

Silent Spring was published in 1962. The book's release was considered by many to be a turning point in our understanding of the interconnections among the environment, the economy, and social well-being. Since then, many milestones have marked the journey toward sustainable development.

This Timeline captures some of the key events. The International Institute for Sustainable Development has prepared the fourth edition with the generous support of the Canada School of Public Service and CIDA.

IISD's vision is better living for all—sustainably. Its mission is to champion innovation, enabling societies to live sustainably. (See <www.iisd.org>.)

- 1962** *Silent Spring* by Rachel Carson brought together research on toxicology, ecology, and epidemiology to suggest that agricultural pesticides were building to catastrophic levels. This was linked to damage to animal species and human health.
- 1967** **Environmental Defense Fund (EDF)** formed to pursue legal solutions to environmental damage. EDF goes to court to stop the Suffolk County Mosquito Control Commission from spraying DDT on the marshes of Long Island. (See <www.environmentaldefense.org>.)
- 1968** **Biosphere:** Intergovernmental Conference for Rational Use and Conservation of the Biosphere (UNESCO) is held; early discussions of the concept of ecologically sustainable development. (See <www.unesco.org>.)
- 1968** **Paul Ehrlich publishes *Population Bomb*** on the connections among human population, resource exploitation, and the environment.
- 1969** **Friends of the Earth** forms as an advocacy organization dedicated to the prevention of environmental degradation, the preservation of diversity and the role of citizens in decision making. (See <www.foe.org>.)
- 1969** **National Environmental Policy Act** is passed in the U.S., one of the first countries to establish a national legislative framework to protect the environment. It sets the basis for environmental impact assessment in the world.
- 1969** ***Partners in Development/1970-IDRC:*** Report of the Commission on International Development. This is the first of the international commissions to consider a new approach to development, focused on research and knowledge in the South. It leads to the formation of the International Development Research Centre. (See <www.idrc.ca>.)

- 1970 First Earth Day** is held as a national teach-in on the environment. An estimated 20 million people participated in peaceful demonstrations across the U.S. (See <earthday.envirolink.org/history.html>.)
- 1970 Natural Resources Defense Council** forms with a staff of lawyers and scientists to push for comprehensive U.S. environmental policy. (See <www.nrdc.org>.)
- 1971 Greenpeace** starts up in Canada and launches an aggressive agenda to stop environmental damage through civil protests and non-violent interference. (See <www.greenpeace.org>.)
- 1971 Founex Report** panel of experts calls for the integration of environment and development strategies.
- 1971 Polluter Pays Principle:** OECD Council says that those causing pollution should pay the costs.
- 1971 International Institute for Environment and Development (IIED)** established in the U.K. to seek ways for countries to make economic progress without destroying the environmental resource base. (See <www.iied.org>.)
- 1971 Rene Dubos and Barbara Ward write *Only One Earth*.** The book sounds an urgent alarm about the impact of human activity on the biosphere, but also expresses optimism that a shared concern for the planet could lead humankind to create a common future.
- 1972 UN Conference on Human Environment/UNEP** held in Stockholm. The conference is rooted in the regional pollution and acid rain problems of northern Europe. It leads to the establishment of many national environmental protection agencies and the United Nations Environment Programme (UNEP). (See <www.unep.org>.)
- 1972 Environnement et Développement du Tiers-Monde (ENDA)** is established in Senegal, becoming in 1978 an international NGO concerned with empowering local peoples, eliminating poverty, and southern research and training for sustainable development. (See <www.enda.sn>.)
- 1972 Club of Rome publishes controversial *Limits to Growth*.** It predicts dire consequences if growth is not slowed. Northern countries criticize the report for not including technological solutions while Southern countries are incensed because it advocates abandonment of economic development. (See <www.clubofrome.org>.)

