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350.org. http://350.org/

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History

Planet Earth is around 4.54 billion years old. During that time the biological world of plants and animals has evolved from the physical world of rocks, air, and water, and the social world of human societies has evolved from the biological world. If the planet's history is imagined as taking place in one day, then it took until 4:00 a.m. for life to begin, and until 9:52 p.m. for plants to colonize the land. Mammals did not evolve until 11:39 p.m., and humans did not appear until 11:58:43. In just a moment before midnight, people on planet Earth began to become concerned about sustainable development.

A Relational View of Reality, History, and Sustainability

Throughout history, people (the human part of nature) have organized themselves in various ways (or been organized by others) to use various technologies to work with the rest of nature to produce the goods and services they need or want. Figure 1 shows what is involved. The economic structure of society depends on natural resources (for example, land, metal ores, water) and services (for example, soil fertility, waste treatment) and combines these with labor (workers) and technology (machines), under social relations of production. Such relations vary among kinds of society (slavery, feudalism, capitalism, state socialism, etc.) and have to do primarily with social class or the ownership and control of the forces of production. Because the forces and relations of production are closely related, changes to social relations will necessarily involve changes in society's relationship with nature, and vice versa.

A society also has a social structure consisting of state institutions to govern or regulate social processes and other institutions such as political parties, the media, and the nongovernmental organizations of civic society. A further part of the social structure consists of the cosmology (worldview) and beliefs held by members of society and propagated through such channels as education, government, and the media. Figure 1 provides a means of understanding the assemblage of ecological and social relations and processes that constitute a society. It also reminds us that our understanding of sustainability and sustainable development (and everything else) is both socially and ecologically influenced. As part of the box labeled cosmology and ideology, it is a product of the social relations we are part of and influenced by the ecological relations we perceive. The term *ideology* suggests that our understanding may be false. It may be an understanding that sustains the interests of those with wealth and power and fails to reflect our true interests and concerns.

What should those interests, the common interests of people, be? Clearly we have an interest in the long-term

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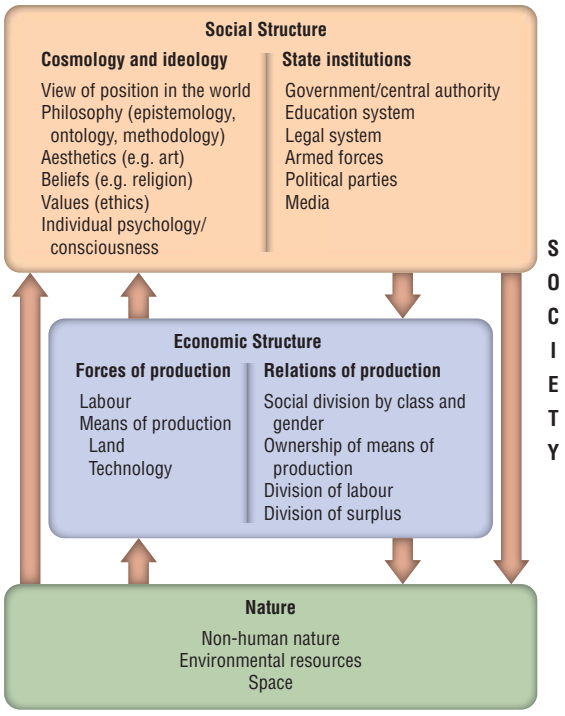

SOURCE: Huckle, John, and Adrian Martin. 2001. *Environments in a Changing World*. London: Prentice Hall.

