



Asian Development Bank

Concern about the environment is not new.

The initial concept of sustainable development was introduced in 1972 and was well embraced as a vision recognizing the interconnectedness of social, economic, and environmental issues. What is more, as defined by the World Commission on Environment and Development in 1987, it is also development that meets the needs of the present without compromising the ability of future generations to meet theirs. It embraces two key notions:

- The concept of needs, in particular those of the world's poor, to which overriding priority should be given.
- The idea of limits to the environment's ability to meet present and future needs.

While the ever-present challenge of poverty reduction continues to loom large, the world faces new challenges ranging from the food and energy crises to the global recession to climate change. All these factors make the situation today much more complex.

The pursuit of sustainable development is a balancing act: it requires the implementation of policies, strategies, programs, and projects that treat environment and development as a single issue; it also demands changes in the mindsets, attitudes, and behaviors of stakeholders.

Certainly, no one nation can achieve sustainable development alone. Governments, businesses, and civil society have accepted this paradigm as imperative for making progress on the three pillars of sustainable development—social, economic, and environmental.

This timeline* catalogs major sector and thematic landmarks in the world since 1948. Because the Asian Development Bank promotes sustainable development in Asia and the Pacific, and many milestones have marked its journey, this publication can be read in conjunction with the ADB Sustainable Development Timeline.

^{*} The timeline is not an exhaustive treatment of milestones.

SUSTAINABL

YEAR MILESTONE

The International Union for the Protection of Nature is founded; it aims to promote a unique partnership of government and nongovernment organizations.

1949

The United Nations Scientific Conference on the Conservation and Utilization of Resources is held in Lake Success; it is the first major meeting of the United Nations on the subject.

The world's population reaches 2.5 billion.

Harrison Brown publishes "The Challenge of Man's Future;" it develops themes that 25 years later will be covered by the term "sustainable development."

1956

The first person dies because of mercury released in Minamata Bay; thousands are poisoned.

The International Union for the Protection of Nature changes its name to International Union for Conservation of Nature and Natural Resources.

1958

The United Nations Conference on the Law of the Sea is held; it approves draft conventions on environmental protection.

1960

The world's population reaches 3 billion.

The World Wildlife Fund, now the World Wide Fund for Nature, is established.

1962

Rachel Carson publishes "Silent Spring;" it is considered a turning point in our understanding of the interconnections between the environment, the economy, and social well-being.

1964

The International Biological Program begins to explore the biological basis of productivity and human welfare.

1966

The Lunar Orbiter takes the first photographs of Earth from the vicinity of the moon.

1967

The Torrey Canyon spills 118,000 tons of crude oil off Land's End.

The Environmental Defense Fund is formed to pursue legal solutions to environmental damage; the founders go to court to stop the Suffolk County Mosquito Control Commission from spraying dichlorodiphenyltrichloroethane (DDT) in the marshes of Long Island.

The East European Committee is set up by the Commission on Education and Communication; it is the first and only internationally established nature conservation body east of the "Iron Curtain."

1968

Paul Ehrlich publishes the "Population Bomb;" it discusses the connection between human population, resource exploitation, and the environment.

The Club of Rome is established; it commissions a study of global proportions to model and analyze the dynamic interactions between industrial production, population, environmental damage, food consumption, and natural resource usage.

The Intergovernmental Conference of Experts on the Scientific Basis for Rational Use and Conservation of the Resources of the Biosphere is held in Paris; it provides a forum for early discussion of the concept of sustainable development.

The United Nations General Assembly authorizes the Human Environment Conference to be held in 1972.

The United Nations Educational, Scientific and Cultural Organization convenes the Biosphere Conference in Paris; it recommends strenuous efforts by national and international agencies and public and private organizations to establish natural areas for the preservation of species, their habitats, and representative samples of ecosystems.

1969 Friends of the Earth forms as a nonprofit advocacy organization dedicated to protecting the planet from environmental degradation; preserving biological, cultural, and ethnic diversity; and empowering citizens to have an influential voice in decisions affecting the quality of their environment and their lives.

The National Environmental Policy Act is passed in the United States, establishing the Environmental Protection Agency, the first national agency for environmental protection; it sets the basis for environmental impact assessments.