- 1973 U.S. enacts Endangered Species Act**, one of the first countries to implement legal protections for its heritage in fish, wildlife, and plants.
- 1973 Chipko movement** born in India in response to deforestation and environmental degradation. The actions of the women of the community influenced both forestry and women's participation in environmental issues. (See <www.rightlivelihood.org/recipe/chipko.htm>.)
- 1973 OPEC oil crisis** fuels limits to growth debate.
- 1974 Rowland and Molina** release CFCs work in the scientific journal *Nature*, calculating that continued use of CFC gases at an unaltered rate would critically deplete the ozone layer.
- 1974 Latin American World Model** developed by the Fundación Bariloche. It is the South's response to *Limits to Growth* and calls for growth and equity for the Third World. (See <www.fundacionbariloche.org.ar/LP-mod-latinoam.htm>.)
- 1975 CITES: Convention on International Trade in Endangered Species of Flora and Fauna** comes into force. (See <www.cites.org>.)
- 1975 Worldwatch Institute** established in the U.S. to raise public awareness of global environmental threats and catalyze effective policy responses; it begins publishing annual State of the World in 1984. (See <www.worldwatch.org>.)
- 1976 Habitat: First global meeting** to link environment and human settlement.
- 1977 Greenbelt Movement** starts in Kenya. It is based on community tree-planting to prevent desertification. (See <www.greenbeltmovement.org>.)
- 1977 UN Conference on Desertification** is held.
- 1978 Amoco Cadiz oil spill** off the coast of Brittany.
- 1978 OECD Directorate of the Environment** relaunches research on environment and economic linkages. (See <www.oecd.org>.)
- 1979 Convention on Long-Range Transboundary Air Pollution** is adopted.
- 1979 Banking on the Biosphere**, IIED report on practices of nine multilateral development agencies, including the World Bank, sets the stage for reforms which are still underway.
- 1979 Three Mile Island** nuclear accident occurs in Pennsylvania, USA.

- 1980 World Conservation Strategy** released by IUCN. The section "Towards Sustainable Development" identifies the main agents of habitat destruction as poverty, population pressure, social inequity and trading regimes. It calls for a new international development strategy to redress inequities. (See <www.iucn.org>.)
- 1980 Independent Commission on International Development Issues** publishes *North-South, A Programme for Survival* (Brandt Report). It calls for a new economic relationship between North and South.
- 1980 Global 2000 Report** is released. This report recognizes biodiversity for the first time as critical to the proper functioning of the planetary ecosystem. It asserts that the robust nature of ecosystems is weakened by species extinction. (See <www.millenniuminstitute.net/publications/publications.html>.)
- 1981 World Health Assembly** unanimously 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. (See <www.who.org>.)
- 1982 World Resources Institute** established in the U.S. Begins publishing biennial assessments of World Resources in 1986. (See <www.wri.org>.)
- 1982 UN Convention on the Law of the Sea** is adopted. It establishes material rules concerning environmental standards as well as enforcement provisions dealing with pollution of the marine environment. (See <www.un.org/depts/los/>.)
- 1982 International debt crisis** erupts and threatens the world financial system. It turns the 1980s into a lost decade for Latin America and other developing regions.
- 1982 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 our exploitation of them. (See <www.un.org/documents/ga/res/37/a37r007.htm>.)
- 1983 Development Alternatives** established in India. It fosters a new relationship among people, technology, and the environment in the South. (See <www.devalt.org>.)

- 1984 Toxic chemical leak** leaves 10,000 dead and 300,000 injured in Bhopal, India. (See <www.bhopal.net>.)
- 1984 Drought in Ethiopia:** Between 250,000 and 1 million people die from starvation.
- 1984 Third World Network** is founded as the activist voice of the South on issues of economics, development, and environment. (See <www.twinside.org.sg>.)
- 1984 International Conference on Environment and Economics (OECD)** concludes that the environment and economics should be mutually reinforcing. Helps to shape the report, *Our Common Future*.
- 1985 Responsible Care[®]**, an initiative of the Canadian Chemical Producers, provides a code of conduct for chemical producers that is now adopted in many countries. (See <www.ccpa.ca>.)
- 1985 Climate Change:** Austria meeting of the World Meteorological Society, UNEP, and the International Council of Scientific Unions reports on the build-up of CO₂ and other "greenhouse gases" in the atmosphere. They predict global warming. (See <www.wmo.ch>: WMO Ref. No. 661.)
- 1985 Antarctic ozone hole** discovered by British and American scientists.
- 1986 Accident at nuclear station** in Chernobyl generates a massive toxic radioactive explosion.
- 1987 *Our Common Future (Brundtland Report)*:** Report of the World Commission on Environment and Development weaves together social, economic, cultural, and environmental issues and global solutions. It popularizes the term "sustainable development."
- 1987 Development Advisory Committee:** DAC members of OECD evolve guidelines for environment and development in bilateral aid policies. (See <www.oecd.org>.)
- 1987 Montreal Protocol on Substances that Deplete the Ozone Layer** is adopted. (See <hq.unep.org/ozone/Montreal-Protocol/Montreal-Protocol2000.shtml>.)
- 1988 Chico Mendes**, Brazilian rubber tapper fighting the destruction of the Amazon rainforest, is assassinated. Scientists use satellite photos to document what the Amazon fires are doing to the rainforest. (See <www.chicomendes.com>.)