Figure 1. Society: social structure, economic structure, and nature. *(Reproduced by permission of Gale, a part of Cengage Learning.)*

viability of the ecological systems that support us. Our societies are sustainable if they have the capacity to endure because we care for one another and the rest of nature. In their relations with the environment, sustainable societies need to exercise stewardship, conserve resources, practice environmental management, and consume within limits set by ecological systems. In their relations with one another, sustainable societies need to devise appropriate social systems (economic, political, and cultural systems, involving products, technologies, laws, planning, media, education, lifestyles, etc.) to allow them to live sustainably. Because the most commonly recognized definitions of sustainability focus on providing quality of life for human and nonhuman nature, sustainability and sustainable development inevitably rest on ethics. Franz Hartmann (1998) suggests the kinds of relationships that need to be sustained:

1. Relationships between humans based on: mutual respect and tolerance, equitable access to food, clothing, health care, shelter, and meaningful work; freedom of thought and ability for mental development; democratically determined political and economic decisions.
2. Relationships among humans and other species where the attempt is made to minimize human domination of and impact on other species.
3. Relationships among organisms and their environment which have created the climate, hydrological cycle, radioactive levels, and other environmental conditions (i.e., ecological processes) that we have experienced throughout most of human history. (Hartmann 1998, 340)

Modernity, Capitalism, and Globalization

For the purposes of understanding the history of sustainable development, a suitable starting point is the early modern period from 1500 to 1800 in Western Europe. (Clive Ponting [1991], Jared Diamond [2005], and John Huckle and Adrian Martin [2001] provide environmental histories of the world that cover premodern times.) The early modern period saw European expansion into much of the world; the scientific, agricultural, and English revolutions of the seventeenth century; the Enlightenment of the eighteenth century; the French Revolution of 1789; and the beginnings of the English Industrial Revolution. It resulted in the establishment of a civilization and system of states that became associated with modernity and the West, and that were later to gain world dominance.

The rise of modern societies involved three main elements: new ways of organizing economic production and distribution that allowed the rise of capitalism; the development of the modern state; and the rise of science and modern ideology. The private enclosure of common or communally held land was the principal means by which the means of production (Figure 1) were taken into private ownership, and labor, deprived of its means of subsistence, was forced into factories.

Under capitalism, human and nonhuman nature became a means of making profit or a return on capital investment. Competition between capitalists drives down working conditions and wages and intensifies environmental degradation, while their need to find profitable ways of investing ever larger amounts of capital drives economic growth. Nation states seek to protect and manage capitalism and growth within their borders. This task becomes difficult at times because capitalism shows long waves of growth and decline linked to changing products and technologies within which shorter cycles of boom and bust are embedded. Science and technology play key roles in initiating and sustaining these long waves while ideology may serve to conceal their true social and environmental costs.

The search by European capitalists for new resources, markets, and profitable investments led to

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globalization, or the increasing significance of social processes and interactions operating at interregional and transcontinental scales. Flows of material, capital, and information across borders accelerated during the twentieth century and resulted in global environmental problems of three kinds: those related to the global commons (for example, overfishing and climate change); those concerning population growth and resource depletion (desertification, water shortages, species loss); and those resulting from transboundary pollution (acid rain, nuclear fallout). Cultural, intellectual, and scientific networks now document these problems while international political networks and organizations seek to monitor and regulate them using a growing number of regional and global institutions, laws, conventions, and protocols. These networks and organizations shape (and are shaped by) national and local political institutions, movements, and struggles, and sustainability and sustainable development are now concepts that are central to the politics of the environment and development at all levels of global society (Held et al. 1999).

Early Concerns Relating to Sustainable Development (1500 to 1950)

In the early modern period (1500 to 1800), European expansion resulted in the demographic and ecological transformation of the Americas while agricultural development led to resource shortages and land degradation. With the Industrial Revolution of the late eighteenth century, humanity's power to degrade the environment expanded greatly with the introduction of new sources of energy, new productive processes, and poorly regulated urbanization. Demand for food and raw materials, together with the need to reinvest surplus capital, led to the exploitation of Australasia and the Indian subcontinent and free-wheeling frontier capitalism in North America. The modern period from 1800 to 1945 witnessed the ecological transformation of European colonies, some global extinctions of species, a significant contribution to the cumulative impact of global warming, much local resource exhaustion, the agricultural transformation of many rural environments, and increases in air, soil, and water pollution. It also saw the birth of modern ideas of progress, early debates over population growth and resource shortages, and political demands for new kinds of social and environmental relations.