The Pearson Commission on International Development investigates the effectiveness of the World Bank's development assistance in the 20 years to 1968; it is the first international commission to consider a new approach to development, focused on research and knowledge in developing countries; it leads to the formation of the International Development Research Centre.

19705

The First Earth Day is proclaimed in San Francisco; it is held as a national teach-in on the environment; an estimated 20 million people participate in peaceful demonstrations across the United States.

The Natural Resources Defense Council is formed to push for comprehensive environmental policy in the United States.

The International Development Research Centre is established to support research that promotes growth and development in developing countries.

1971 Greenpeace begins operations with an agenda to stop environmental damage through civil protests and nonviolent interference.

The Founex Report calls for integration of environment and development strategies.

The United Nations Educational, Scientific and Cultural Organization establishes the Man and the Biosphere Programme to promote interdisciplinary approaches to management, research and education in ecosystem conservation, and sustainable use of natural resources.

The Council of the Organisation for Economic Co-operation and Development presses for adoption of the Polluter Pays Principle, meaning that those causing pollution should pay the costs.

The International Institute for Environment and Development is established to seek ways for countries to make economic progress without destroying the environmental resource base.

René Dubos and Barbara Ward publish "Only One Earth;" it discusses the impact of human activity on the biosphere but expresses optimism that a shared concern for the planet could lead humankind to create a common future.

Thor Heyerdahl, during the voyage of Ra II across the North Atlantic, finds that all but a small part of the ocean is filled with lumps of floating asphalt, the result of oil pollution from tankers.

The first-ever International Youth Conference on the Human Environment gathers in Hamilton.

1972 The United Nations Conference on the Human Environment is held in Stockholm; it leads to the establishment of numerous national environmental protection agencies and the United Nations Environment Programme.

The Club of Rome publishes "The Limits to Growth;" it predicts consequences if population growth is not slowed; it calls for a state of global equilibrium.

Edward Goldsmith and Robert Allen publish "Blueprint for Survival;" it warns of the breakdown of society and irreversible disruption of life-supporting systems on the earth and calls for a steady-state society; it is signed by over 30 leading scientists.

The United Nations Conference on the Law of the Sea is held in New York; it covers limits, navigation, archipelagic status and transit regimes, exclusive economic zones, continental shelf jurisdiction, deep seabed mining, the exploitation regime, protection of the marine environment, scientific research, and settlement of disputes.

The European Environmental Action Programme is launched; this is the first attempt to synthesize a single environmental policy for the European Economic Community.

The United States enacts the Endangered Species Act to better safeguard, for the benefit of all citizens, the nation's heritage in fish, wildlife, and plants.

The oil crisis fuels the limits-to-growth debate.

The Chipko Movement is born in India in response to deforestation and environmental degradation, influencing forestry practices and women's participation in environmental issues.

1974 The United Nations Convention on International Trade in Endangered Species of Wild Fauna and Flora is opened for signature in Washington, DC; it is an important step in controlling illegal commerce in ivory, furs, and other products of endangered species.

The first World Population Conference takes place in Bucharest; 135 countries participate.

A symposium in Cocoyoc identifies maldistribution of resources as a key factor in environmental degradation; the meeting calls for development action focused on fulfilling basic human needs.

The World Food Conference is held in Rome; it lays the groundwork for a strategy to attack the world food problem and results in the creation of the World Food Council and the World Food Programme.

The world's population reaches 4 billion.

Mario Molina and Frank Rowland release seminal work on chlorofluorocarbons in *Nature*, with implications for the ozone layer.

The Bariloche Foundation publishes "Limits to Poverty;" it calls for growth and equity in the Third World; it is the South's response to "The Limits to Growth."

1975 The Worldwatch Institute is established to raise public awareness of global environmental threats and catalyze effective policy responses; it begins publishing the annual "State of the World" in 1984.

The Convention on International Trade in Endangered Species of Wild Flora and Fauna comes into effect.

The Dag Hammarskjöld Foundation publishes "What Now: Another Development;" it builds on the Founex and Cocoyoc documents and calls for development in poor countries that is needs-oriented, endogenous, self-reliant, ecologically sound, and based on self-management and participation.

