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World Development Report 1993

Investing in Health

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WORLD DEVELOPMENT REPORT 1993

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MEMORANDUM TO THE EXECUTIVE DIRECTORS

Subject: *World Development Report 1993*

World Development Report 1993, the sixteenth in this annual series, examines the interplay between human health, health policy, and economic development. The three most recent Reports--on the environment, on development strategies, and on poverty--have provided an overview of the goals and means of development. This year's Report on health, like next year's on infrastructure, examines in depth a single sector in which the impact of public finance and public policy is of particular importance.

Countries at all levels of income have achieved great advances in health. Although the likelihood that a child in a developing country will die before reaching age five remains an unacceptably high one in ten, today's level is less than half that of 1960. Declines in poverty have allowed households to increase consumption of the food, clean water, and shelter necessary for good health. Rising educational levels have meant that people are better able to apply new scientific knowledge to promote their own and their families' health. Health systems have met the demand for better health through an expanded supply of services providing increasingly potent interventions.

Yet in developing countries, and especially for the poor, there continues to be a heavy burden of disease--much of which can be prevented or inexpensively cured. If the under-five mortality rate in developing countries were reduced to the level of the OECD countries, 11 million fewer children would die each year. At the same time, increasing numbers of developing countries are beginning to face the problems of rising health system costs now experienced by OECD countries.

This Report advances a three-pronged approach to government policies for improving health in developing countries. The first is for government to foster an economic environment that enables households to improve their own health. Growth policies (including, where necessary, economic adjustment policies) that ensure income gains for the poor are essential. So, too, is expanded investment in education, particularly of females.

The second is to redirect government spending on health. Half of the $168 billion annual expenditure on health in developing countries is spent by governments. Too much goes to specialized care in tertiary facilities that provides little gain for the money spent. Too little goes to the low-cost, highly effective programs--such as control and treatment of infectious diseases and malnutrition--that would most help the poor. Redirecting about 40 percent of current government expenditures would finance public health programs and

essential clinical services that could reduce the burden of disease in developing countries by over 20 percent, the equivalent of averting 9 million infant deaths.

The third element of policy is for governments to facilitate greater private sector involvement in health. Government finance of inexpensive, cost-effective services for the poor would leave the coverage of a broad range of clinical services to private finance or to social insurance. Private finance will usually be mediated through insurance. Government regulation can strengthen private insurance markets by improving incentives for wide coverage and for cost control. Even for publicly financed clinical services, governments can encourage competition and private sector involvement in service supply, and governments can help improve the efficiency of the private sector through the generation and dissemination of key information. The combination of these will improve health outcomes and contain costs while enhancing consumer satisfaction.

Major health policy reforms are feasible, as experience in several developing countries has shown. The donor community can assist with financing the transitional costs of reform, especially in the low-income countries. This will translate into longer, healthier, and more productive lives for people around the world, and especially for the more than 1 billion poor.

The World Health Organization (WHO) has been a full partner with the World Bank at every step of the preparation of the Report. I would like to record my appreciation to the many WHO staff involved in facilitating this partnership. Starting from the Report's conception, WHO participated actively by providing data on the various aspects of health development and systematic input for many technical consultations. Substantial use was made of WHO's extensive technical expertise, particularly with regard to the cost-effectiveness of health policies and strategies, to the choice of health technologies, and to health financing. Perhaps the most significant contribution of WHO was in a jointly sponsored assessment of the global burden of disease, which is a key element of this Report. UNICEF, bilateral agencies, and other institutions also contributed their expertise, and the World Bank is grateful to them as well. Specific acknowledgments are provided elsewhere in the Report.

Like its predecessors, *World Development Report 1993* includes the World Development Indicators, which offer selected social and economic statistics on 127 countries. The Report is a study by the Bank's staff, and the judgments made herein do not necessarily reflect the views of the Board of Directors or of the governments they represent.

Lewis T. Preston

By: Sven Sandstrom

This Report has been prepared by a team led by Dean T. Jamison and comprising Jose-Luis Bobadilla, Robert Hecht, Kenneth Hill, Philip Musgrove, Helen Saxenian, Jee-Peng Tan, Seth Berkley (part-time), and Christopher J. L. Murray (part-time). Anthony R. Measham drafted and coordinated contributions from the Bank's Population, Health, and Nutrition Department. Valuable contributions and advice were provided by Susan Cochrane, Thomas W. Merrick, W. Henry Mosley, Alexander Preker, Lant Pritchett, and Michael Walton. Extensive input to the Report from the World Health Organization was coordinated through a Steering Committee chaired by Jean-Paul Jardel; and valuable guidance in all aspects of the Report's preparation was provided by an Advisory Committee chaired by Richard G.A. Feachem. Members of these committees are listed in the "Acknowledgements". Peter Cowley, Anna E. Maripuu, Barbara J. McKinney, Karima Saleh, and Abdo S. Yazbeck served as research associates. Lecia A. Brown, Caroline J. Cook, Anna Godal, and Vito L. Tanzi served as interns. The work was carried out under the general direction of Lawrence H. Summers and Nancy Birdsall.