The idea of progress is older than that of development, having its origins in religious notions of the gradual unfolding of God's design for the earth and humankind. The English philosopher Francis Bacon (1561–1626) suggested that science would enable the domination of nature, and during the subsequent Enlightenment (1750 to 1900), progress lost its religious associations and became linked to the application of science and technology that promised an industrial revolution and economic growth. The French philosopher and mathematician René Descartes (1596–1650) put forward the idea that nature could be understood by the use of reason. Only people possessed rationality: this separated them from the rest of the natural world, which, lacking rationality, could be regarded as a machine. His mechanistic worldview removed ethical constraints on what could be done to other living things and the earth and underpinned advances in science in the late seventeenth and eighteenth centuries.

Rationality was also applied to politics and economics. Seventeenth- and eighteenth-century thinkers such as John Locke, Thomas Jefferson, and Voltaire concerned themselves with the idea of a rational political order. The Scottish economist Adam Smith (1723–1790) sought to portray capitalism and the market as a rational economic order; he regarded self-interest as natural but thought it could be harnessed for the general good. Whereas Smith welcomed the creation of new desires that followed from human development, the French philosopher Jean-Jacques Rousseau (1712–1778) thought that desires beyond the need for food and shelter contributed to unhappiness. He held that the route to happiness lay in abandoning society and returning to life as a natural being in a natural world. Rousseau's ideas inspired the early-nineteenth-century Romantic movement and were later echoed in the green movement and green politics (Clayre 1977).

The concept of sustainability was used in German forestry circles in the early eighteenth century. At that time concern arose about population growth, with the English economist Thomas Malthus (1766–1834) arguing in 1798 that the tendency of population toward geometric growth meant that it would always outstrip the growth in food supply. He suggested that the poor laws, which provided relief for unemployed laborers, should be abolished (the destitute should be left to die) and was criticized by the English writer and philosopher William Godwin (1756–1836) and by socialists. Godwin, the first advocate of anarchism, proposed a utopian society without property and self-interest and thought moral constraint was the key to reducing population growth; socialists saw the solution in improved economic and social organization, more advanced technology, and a consequent rise in living standards.

Socialism provides a radical critique of social and environmental relations under capitalism and urges both political and economic democracy. As early as the 1640s, English protest movements known as the Levellers and the Diggers sought to protect land as common property, but it was not until the nineteenth century that the

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German political philosopher Karl Marx (1818–1883), together with his compatriot Friedrich Engels (1820–1895), and William Morris (1834–1896), a prominent English cultural figure and advocate of socialism, laid the foundations of ecological socialism. Marx and Engels suggested that Malthus's "law" of population was neither universal nor necessary, and that the cause of poverty and misery was not overpopulation but oppressive economic and political structures. They were critical of Malthusian natural limits, believing that science and technology offered the prospect of societies of abundance in which everyone's needs were met. Some see Marx and Engels as accepting the then prevailing notions of industrialism and ever-increasing production; but they did acknowledge that all human development relies on naturally given conditions and limits to social activity. In 1894 Marx noted that capitalist agriculture destroys soil fertility as food is transported to the town and waste is no longer returned to the countryside, while Engels had earlier suggested that people should not "rule over nature as a conqueror over foreign people, like someone standing outside nature" but should "know and correctly apply its laws" (Engels 1950 [1876], 82).

William Morris is widely credited with developing the key principles of ecosocialism. He critiqued both capitalism and industrialism (both the relations and forces of production) and advocated a return to communal societies, living in harmony with nature, in which there is useful and satisfying work for all. In his 1890 utopian novel *News from Nowhere*, he envisaged a future society based on common ownership and democratic control of the means of production. Many of the relationships outlined above are to be found in this utopia.