- **1976** The United Nations Conference on Human Settlements, the first global meeting to link environment and human settlement, is held in Vancouver.
- 1977 The Greenbelt Movement starts in Kenya; it is based on community tree-planting to prevent desertification.

The United Nations Conference on Desertification is held in Nairobi.

The United Nations Water Conference is held in Mar del Plata; it sets the goal of providing clean water and adequate sanitation to all in the world by 1990.

1978 The Amoco Cadiz spills oil off the coast of Brittany.

The Organisation for Economic Co-operation and Development relaunches research on environment and economic linkages.

1979

The Convention on Long-range Transboundary Air Pollution is adopted.

Robert Stein publishes "Banking on the Biosphere;" it reviews the procedures and practices of nine multilateral development agencies.

The Three Mile Island nuclear accident occurs in Pennsylvania.

The World Climate Conference concludes that the "greenhouse effect" from increased buildup of carbon dioxide in the atmosphere demands urgent international action.

The International Union for Conservation of Nature publishes the "World Conservation Strategy;" the section "Towards Sustainable Development" identifies the main agents of habitat destruction as poverty, population pressure, social inequity, and trading regimes; the strategy calls for a new international development strategy to redress inequities.

The term "sustainable development" is first introduced into the international policy debate by the World Conservation Strategy.

The Independent Commission on International Development Issues publishes "North–South: A Program for Survival;" it calls for a new economic relationship between North and South; also known as the Brandt Report.

The Council on Environmental Quality and the United States Department of State release "The Global 2000 Report to the President;" it recognizes biodiversity for the first time as a critical factor to the proper functioning of the planetary ecosystem.

1981 The World Health Assembly of the World Health Organization adopts a Global Strategy for Health for All by the Year 2000; it affirms that the major social goal of governments should be the attainment of a level of health by all peoples that would permit them to lead socially and economically productive lives.

The United Nations World Charter for Nature adopts the principle that every form of life is unique and should be respected regardless of its value to humankind; it calls for an understanding of our dependence on natural resources and the need to control their exploitation.

The United Nations Convention on the Law of the Sea is adopted; it sets rules for environmental standards and enforcement provisions to deal with pollution of the marine environment.

The World Resources Institute is established; it begins publishing assessments of the resource base that supports the global economy in 1986.

An international debt crisis threatens the world financial system; it turns the 1980s into a lost decade for Latin America and other developing regions.

Australia adopts a national conservation strategy to implement the objectives of the World Conservation Strategy.

The World Commission on Environment and Development forms; chaired by Gro Harlem Brundtland, the commission works for 3 years to weave together a report on social, economic, cultural, and environmental issues.

Development Alternatives is established to foster a new relationship between people, technology, and the environment to attain the goal of sustainable development.

The Worldwatch Institute introduces the annual "State of the World" publication; it monitors changes in the global resource base, focusing on how changes there affect the economy.

The Third World Network is established to serve as the activist voice of the South on issues of economics, development, and the environment.

A toxic chemical leak kills 10,000 persons and injures 300,000 in Bhopal.



Between 250,000 and 1 million people die from drought-induced starvation in Ethiopia.

The International Conference on Environment and Economics concludes that the environment and economics should be mutually reinforcing.

1985 The Antarctic ozone hole is discovered.

The World Meteorological Society, the United Nations Environment Programme, and the International Council of Scientific Unions meet in Vienna; they report on the buildup of carbon dioxide and other "greenhouse gases" in the atmosphere and predict global warming.

Responsible Care, an initiative of the Canadian Chemical Producers' Association, provides a code of conduct for chemical producers that is now adopted in many countries.

The Conference on Environment and Development, sponsored by the International Union for Conservation of Nature, is held in Ottawa; participants define sustainable development as the emerging paradigm derived from two closely related concerns: (i) one reacting against laissez-faire economic theory, which considers living resources as externalities and free goods; and (ii) one based on the concept of resource stewardship.

An accident at the nuclear station in Chernobyl causes a massive toxic radioactive explosion.