- 1988 Intergovernmental Panel on Climate Change** established to assess the most up-to-date scientific, technical, and socioeconomic research in the field. (See <www.ipcc.ch>.)
- 1989 Exxon Valdez** tanker runs aground dumping 11 million gallons of oil into Alaska's Prince William Sound. (See <www.evostc.state.ak.us>.)
- 1990 International Institute for Sustainable Development (IISD)** established in Canada. It begins publishing the *Earth Negotiations Bulletin* as the authoritative record of international negotiations on environment and development. (See <www.iisd.org>.)
- 1990 UN Summit for Children:** This gives important recognition to the impact of the environment on future generations. (See <www.unicef.org/wsc/>.)
- 1990 Regional Environmental Centre for Central and Eastern Europe** established to address environmental challenges across the region, with an emphasis on the engagement of business as well as governments and civil society. (See <www.rec.org>.)
- 1991 The Canadian east coast cod fishery collapses** when only 2,700 tonnes of spawning biomass are left after a harvest of 190,000 tonnes.
- 1991 Hundreds of oil fires** burn out of control in Kuwait for months following the Persian Gulf War.
- 1992 The Business Council for Sustainable Development** publishes *Changing Course*. It establishes business interests in promoting SD practices. (See <www.wbcsd.ch>.)
- 1992 Earth Summit:** UN Conference on Environment and Development (UNCED) is held in Rio de Janeiro. Agreements are reached on the action plan "Agenda 21," and on the Convention on Biological Diversity, the Framework Convention on Climate Change, and non-binding Forest Principles. (See <www.unep.org/unep/partners/un/unced/home.htm>.)
- 1992 Stockholm Environment Institute** established as an independent institute for carrying out global and regional environmental research. (See <www.sei.se>.)
- 1993 First meeting of the UN Commission on Sustainable Development** established to ensure follow-up to UNCED, enhance international cooperation and rationalize intergovernmental decision-making capacity. (See <www.un.org/esa/sustdev/>.)

- 1993 World Conference on Human Rights:** Governments re-affirm their international commitments to all human rights. This marks the appointment of the first UN High Commissioner for Human Rights. (See <www.unhchr.ch>.)
- 1994 Global Environment Facility:** Billions of aid dollars are restructured to give more decision-making power to developing countries. (See <www.gefweb.org/>.)
- 1994 China's Agenda 21:** White paper on PRC's population, environment, and development is published. China sets an international example for country strategies for sustainable development. (See <eng.cciced.org/cn/default.asp>.)
- 1995 The execution of Ken Saro-Wiwa** in Nigeria brings international attention to the linkages between human rights, environmental justice, security, and economic growth.
- 1995 World Trade Organization (WTO)** established. Formal recognition of trade, environment and development linkages. (See <www.wto.org>.)
- 1995 World Summit for Social Development** held in Copenhagen. This marks the first time that the international community has expressed a clear commitment to eradicate absolute poverty. (See <www.un.org/esa/socdev/wssd/index.html>.)
- 1995 Fourth World Conference on Women** held in Beijing. Negotiations recognize that the status of women has advanced but obstacles still remain to the realization of women's rights as human rights. (See <www.un.org/womenwatch/daw/beijing/platform/>.)
- 1996 ISO 14001** formally adopted as a voluntary international standard for corporate environmental management systems. (See <www.iso.org>.)
- 1997 Asian ecological and financial chaos:** Land-clearing fires intensified by an El Niño induced drought result in haze blanketing the region and causing US\$3 billion in health costs and fire-related damage. Concurrently, the market crashes raising questions about currency speculation and need for government economic reforms.
- 1997 UN General Assembly** review of the Earth Summit. Special session acts as a sober reminder that little progress has been made in implementing Agenda 21 and ends without significant new commitments. (See <www.iisd.ca/linkages/csd/ungass.html>.)