In his *Principles of Political Economy* of 1848, the English philosopher John Stuart Mill (1806–1873) published a chapter on the idea of a "stationary state economy," one with levels of capital, wealth, and population that are not growing. He stressed the value of leaving parts of nature untouched to meet people's spiritual and aesthetic needs; these ideas were taken up by advocates of steady-state economics in the twentieth century.

In 1903 the English reformer Sir Ebenezer Howard (1850–1928) planned and supervised the building of Letchworth, the world's first garden city, forty miles north of London. He sought to combine the advantages of the town and countryside while avoiding their disadvantages. By bringing the countryside into the town, providing work and leisure facilities close to homes, and fostering community, his plans sought to reduce alienation, pollution, and the need to travel. Howard's ideas were the origins of more recent urban planning that seeks more sustainable cities.

The organized environmental movement in North America was started by the American naturalist John Muir (1838–1914), a Scottish emigrant whose writing and campaigning led to the establishment of Yosemite National Park in 1890 and the founding of the Sierra Club in 1892. At the same time Gifford Pinchot (1865–1946), a conservationist, was advocating "sustained yield" forestry and in 1905 was appointed by President Theodore Roosevelt as the first director of the Forest Service of the US Agriculture Department. Pinchot followed the utilitarian principle of the English philosopher Jeremy Bentham (1748–1832) in suggesting that sustainable forestry gave "the greatest good for the greatest number over the longest time"; his "wise use" position is essentially utilitarian. Pinchot and Muir argued over wise use versus preservation, an argument that was later to be refocused on strong and weak versions of sustainability.

In *A Sand County Almanac* (1949), the American ecologist Aldo Leopold (1887–1948) called for a land ethic by which "a thing is right when it tends to preserve the integrity, stability and beauty of the biotic community. It is wrong when it tends otherwise" (Leopold 2001). This ethic is anthropocentric, arguing that healthy ecosystems serve long-term human interests and that it is not sensible to destroy species and habitats if the long-term consequences are not known. Leopold's argument is known as the precautionary principle.

Sustainable Development Comes of Age (1950–1990)

By the mid-twentieth century many of the excesses of capitalism had been tamed, and it was evolving in very different ways in different countries. From 1945 to 1970 it enjoyed a "golden age" in the advanced economies of the West, largely owing to the Bretton Woods system of monetary management, which in 1944 established rules for commercial and financial relations among the world's major industrial states. The system provided an anchor for the global economy, allowing countries to pursue full employment policies and avoid financial crises. New products such as the motor car and television facilitated economic growth and the rise of consumer societies, and pressure from workers and citizens led to the establishment of socially democratic or welfare states that guaranteed new kinds of rights, such as rights to health care, education, environmental protection, and protection against unfair dismissal from employment.

The state socialist societies of the Soviet Union, Eastern Europe, and China were now established and following

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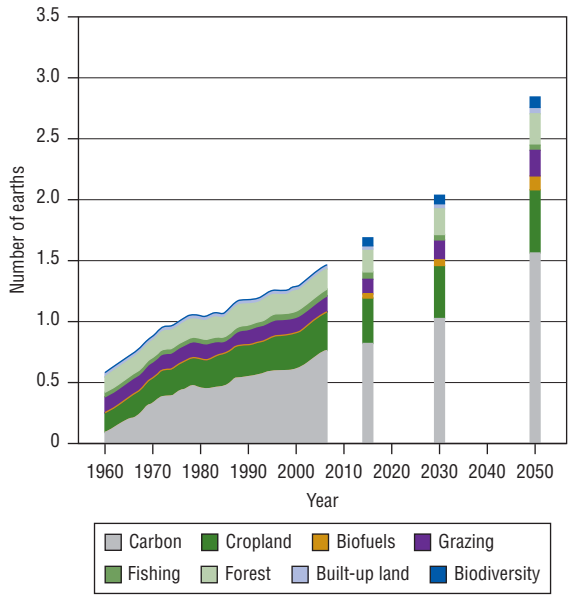

SOURCE: Global Footprint Network. 2010. Available from http://www.footprintnetwork.org/press/LPR2010.pdf.

