations from the median 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, are available for paid employment or self-employment and have taken specific steps to seek paid employment or self-employment.

Urban population The percentage of the population living in urban areas as defined according to the national definition used in the most recent population census.

Wasting The percentage of children, between 12 and 23 months, below minus two standard deviations from the median weight-for-height of the reference population.

Water access See *Safe water*.

Water sources, internal renewable The average annual flow of rivers and aquifers generated from endogenous precipitation.

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>	
Albania	Belize	Afghanistan	Swaziland
Antigua and Barbuda	Botswana	Algeria	Tanzania, U. Rep. of
Argentina	Brazil	Angola	Togo
Australia	China	Bangladesh	Uganda
Austria	Colombia	Benin	Vanuatu
Bahamas	Cuba	Bhutan	Viet Nam
Bahrain	Dominican Rep.	Bolivia	Yemen
Barbados	Ecuador	Burkina Faso	Zaire
Belgium	El Salvador	Burundi	Zambia
Brunei Darussalam	Fiji	Cambodia	Zimbabwe
Bulgaria	Gabon	Cameroon	
Canada	Grenada	Cape Verde	
Chile	Guyana	Central African Rep.	
Costa Rica	Iran, Islamic Rep. of	Chad	
Cyprus	Iraq	Comoros	
Czechoslovakia	Jamaica	Congo	
Denmark	Jordan	Côte d'Ivoire	
Dominica	Korea, Dem. Rep. of	Djibouti	
Finland	Lebanon	Egypt	
France	Libyan Arab Jamahiriya	Equatorial Guinea	
Germany	Maldives	Ethiopia	
Greece	Mongolia	Gambia	
Hong Kong	Nicaragua	Ghana	
Hungary	Oman	Guatemala	
Iceland	Panama	Guinea	
Ireland	Paraguay	Guinea-Bissau	
Israel	Peru	Haiti	
Italy	Philippines	Honduras	
Japan	Romania	India	
Korea, Rep. of	Saint Kitts and Nevis	Indonesia	
Kuwait	Saint Lucia	Kenya	
Luxembourg	Saint Vincent	Lao People's Democratic Republic	
Malaysia	Samoa	Lesotho	
Malta	Saudi Arabia	Liberia	
Mauritius	Seychelles	Madagascar	
Mexico	Solomon Islands	Malawi	
Netherlands	South Africa	Mali	
New Zealand	Sri Lanka	Mauritania	
Norway	Suriname	Morocco	
Poland	Syrian Arab Rep.	Mozambique	
Portugal	Thailand	Myanmar	
Qatar	Tunisia	Namibia	
Singapore	Turkey	Nepal	
Spain	United Arab Emirates	Niger	
Sweden		Nigeria	
Switzerland		Pakistan	
Trinidad and Tobago		Papua New Guinea	
United Kingdom		Rwanda	
Uruguay		Sao Tome and Principe	
USA		Senegal	
USSR		Sierra Leone	
Venezuela		Somalia	
Yugoslavia		Sudan	

Countries in the income aggregates

<i>High-income</i> (GNP per capita \$6,000 and above)	<i>Middle-income</i> (GNP per capita \$500 to \$5,999)	<i>Low-income</i> (GNP per capita below \$500)
Antigua and Barbuda	Albania	Lebanon
Australia	Algeria	Libyan Arab Jamahiriya
Austria	Angola	Malaysia
Bahamas	Argentina	Mauritius
Bahrain	Belize	Mexico
Barbados	Bolivia	Mongolia
Belgium	Botswana	Morocco
Brunei Darussalam	Brazil	Namibia
Canada	Bulgaria	Nicaragua
Cyprus	Cameroon	Oman
Denmark	Cape Verde	Panama
Finland	Chile	Papua New Guinea
France	Colombia	Paraguay
Germany	Congo	Peru
Hong Kong	Costa Rica	Philippines
Iceland	Côte d'Ivoire	Poland
Ireland	Cuba	Portugal
Israel	Czechoslovakia	Romania
Italy	Djibouti	Saint Kitts and Nevis
Japan	Dominica	Saint Lucia
Kuwait	Dominican Rep.	Saint Vincent
Luxembourg	Ecuador	Samoa
Malta	Egypt	Senegal
Netherlands	El Salvador	South Africa
New Zealand	Fiji	Swaziland
Norway	Gabon	Syrian Arab Rep.
Qatar	Greece	Thailand
Saudi Arabia	Grenada	Trinidad and Tobago
Seychelles	Guatemala	Tunisia
Singapore	Honduras	Turkey
Spain	Hungary	Uruguay
Suriname	Iran, Islamic Rep. of	USSR
Sweden	Iraq	Vanuatu
Switzerland	Jamaica	Venezuela
United Arab Emirates	Jordan	Yemen
United Kingdom	Korea, Dem. Rep. of	Yugoslavia
USA	Korea, Rep. of	Zimbabwe
		Afghanistan
		Bangladesh
		Benin
		Bhutan
		Burkina Faso
		Burundi
		Cambodia
		Central African Rep.
		Chad
		China
		Comoros
		Equatorial Guinea
		Ethiopia
		Gambia
		Ghana
		Guinea
		Guinea-Bissau
		Guyana
		Haiti
		India
		Indonesia
		Kenya
		Lao PDR
		Lesotho
		Liberia
		Madagascar
		Malawi
		Maldives
		Mali
		Mauritania
		Mozambique
		Myanmar
		Nepal
		Niger
		Nigeria
		Pakistan
		Rwanda
		Sao Tome and Principe
		Sierra Leone
		Solomon Islands
		Somalia
		Sri Lanka
		Sudan
		Tanzania, U. Rep. of
		Togo
		Uganda
		Viet Nam
		Zaire
		Zambia