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Acronyms and initials

AIDS	Acquired immune deficiency syndrome
ARI	Acute respiratory infection
BCG	Bacillus of Calmette and Guerin vaccine (to prevent tuberculosis)
DALY	Disability-adjusted life year
DPT	Diphtheria, pertussis, and tetanus vaccine
EPI	Expanded Programme on Immunization (immunization against diphtheria, pertussis, tetanus, poliomyelitis, measles, and tuberculosis)
EPI Plus	EPI plus immunization against hepatitis B and yellow fever and, where appropriate, vitamin A and iodine supplementation
FAO	Food and Agriculture Organization of the United Nations
GBD	Global burden of disease
GDP	Gross domestic product
GNP	Gross national product
HIV	Human immunodeficiency virus
HMO	Health maintenance organization
NGO	Nongovernmental organization
OECD	Organization for Economic Cooperation and Development (Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, and United States)
STD	Sexually transmitted disease
UNDP	United Nations Development Programme

UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
UNPF	United Nations Population Fund
WHO	World Health Organization

Definitions and data notes

Selected terms related to health, as used in this Report

Under-five mortality. The probability of dying between birth and age 5, expressed per 1,000 live births. Other demographic terms are defined in the technical notes to the World Development Indicators.

Externality. A spillover of benefits or losses from one individual to another.

Intervention. In health, a specific activity meant to reduce disease risks, treat illness, or palliate the consequences of disease and disability.

Allocative efficiency. The optimal distribution of resources among a number of competing uses.

Technical efficiency. The choice of input resources to produce a specific health output, intervention, or service at lowest cost.

Cost-effectiveness (in health care). The net gain in health or reduction in disease burden from a health intervention in relation to the cost. Measured in dollars per disability-adjusted life year (see next two entries).

Global burden of disease (GBD). An indicator developed for this Report in collaboration with the World Health Organization that quantifies the loss of healthy life from disease; measured in disability-adjusted life years.

Disability-adjusted life year (DALY). A unit used for measuring both the global burden of disease and the effectiveness of health interventions, as indicated by reductions in disease burden. It is calculated as the sum of the years lost in a given year from premature death (defined as the difference between actual age at death and life expectancy at that age in a low-mortality population) and from disability associated with disease or injury. See Box 1.3 and Appendix B for further details.

Population-based health services. Services, such as immunization, that are directed toward all members of a specific population subgroup.

Tertiary care facility. A hospital or other facility that offers a specialized, highly technical level of health care for the population of a large region. Characteristics include specialized intensive care units, advanced diagnostic support services, and highly specialized personnel.

Country groups

For operational and analytical purposes the World Bank's main criterion for classifying economies is gross national product (GNP) per capita. Every economy is classified as low-income, middle-income (subdivided into lower-middle and upper-middle), or high-income. Other analytical groups, based on regions, exports, and levels of external debt, are also used.

Because of changes in GNP per capita, the country composition of each income group may change from one edition to the next. Once the classification is fixed for any edition, all the historical data presented are based on the same country grouping. The income-based country groupings used in this year's Report are defined as follows.

- *Low-income economies* are those with a GNP per capita of $635 or less in 1991.

- Middle-income economies are those with a GNP per capita of more than $635 but less than $7,911 in 1991. A further division, at GNP per capita of $2,555 in 1991, is made between lower-middle-income and upper-middle-income economies.

- *High-income economies* are those with a GNP per capita of $7,911 or more in 1991.

- *World* comprises all economies, including economies with sparse data and those with less than 1 million population; these are not shown separately in the main tables but are presented in Table ___ in the technical notes to the World Development Indicators (WDI).

Demographic regions. For purposes of demographic and epidemiological analysis, this year's Report (including its health data appendices) groups economies into eight demographic regions, defined as follows:

- *Sub-Saharan Africa (SSA)* comprises all countries south of the Sahara including South Africa but excluding Mauritius, Reunion, and Seychelles, which are in the Other Asia and islands group.

- *India*

- *China*

- *Other Asia and islands (OAI)* includes the low- and middle-income economies of Asia (excluding India and China) and the islands of the Indian and Pacific Oceans except Madagascar, which is in the Sub-Saharan Africa region.