Figure 2. Today, humanity uses the equivalent of 1.5 earths to provide the resources we use and absorb our waste. This means it now takes the earth one year and six months to regenerate what we use in a year. In 1960 humanity needed only 0.5 planets. On a "business as usual" projection it will need three planets by 2050. *(© WWF. Living Planet Report 2010. p. 41 Figure 35b. wwf.panda.org. Some rights reserved.)*

their own distinctive paths to development, while former colonial states in the global south were finding development difficult. Their increasing poverty and underdevelopment became matters of mounting concern.

Although modern environmentalism has earlier roots, it took off in the late 1960s and early 1970s as members of the first generation to grow up in welfare states joined a new social movement that focused attention on issues affecting the environment and the quality of life. Environmentalism flowered alongside movements concerned with such issues as peace, global poverty, and women's rights, and encouraged governments to introduce new agencies, laws, and regulations to protect the environment. Globalization quickened pace after 1945, as did the global networks monitoring and seeking to ameliorate global problems relating to the environment and development. Green political parties and organizations such as Greenpeace and Friends of the Earth were founded at this time, and the first Earth Day was held in 1970. Figure 2 shows humanity's steadily increasing global footprint from 1960 to 1990.

By the late 1960s the golden age of capitalism was drawing to a close as producers found it increasingly difficult to sell all they could produce and rates of profit declined. Following speculative attacks on the dollar, a weakened United States unilaterally terminated the dollar's convertibility to gold in 1971. As a result, the Bretton Woods system ended, and many fixed currencies became free floating. This change paved the way for the liberalization of financial markets that began in the 1970s and picked up speed in the 1980s following the worldwide recession of the mid-1970s. Exchange controls were lifted and formal restrictions on credit abandoned. There was a gradual shift from a debt-averse world to a debt-sodden world as financial markets lost their moral anchor and engaged in reckless and fraudulent behavior. In the emerging era of economic neoliberalism, financial products and services were seen as the means of reviving capital's fortunes. But all was to end in disaster with the financial crisis of 2008. While it is "masked by a lot of rhetoric about individual freedom, liberty, personal responsibility and the virtues of privatisation, the free market and free trade" neoliberalism refers to a project "desgined to restore and consolidate capitalist class power" (Harvey 2010, 10). It has resulted in a growing centralization of economic and political power, growing inequality, and lobbying by its supporters to weaken regulations that protect citizens and the environment.

Environmentalism

Environmentalism as a social movement drew inspiration from certain key events, personalities, and publications. As early as 1962 Rachel Carson (1907–1964), an American biologist, warned in the book *Silent Spring* of the dangers of pesticides to wildlife and challenged the arrogance of much science and technology. In works published in 1966, both Barbara Ward (1914–1981), an English economist, and Kenneth Boulding (1910–1993), an American economist and educator, compared the earth to a spaceship and urged conservation of the biosphere, which acted as spaceship earth's life-support system (a message that was given extra impact by early pictures of the earth from space). In a 1967 book, the English economist E. J. Mishan (b. 1917) drew attention to the costs of economic growth, repeating the economist John Kenneth Galbraith's argument outlined in *The Affluent Society* (1958) that gross domestic product is a very poor measure of human welfare (Galbraith 1998). In his 1968 essay "The Tragedy of the Commons," the ecologist Garrett Hardin (1915–2003) recognized the danger that individuals, acting rationally in their own self-interest, might deplete a shared resource (for example, through overfishing or overgrazing) even though it is not in their long-term interest to do so.

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Paul Ehrlich (b. 1932), an American ecologist, revisited Malthus in his 1968 book *The Population Bomb*, forecasting disaster if humans failed to control population growth. Similar pessimistic scenarios resulted from a study involving a computer simulation of trends in population, pollution, and resource use, run by a team of young scientists at the Massachusetts Institute of Technology. *The Limits to Growth* (Meadows et al., 1972) attracted much attention, but critics questioned the assumptions underlying the computer model and the way in which it discounted ingenuity and the potential for adaptation in human societies.