The Conference on Conservation and Development: Implementing the World Conservation Strategy is held in Ottawa to evaluate progress in implementing the World Conservation Strategy of 1980 and to consider proposals for revising it.

The World Commission on Environment and Development publishes "Our Common Future," also known as the Brundtland Report; it weaves together social, economic, cultural, and environmental issues and global solutions; it popularizes the term "sustainable development."

The Montreal Protocol on Substances that Deplete the Ozone Layer is adopted.

The world's population reaches 5 billion.

The Organisation for Economic Co-operation and Development evolves guidelines for environment and development in bilateral aid policies.

The Intergovernmental Panel on Climate Change is established to assess the most up-to-date scientific, technical, and socioeconomic research in the field.

The Centre for Our Common Future is established to act as a focal point for follow-up activities to the Brundtland Report.

Satellite imagery is used to document the effects of fires in the Amazon.

Chico Mendes, the charismatic founder of the Brazilian rubber tappers' union, is murdered in December; he had led a nonviolent campaign to stop the slash-and-burn conversion of Amazonian rain forest to pastureland; his death focused attention on the destruction of the world's largest remaining tropical forest.

The Stockholm Environment Institute is established to carry out global and regional environmental research.

The Exxon Valdez runs aground and dumps 11 million gallons of oil into the Prince William Sound.

Edward Barbier, Anil Markandya, and David Pearce publish "Blueprint for a Green Economy;" it introduces the central role of the environment in economic and public policy decisions.

1988



1990

The International Institute for Sustainable Development is established; it begins publishing the "Earth Negotiations Bulletin" to record international negotiations on environment and development.

The United Nations World Summit for Children is held in New York; it links environmental impacts to future generations.

The Regional Environmental Center for Central and Eastern Europe is established; it aims to address environmental challenges across the region, with an emphasis on the engagement of business as well as governments and civil society.

1991 The cod fishery off the Canadian east coast collapses.

Hundreds of oil fires burn out of control in Kuwait in the wake of the Gulf War.

The International Union for Conservation of Nature, the United Nations Environment Programme, and the World Wide Fund for Nature publish "Caring for the Earth: A Strategy for Sustainable Living" as a sequel to the World Conservation Strategy released in 1980; it sets forth 132 actions to increase human well-being and halt the destruction of the earth's capacity to support life.

The World Bank, the United Nations Development Programme, and the United Nations Environment Programme create the Global Environment Facility to provide grants to developing countries for projects that benefit the global environment and promote sustainable livelihoods in local communities.

1992

The Business Council for Sustainable Development publishes "Changing Course;" it establishes business interests in promoting sustainable development practices.

The United Nations Conference on Environment and Development is held in Rio de Janeiro; agreements are reached on Agenda 21, the Convention on Biological Diversity, the Framework Convention on Climate Change, and nonbinding Forest Principles.

The United Nations General Assembly sets up the Commission on Sustainable Development to oversee implementation of Agenda 21 into the programs and processes of the United Nations system.

1993

The United Nations Commission on Sustainable Development is established to ensure follow-up to the United Nations Conference on Environment and Development, enhance international cooperation, and rationalize intergovernmental decision-making capacity.

At the World Conference on Human Rights in Vienna, governments reaffirm their international commitments to all human rights; this marks the appointment of the first United Nations High Commissioner for Human Rights.

The United States President's Council on Sustainable Development is established; it advises the President on sustainable development and aims to develop bold, new approaches to achieve economic, environmental, and equity goals.

1994

Under the Global Environment Facility, billions of aid dollars are restructured to give more decision-making power to developing countries.

"[People's Republic of] China's Agenda 21," a white paper on the People's Republic of China's population, environment, and development, is published.

The North American Free Trade Agreement enters into force; a side agreement, the North American Agreement on Environmental Cooperation, establishes the Commission for Environmental Cooperation to facilitate effective cooperation for conservation, protection, and enhancement of the environment.

The International Conference on Population and Development is held in Cairo.

The United Nations Convention on Desertification is adopted.

The United States Agency for International Development redefines its foreign assistance program in terms of sustainable development.



1995 The World Trade Organization is established and gives formal recognition to trade, environment, and development linkages.