- 1998 Controversy over genetically modified organisms:** Global environmental and food security concerns raised over genetically modified (GM) food products. The EU blocks import of GM crops from North America and farmers in developing countries rebel against "terminator technology," seeds that will only germinate once.
- 1998 Unusually severe weather:** China experiences worst floods in decades; two-thirds of Bangladesh underwater for several months from monsoons; Hurricane Mitch destroys parts of Central America; 54 countries hit by floods, and 45 by drought; Earth hits highest global temperature ever recorded.
(See <lwf.ncdc.noaa.gov/oa/climate/research/1998/ann/extremes98.html>.)
- 1999 Launch of the first global sustainability index 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.
(See <www.sustainabilityindex.com>.)
- 1999 Third World Trade Organization Ministerial Conference** held in Seattle, USA. 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 WTO delegates, scuttle the negotiations. The first of many such anti-globalization protests, they signal a new era of confrontation between disaffected stakeholders and those in power.
(See <www.iisd.org/trade/wto/seattleandsd.htm>.)
- 1999 Multilateral Agreement on Investment:** Environmental groups and social activists effectively lobby against the MAI. This, along with disagreement by governments over the scope of the exceptions being sought, leads to the demise of the negotiations.
- 2000 Increasing urbanization:** Almost half of the world's population now lives in cities that occupy less than two percent of the Earth's land surface, but use 75 percent of Earth's resources. (See <atlas.aaas.org>.)
- 2000 The Second World Water Forum and Ministerial** recognizes water security as a critical concern for the 21st century.
(See <www.worldwatercouncil.org>.)

- 2000 UN Millennium Summit and the MDGs:** The largest-ever gathering of world leaders agrees to a set of time-bound and measurable goals for combating poverty, hunger, disease, illiteracy, environmental degradation, and discrimination against women. Now known as the Millennium Development Goals, they are to be achieved by 2015. (See <www.un.org/millenniumgoals/>.)
- 2000 Miss Waldron's red colobus monkey declared extinct.** It is the first extinction in several centuries of a member of the Primate Order, to which human beings belong. According to the IUCN Red Book, 11,046 species are now threatened with extinction. (See <www.wcs.org/wcspubs/wcsreports/460606/>.)
- 2004 Wangari Muta Maathai awarded Nobel Prize.** Founder of the Greenbelt Movement in Kenya, she is the first environmentalist to be awarded a Nobel prize. (See <nobelprize.org/peace/laureates/2004/>.)
- 2004 HIV/AIDS pandemic in Sub-Saharan Africa.** In 2004 alone, 2.5 million people in the region die of AIDS and over three million become newly infected. With only 10 percent of the world's population, the region is home to more than 60 percent of all people living with HIV. (See <www.unaids.org>.)
- 2005 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. (See <www.iisd.ca/process/climate_atm-fcccintro.htm>.)
- 2005 Millennium Ecosystem Assessment released:** 1,300 experts from 95 countries provide scientific information concerning the consequences of ecosystem change for human well-being. (See <www.millenniumassessment.org>.)
- 2005 Further signs of global climate change:** Thinning of glaciers and the polar ice caps increases. Evidence suggests that the increase in frequency and severity of hurricanes in the Atlantic and related storm damage may be attributable to climate change. (See <www.ucsusa.org/global_warming/science/hurricanes-and-climate-change.html>.)
- 2002 World Summit on Sustainable Development** is held in Johannesburg marking 10 years since UNCED. In a climate of frustration at the lack of government progress, the Summit promotes "partnerships" as a non-negotiated approach to sustainability. (See <www.johannesburgsummit.org>.)

- 2002 Global Reporting Initiative (GRI):** After five years of a multi-stakeholder, consensus-building process, GRI releases its guidelines for how organizations should report on the economic, environmental, and social dimensions of their business activities. (See <www.globalreporting.org>.)
- 2001 Terrorists representing anti-Western, non-state interests and ideologies, attack the World Trade Center and Pentagon,** marking the end of an era of unhindered economic expansion. Stock markets and economies stumble and the United States gears up for a war on terrorism.
- 2001 Fourth Ministerial Conference of the World Trade Organization,** held in Doha, Qatar, recognizes environment and development concerns in the final Declaration. NGOs and the WTO agree to re-interpret the Agreement on Intellectual Property Rights regarding access to medicines and public health. (See <www.ictsd.org/ministerial/doha/>.)
- 2001 China joins the World Trade Organization,** accelerating national structural economic changes. The accession signals China's emergence, together with India and Brazil, as major new forces in the global economy.

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