Under pressure from environmentalists and those concerned about world poverty, governments and the international community were prompted to act on issues of the environment and development. The first United Nations (UN) Conference on the Human Environment was held in Stockholm in 1972. Here Indira Gandhi, India's prime minister, told the conference that "poverty is the worst pollution," echoing the views of those in the global south who regarded environmentalism as a Western luxury that they could not afford. Because conservation and environmental protection were seen as barriers to development and poverty reduction, the global community needed to find a compromise that would allow development and conservation to be seen instead as interdependent and mutually beneficial.

The Sustainability Concept

The 1972 UN conference led to the establishment of the United Nations Environment Programme, whose first director, Maurice Strong, used the term *eco-development* to express this compromise. In "Blueprint for Survival," Edward Goldsmith and colleagues had described a stable Britain that could be "sustained indefinitely while giving optimum satisfaction to its members" (Goldsmith et al. 1972, 23), whereas the *Limits to Growth* study had speculated on a "condition of ecological and economic stability that is sustainable far into the future" (Meadows et al. 1972, 24). The concept of a sustainable society was also explored by the World Council of Churches in the 1970s in ways that linked it to the need for equity and democracy.

The term *sustainable development* was defined in *World Conservation Strategy*, produced by the International Union for Conservation of Nature and Natural Resources (IUCN), as "the integration of conservation and development to ensure that modifications to the planet do indeed secure the survival and well-being of all people" (IUCN 1980, Section 1.2). The *Strategy* stressed the importance of incorporating conservation into development planning, identified the causes of habitat destruction, and called for a new development strategy in ways that echoed the Brandt Report, a review of international development issues published in the same year. It did not discuss the economic and political changes that would be needed to bring about sustainable development, and this task of making the idea politically acceptable fell to the World Commission on Environment and Development (WCED), set up in 1983. In 1987 the WCED published the Brundtland Report (*Our Common Future*), which defined sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1987, 43). Behind mainstream advocacy of sustainable development was the vision of a system of global welfare modeled on the socially democratic state. Rich states were to help poor states with increased flows of investment, trade, aid, and appropriate technology, partly because it was their moral duty and partly because such help was in their own interests. By the late 1980s, however, neoliberalism had succeeded social democracy as the dominant ideology shaping national and international politics and the recommendations seemed increasingly unrealistic. Whereas social democracy offers citizens certain rights and protections as part of the social contract, neoliberalism seeks to remove these as its proponents suggest that they restrict the operation of free markets and lead to an over large state.

The late 1960s saw the emergence of the New Left, with critical social theorists suggesting that science and technology were not neutral instruments of progress and that capitalism's hold on society was largely due to its associated technology, bureaucracy, consumerism, mass media, and instrumental rationality. Texts such as *To Have or To Be?* (1976), by the American social philosopher Erich Fromm, and *One-Dimensional Man* (1964), by the American political philosopher Herbert Marcuse, questioned materialism, while in *The Closing Circle*, the ecosocialist Barry Commoner (1971) suggested that the US economy should be restructured to reflect the laws of ecology, substituting natural products like soap and cotton for polluting products like detergents and nylon. Herman Daly (1977), an American ecological economist, developed Mill's idea of steady-state economics, and during the 1980s advocates of ecosocialism and green politics engaged in much debate, with the latter group critiquing industrialism and favoring such notions as bioregionalism, decentralization, and appropriate technology (Weston 1986; Dobson 2007).

By 1990 the contradictions surrounding mainstream ideas of sustainable development had come under discussion (Redclift 1987). The environmental and social costs of state socialism had been exposed, and sustainability advocates had suggested alternatives (Bahro 1978).