The World Summit for Social Development is held in Copenhagen; this marks the first time that the international community makes a clear commitment to eradicating absolute poverty.

The Fourth World Conference on Women is held in Beijing; negotiations recognize that the status of women has advanced but that obstacles remain to the realization of women's rights as human rights.

1996 | ISO 14001 is formally adopted as a voluntary international standard for corporate environmental management systems.

The United Nations Conference on Human Settlements is held in Istanbul.

The Asia-Pacific Economic Cooperation Ministerial Meeting on Sustainable Development is held in Manila; the Manila Declaration and an Action Program cover key areas for cooperation on sustainable cities, cleaner production and technologies, and the sustainability of the marine environment.

The Summit of the Americas on Sustainable Development is held in Santa Cruz; the Declaration of Santa Cruz de la Sierra and the Plan of Action for the Sustainable Development of the Americas stress fairness in regional development.

Land-clearing fires intensified by an El Niño-induced drought result in haze blanketing Southeast Asia and causing \$3 billion in health costs and fire-related damage; concurrently, the market crashes raising questions about currency speculation and need for government economic reforms.

The United Nations General Assembly reviews the Earth Summit; a special session acts as a sober reminder that little progress has been made in implementing Agenda 21 and ends without significant new commitments.

The Intergovernmental Panel on Forests submits its recommendations to the United Nations Commission on Sustainable Development; the panel calls for continued dialogue, but cannot reach an agreement on important issues such as financial assistance and trade-related measures, or whether to begin negotiations on a global forest convention.

The Earth Council convenes nongovernment organizations at the Rio+5 Forum in Rio de Janeiro; the meeting notes that many organizations and individuals working for sustainability in their own communities and sectors continue to work largely in isolation from each other.

Global Knowledge '97: Knowledge for Development in the Information Age is held in Toronto, initiating a global dialogue on how to harness knowledge and information as tools for sustainable and equitable development.

Delegates to the United Nations Framework Convention on Climate Change sign the Kyoto Protocol; the protocol commits developed nations to reducing overall emissions of several greenhouse gases and mechanisms to encourage North–South cooperation on emissions reduction.

1998 Global environmental and food security concerns are raised over genetically modified food products; the European Union blocks imports of genetically modified crops from North America and farmers in developing countries rebel against "terminator technology," seeds that will only germinate once.

The People's Republic of China experiences the worst floods in decades; two-thirds of Bangladesh are underwater for several months from monsoons; Hurricane Mitch destroys parts of Central America; 54 countries are hit by floods and 45 by drought; the earth experiences the highest global temperature ever recorded.

The global sustainability index is launched, tracking leading corporate sustainability practices worldwide; called the Dow Jones Sustainability Group Indexes, the tool provides guidance to investors looking for profitable companies that follow sustainable development principles.



The Third World Trade Organization Ministerial Conference is held in Seattle; thousands of demonstrators take to the streets to protest the negative effects of globalization and growth of global corporations and, along with deep conflicts among delegates, scuttle the negotiations; the first of many such anti-globalization protests, this signals a new era of confrontation between disaffected stakeholders and those in power.

Environmental groups and social activists lobby against the Multilateral Agreement on Investment; this, along with disagreement by governments over the scope of the exceptions being sought, leads to the demise of negotiations.

The world's population reaches 6 billion.

The Second World Water Forum in the Hague recognizes water security as a critical concern for the 21st century.

The United Nations Millennium Summit agrees to a set of time-bound and measurable goals for combating poverty, hunger, disease, illiteracy, environmental degradation, and discrimination against women; the Millennium Development Goals are to be achieved by 2015.

Miss Waldron's red colobus monkey is declared extinct; it is the first extinction in several centuries of a member of the Primate Order, to which human beings belong.

2001 The Fourth Ministerial Conference of the World Trade Organization is convened in Doha; it recognizes environment and development concerns in the final Declaration; nongovernment organizations and the World Trade Organization agree to reinterpret the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding access to medicines and public health.

The People's Republic of China joins the World Trade Organization.