Countries in the major world aggregates

<i>Least developed countries</i>	<i>All developing countries</i>	<i>Industrial countries</i>
Afghanistan	Afghanistan	Albania
Bangladesh	Algeria	Australia
Benin	Angola	Austria
Bhutan	Antigua and Barbuda	Belgium
Botswana	Argentina	Bulgaria
Burkina Faso	Bahamas	Canada
Burundi	Bahrain	Czechoslovakia
Cape Verde	Bangladesh	Denmark
Central African Rep.	Barbados	Finland
Chad	Belize	France
Comoros	Benin	Germany
Djibouti	Bhutan	Greece
Equatorial Guinea	Bolivia	Hungary
Ethiopia	Botswana	Iceland
Gambia	Brazil	Ireland
Guinea	Brunei Darussalam	Israel
Guinea-Bissau	Burkina Faso	Italy
Haiti	Burundi	Japan
Lao PDR	Cambodia	Luxembourg
Lesotho	Cameroon	Malta
Malawi	Cape Verde	Netherlands
Maldives	Central African Rep.	New Zealand
Mali	Chad	Norway
Mauritania	Chile	Poland
Mozambique	China	Portugal
Myanmar	Colombia	Romania
Nepal	Comoros	Spain
Niger	Congo	Sweden
Rwanda	Costa Rica	Switzerland
Samoa	Côte d'Ivoire	United Kingdom
Sao Tome and Principe	Cuba	USA
Sierra Leone	Cyprus	USSR
Somalia	Djibouti	Yugoslavia
Sudan	Dominica	
Tanzania, U. Rep. of	Dominican Rep.	
Togo	Ecuador	
Uganda	Egypt	
Vanuatu	El Salvador	
Yemen	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. Rep. of	
	Korea, Rep. of	
	Kuwait	
	Lao PDR	
	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	
	Sao Tome and Principe	
	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	

Countries in the developing aggregates

<i>Africa South of the Sahara</i>	<i>Arab States</i>	<i>East Asia, South-East Asia and Oceania</i>
Angola	Algeria	Brunei Darussalam
Benin	Bahrain	Cambodia
Botswana	Cyprus	China
Burkina Faso	Egypt	Fiji
Burundi	Iraq	Hong Kong
Cameroon	Jordan	Indonesia
Cape Verde	Kuwait	Korea, Dem. Rep. of
Central African Rep.	Lebanon	Korea, Rep. of
Chad	Libyan Arab Jamahiriya	Lao PDR
Comoros	Morocco	Malaysia
Congo	Oman	Mongolia
Côte d'Ivoire	Qatar	Myanmar
Djibouti	Saudi Arabia	Papua New Guinea
Equatorial Guinea	Sudan	Philippines
Ethiopia	Syrian Arab Rep.	Samoa
Gabon	Tunisia	Singapore
Gambia	United Arab Emirates	Solomon Islands
Ghana	Yemen	Thailand
Guinea		Vanuatu
Guinea-Bissau	<i>Latin America and the Caribbean</i>	Viet Nam
Kenya	Antigua and Barbuda	
Lesotho	Argentina	<i>South Asia</i>
Liberia	Bahamas	Afghanistan
Madagascar	Barbados	Bangladesh
Malawi	Belize	Bhutan
Mali	Bolivia	India
Mauritania	Brazil	Iran, Islamic Rep. of
Mauritius	Chile	Maldives
Mozambique	Colombia	Nepal
Namibia	Costa Rica	Pakistan
Niger	Cuba	Sri Lanka
Nigeria	Dominica	
Rwanda	Dominican Rep.	
Sao Tome and Principe	Ecuador	
Senegal	El Salvador	
Seychelles	Grenada	
Sierra Leona	Guatemala	
Somalia	Guyana	
South Africa	Haiti	
Swaziland	Honduras	
Tanzania, U. Rep. of	Jamaica	
Togo	Mexico	
Uganda	Nicaragua	
Zaire	Panama	
Zambia	Paraguay	
Zimbabwe	Peru	
	Saint Kitts and Nevis	
	Saint Lucia	
	Saint Vincent	
	Suriname	
	Trinidad and Tobago	
	Uruguay	
	Venezuela	