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André Gorz (1985) had argued that new technologies offered the prospect of postindustrial and sustainable forms of socialism, while other radical thinkers and movements (for example, deep and social ecologists; ecofeminists; and those concerned with environmental justice, spiritual ecology, and postmodern science) offered their own perspectives on sustainable development (Merchant 2008).

Sustainable Development Fails to Break Through (1990 to 2012)

The first UN Conference on Environment and Development (UNCED) took place in Rio de Janeiro in 1992 as a direct consequence of the 1987 Brundtland Report. UNCED drew up conventions on climate, biodiversity, and forests; called for an Earth Charter or set of universal principles to guide human development; and published Agenda 21, a framework for action to achieve sustainable development in the twenty-first century. Agenda 21 proposes a bottom-up approach that emphasizes the role of citizens, communities, and nongovernmental organizations alongside the market, trade, and business. It stresses the importance of capacity building (adequate knowledge and institutions), integrated approaches, and education, but is silent on significant issues including consumption patterns, population, militarism, and international debt. National and local governments subsequently drew up their own versions of Agenda 21, with implementation coordinated by the Commission on Sustainable Development.

Following UNCED, sustainable development sank on the international agenda. This was largely because of the continued rise of neoliberalism, its agenda of deregulation and privatization, and its dislike of government at all levels. As a new wave of capitalist development emerged in the West, based on information technology, biotechnology, and financial services, globalization accelerated, manufacturing shifted to Asia, and prospects for development in poor countries were increasingly linked to free trade and free markets. Millions of people were lifted out of poverty in the two decades after 1990, particularly in India, China, and Brazil, but inequalities grew within and across societies. As humanity's global footprint continued to increase (Figure 2), some considered sustainable development to be an oxymoron, or contradiction in terms, given prevailing forms of capitalist development (Sachs 1999).

The poor countries of the global south, in the aftermath of UNCED, failed to persuade the rich countries of the global north to fund their sustainable development, and the World Summit on Sustainable Development, held in Johannesburg, South Africa, in 2002, was a disappointment. The United States attempted to block any targets or timetables, and no new commitments were made to increase aid, relieve debt, or tackle the crisis of falling commodity prices. US influence was a problem for the sustainable development agenda from the mid-1990s, particularly given opposition by the Republican Party (but also some in the Democratic Party) to nonmarket-based environmental policies and to global agreements viewed as disproportionately burdening the United States. For example, the United States opposed any binding agreements on cutting carbon emissions in an effort to halt climate change. At the turn of the millennium the UN engineered a new compact between rich and poor countries, the Millennium Development Goals, whereby all 193 member states and at least twenty-three international organizations agreed to achieve eight goals by 2015, including that of environmental sustainability.

THE WORLD SOCIAL FORUM (WSF)

The World Social Forum (WSF) is an annual meeting of civil society organizations that meets at the same time as the World Economic Forum to provide alternative answers to world economic problems. It brings together nongovernmental organizations, advocacy campaigns, and activists from the alter-globalization movement to engage in informal debate, exchange experiences, and build proposals to create a more democratic and fairer world. The forum's charter states that it is "opposed to neo-liberalism and to domination of the world by capital and any form of imperialism, and is committed to building a planetary society directed towards fruitful relationships among Mankind and between it and the Earth."

Some locate the beginnings of the WSF in the "Battle for Seattle" in November 1999, in which alter-globalization activists protested against plans by the United States to use trade negotiations to force the rest of the world to accept genetically modified crops and privatize public services. The United Nations has had a presence at the WSF, in the form of United Nations Educational, Scientific and Cultural Organization (UNESCO), since 2001.

In 2011 the WSF took place in Dakar, Senegal, with 75,000 participants from 132 countries. Among the speakers was the Canadian activist Naomi Klein (author of *No Logo*) and Evo Morales, the president of Bolivia. During the meeting participants received news of the overthrow of President Hosni Mubarak of Egypt and the continuing Arab Spring.