2002 The World Summit on Sustainable Development is held in Johannesburg, marking the 10-year anniversary of the United Nations Conference on Environment and Development; the summit promotes "partnerships" as a non-negotiated approach to sustainability.

The Global Reporting Initiative formulates guidelines on how organizations should report on the economic, environmental, and social dimensions of their business activities.

2003 The United Nations General Assembly endorsed the United Nations Decade of Education for Sustainable Development.

2004 Wangari Muta Maathai, the founder of the Greenbelt Movement in Kenya, is the first environmentalist to be awarded a Nobel Prize.

About 2.5 million people in Sub-Saharan Africa die of AIDS and over 3 million become newly infected.

2005 The Kyoto Protocol enters into force, legally binding developed country parties to goals for greenhouse gas emission reductions and establishing the Clean Development Mechanism for developing countries.

The Millennium Ecosystem Assessment is released; experts from 95 countries provide scientific information concerning the consequences of ecosystem change for human well-being.

Evidence suggests the increase in frequency and severity of hurricanes in the Atlantic and related storm damage may be attributable to climate change.

The World Summit takes place in New York to assess progress on the Millennium Development Goals; modified targets are proposed.



The Intergovernmental Panel on Climate Change publishes its fourth assessment report on climate change; the report posits that climate change policies are best addressed by integrating them within the broader framework of sustainable development strategies.

Former United States Vice-President Al Gore's documentary, "An Inconvenient Truth," wins an Academy Award; the alarming forecasts of the Intergovernmental Panel on Climate Change about the planet's health make headlines; the Intergovernmental Panel on Climate Change and Al Gore share the Nobel Peace Prize.

Global food prices increase 43% in 1 year; growing energy demand in the People's Republic of China, India, and elsewhere sends energy prices soaring; financial institutions falter over the collapse of mortgage lending in the United States; markets tumble, sending the world into recession.

Notions of green economy enter the mainstream; a low-carbon economy and green growth become new objectives.

Almost half of the world's population lives in towns and cities that occupy less than 2% of the earth's land surface but use 75% of its resources.

The World Glacier Monitoring Service points to strong acceleration of glacier melting in 2000–2005, with a doubling of the rate compared to the two preceding decades.

2009

Multiyear sea ice all but disappears from the Arctic Ocean; the Australian drought that commenced in 2003 leads to the worst wildfires in history.

The Group of 20 Finance Ministers and Central Bank Governors (G20) promises to phase out fossil fuel subsidies; experts estimate that annual subsidies could amount to \$500 billion, equal to 1% of world gross domestic product.

About 60% of the world's population now have mobile phones and 25% use the internet; social networking begins to influence citizen engagement, from the Obama presidential campaign in the United States to the presidential election in Iran.

The 15th session of the Conference of the Parties to the United Nations Framework Convention on Climate Change is convened in Copenhagen; the domestic targets and actions of large emitters such as the Unites States and the People's Republic of China take center stage.

The Philippines experiences the worst tropical typhoon depression on record; flood water levels reach a record 20 feet in rural areas.

The 16th session of the Conference of the Parties to the United Nations Framework Convention on Climate Change is held in Cancún; it calls for the establishment of a Green Climate Fund and a Climate Technology Center and network.

2011 The Ministry of the Environment of France reports a total rainfall in April of barely 29% of the average established over the 1971–2000 period, adding that soils in the northern part of the country have experienced the driest conditions in 50 years.

The Great East Japan Earthquake hits at 9.0 (M...).

The world's population reaches 7 billion.

2012 The United Nations Conference on Sustainable Development gathers in Rio de Janeiro to mark the 20th anniversary of the 1992 United Nations Conference on Environment and Development in Rio de Janeiro and the 10th anniversary of the 2002 World Summit on Sustainable Development in Johannesburg; it focuses on two themes: a green economy in the context of sustainable development and poverty eradication, and the institutional framework for sustainable development.

About the Asian Development Bank

ADB's vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries reduce poverty and improve the quality of life of their people.

Despite the region's many successes, it remains home to two-thirds of the world's poor:

1.8 billion people who live on less than \$2 a day, with 903 million struggling on less than \$1.25 a day. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

Based in Manila, ADB is owned by 67 members, including 48 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.

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