♦ *Latin America and the Caribbean (LAC)* comprises all American and Caribbean economies south of the United States, including Cuba.

♦ *Middle Eastern crescent (MEC)* consists of the group of economies extending across North Africa through the Middle East to the Asian republics of the former Soviet Union and including Israel, Malta, Pakistan, and Turkey.

♦ *Formerly socialist economies of Europe (FSE)* includes the European republics of the former Soviet Union and the formerly socialist economies of Eastern and Central Europe.

♦ *Established market economies (EME)* includes all the countries of the Organization for Economic Cooperation and Development (OECD) except Turkey, as well as a number of small high-income economies in Europe.

These eight regions fall into two broad demographic groups. The first consists of the FSE and EME, where relatively uniform age distributions are leading to older populations. The other six regions are referred to as *demographically developing*, in the sense that their age distributions are younger but aging. The demographically developing economies correspond approximately to the low- and middle-income economies. Figure 1 of the Overview depicts these regional groups. Table A.11 of Appendix A lists all economies by demographic region and indicates their mid-1990 population. Appendix tables A.4 through A.10 provide demographic and health data by economy within these regions for economies with populations greater than 3 million.

The regional grouping of economies in the WDI differs from that used in the main text of this Report. Part 1 of the table "Classification of economies" at the end of the WDI lists countries by the WDI's income and regional classification.

Low-income and middle-income economies are sometimes referred to as developing economies. The use of the term is convenient; it is not intended to imply that all economies in the group are experiencing similar development or that other economies have reached a preferred or final stage of development. Classification by income does not necessarily reflect development status. (In the WDI, high-income economies classified as developing by the United Nations or regarded as developing by their authorities are identified by the symbol † .) The use of the term "countries" to refer to economies implies no judgment by the Bank about the legal or other status of a territory.

Analytical groups. For some analytical purposes, other overlapping classifications that are based predominantly on exports or external debt are used, in addition to income or geographic groups. Listed below are the economies in these groups that have populations of more than 1 million. Countries with sparse data and those with less than 1 million population, although not shown separately, are included in group aggregates.

♦ *Fuel exporters* are countries for which exports of petroleum and gas accounted for at least 50 percent of exports in the period 1987-89. They are Algeria, Angola, Brunei, Congo, Gabon, Islamic Republic of Iran, Iraq, Libya, Nigeria, Oman, Qatar, Saudi Arabia, Trinidad and Tobago, Turkmenistan, United Arab Emirates, and Venezuela.

♦ *Severely indebted middle-income economies* (abbreviated to "Severely indebted" in the WDI) are twenty-one countries that are deemed to have encountered severe debt-servicing difficulties. These are defined as countries in which, averaged over 1989-91, either of two key ratios is above critical levels: present value of debt to GNP (80 percent) or present value of debt to exports of goods and all services (200 percent). The twenty-one countries are Albania, Algeria, Angola, Argentina, Bolivia, Brazil, Bulgaria, Congo, Côte d'Ivoire, Cuba, Ecuador, Iraq, Jamaica, Jordan, Mexico, Mongolia, Morocco, Panama, Peru, Poland, and Syrian Arab Republic.

♦ In the WDI, *OECD members*, a subgroup of high-income economies, comprises the members of the OECD except for Greece, Portugal, and Turkey, which are included among the middle-income economies. In the main text of the *World Development Report,* the term "OECD countries" includes <u>all</u> OECD members unless otherwise stated.

<u>Data notes</u>

♦ *Billion* is 1,000 million.

♦ *Trillion* is 1,000 billion.

♦ *Tons* are metric tons, equal to 1,000 kilograms, or 2,204.6 pounds.

♦ *Dollars* are current U.S. dollars unless otherwise specified.

♦ *Growth rates* are based on constant price data and, unless otherwise noted, have been computed with the use of the least-squares method. See the technical notes to the WDI for details of this method.

♦ *The symbol* / in dates, as in "1988/89," means that the period of time may be less than two years but straddles two calendar years and refers to a crop year, a survey year, or a fiscal year.

♦ *The symbol* .. in tables means not available.

♦ *The symbol* — in tables means not applicable. (In the WDI, a blank is used to mean not applicable.)

♦ *The number* 0 or 0.0 in tables and figures means zero or a quantity less than half the unit shown and not known more precisely.

The cutoff date for all data in the WDI is April 30, 1993.

Historical data in this Report may differ from those in previous editions because of continuous updating as better data become available, because of a change to a new base year for constant price data, or because of changes in country composition in income and analytical groups.

Economic and demographic terms are defined in the technical notes to the WDI.

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