Countries in the industrial aggregates

OECD

Australia
Austria
Belgium
Canada
Denmark
Finland
France
Germany
Greece
Iceland
Ireland
Italy
Japan
Luxembourg
Netherlands
New Zealand
Norway
Portugal
Spain
Sweden
Switzerland
United Kingdom
USA

Eastern Europe and USSR

Albania
Bulgaria
Czechoslovakia
Hungary
Poland
Romania
USSR
Yugoslavia

Nordic Countries

Denmark
Finland
Iceland
Norway
Sweden

Southern Europe

Albania
Greece
Italy
Malta
Portugal
Spain
Yugoslavia

European Community

Belgium
Denmark
France
Germany
Greece
Ireland
Italy
Luxembourg
Netherlands
Portugal
Spain
United Kingdom

Non-European Countries

Australia
Canada
Israel
Japan
New Zealand
USA

North America

Canada
USA

Primary sources of data

Data for the topics in italics have been taken from more than one major source.

Food and Agriculture Organization of the United Nations (FAO)

Agricultural production. Arable land. Calorie supply. Cereal imports. *Deforestation*. Food imports. Food production. Fuelwood. Land area. Livestock.

Habitat

Persons per habitable room.

Institute for Resource Development

Breastfeeding. Child malnutrition.

International Centre for Urban Studies

City population density.

International Labour Organisation (ILO)

Employment. Labour force. Unemployment. Wages.

International Monetary Fund (IMF)

Budget surplus/deficit. Current account balance. Inflation. International reserves. *Military, health and education expenditures. State and local expenditures on social services.* Taxes. Workers' remittances.

Interparliamentary Union

Women in parliament.

Luxembourg Income Study Database (LIS)

Real GDP per capita poverty line.

Organisation for Economic Co-operation and Development (OECD)

Debt service. ODA, given and received. *ODA for social sectors, and a broad range of indicators for OECD countries.*

Statistical Office of the European Communities (EC)

A broad range of indicators for EC countries.

United Nations Centre for Social Development and Humanitarian Affairs

Divorces. Drug crimes. Homicides. Prisoners.

United Nations Children's Fund (UNICEF)

Breastfeeding. Child malnutrition. Immunization. Under five mortality.

United Nations Development Programme (UNDP)

Human Development Index (HDI). Mean years of schooling. Selected literacy estimates. Selected real GDP per capita estimates.

United Nations Economic Commission for Europe (ECE)

Deforestation, and a broad range of indicators for countries in the ECE.

United Nations Educational Scientific and Cultural Organization (UNESCO)

Book titles. Cinemas. Compulsory education. *Education expenditure.* Graduates. Library books. Literacy. Museums. Newspapers. Radios. Repeaters, school, college and university enrolment. School drop-out. Scientists and technicians. Teachers. Television.

United Nations Industrial Development Organization (UNIDO)

Earnings.

United Nations Population Division

Death rates. Dependency ratio. Fertility. *Infant and under-five mortality.* Life expectancy. *Population: total, urban and rural.* Population density.

United Nations Population Fund (UNFPA)

Contraceptive prevalence.

United Nations Statistical Office

Exports and imports. GDP. Housing. *Infant mortality.* Passenger cars. *Persons per habitable room.* *Real GDP per capita.* Real GDP per capita expenditures. Terms of trade. Trade dependency. *Total population.*

University of Pennsylvania

Real GDP per capita.

World Bank

Debt service and interest payments. Domestic investment. Domestic savings. GDP, GNP and *real GDP per capita.* Household income. *Military, health and education expenditures.* Population below poverty line. Social security benefits. *State and local expenditures on social services.* Stationary population.

World Fertility Survey

Breastfeeding.

World Food Programme (WFP)

Food aid.

World Health Organization (WHO)

Access to health services, safe water and sanitation. Alcohol. Attendance at birth. *Child malnutrition.* Doctors and nurses. *Immunization.* Low birthweight. Maternal mortality. Smoking.

World Priorities, Inc.

Armed forces. Arms exports. Arms Imports. *Military, health and education expenditures.*

World Resources Institute

Greenhouse index. Internal renewable water resource.