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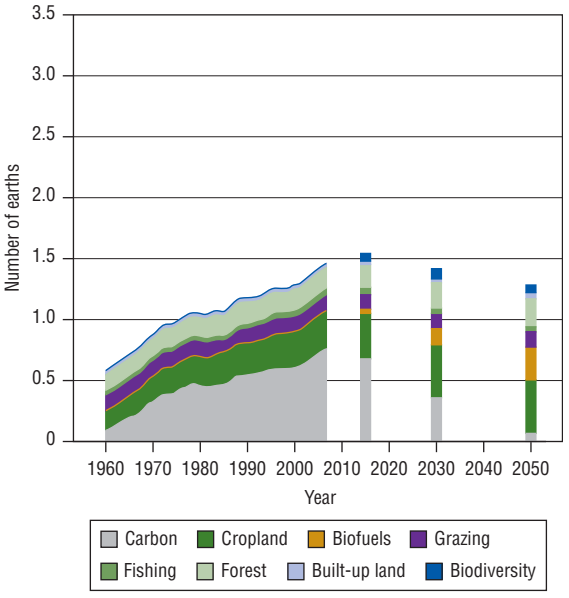
The preference of the World Trade Organization (WTO), created in 1994, for free trade and deregulation posed a threat to poor countries seeking to protect their producers from foreign competition and to countries seeking to create or maintain high environmental and social standards. After a series of WTO judgments that put free trade before the environment, public health, and social welfare, matters came to a head during a 1999 meeting of the WTO in Seattle, where the alter-globalization movement (also known as the anticapitalist or global justice movement) clashed with the authorities. In subsequent years the movement engaged in numerous protests around the world. The World Social Forum (see sidebar) provides its major voice, and following the financial crisis of 2008, it found some expression in the activism of the Occupy movement. After governments in the West bailed out banks and introduced austerity measures that had a disproportionate impact on the poor, members of the movement occupied space in the world's major cities to challenge both growing inequality and the democratic deficit caused by what they considered to be a failed financial system. Many in the movement believe that cooperative living and direct democracy are foundations of sustainability and thus sought to run their encampments on these principles before they were often forcibly evicted.

In 1992 Stephan Schmidheiny, the chairman of the Business Council for Sustainable Development, another arm of UNCED, published *Changing Course*, a manifesto arguing that pollution was a sign of inefficiency and waste and that prices and eco-taxes were preferable to government regulation for encouraging sustainable development. These economic instruments should be used to prompt ecological modernization, a process whereby business does more with less by designing products and processes to conserve energy and resources, recycling waste into the production process. Such "greening of capitalism" draws on ideas about natural capitalism (Hawken et al. 1999), cradle-to-cradle design (McDonough and Braungart 2002), triple-bottom-line accounting (Ekins, Hillman, and Hutchison 1992), product standards, and corporate environmental and social responsibility. Peter Rogers, Kazi Jalal, and John Boyd (2008) provide an overview of mainstream Western theory relating to sustainable development as it existed in the early years of the new millennium.

Drawing inspiration from Franklin D. Roosevelt's New Deal in the 1930s, social democrats suggested that ecological modernization should be the basis of green new deals following the financial crisis of 2008 (NEF 2008; UNEP 2009; SICSWS 2010). Green investment could serve to revive economies and create jobs, but governments would need to act to manage demand, better regulate national and international financial systems for human well-being, and reform the tax system through such measures as a financial transaction tax (known as the Tobin tax, after the economist James Tobin). Ecosocialists, such as Joel Kovel (2007) and John Bellamy Foster (Foster et al. 2010), were critical of such proposals for a green economy, suggesting that only the social control of capital would allow green investment on a sufficient scale in the public interest. They further developed their analysis and suggested that cooperatives, credit unions, open-source software, local economic trading systems, and the policies of some governments in Latin America all provided evidence of democratic alternatives to present realities. David Korten (2010) outlined an agenda for a new economy in the United States based on shared prosperity, ecological stewardship, and citizen democracy, while Tim Jackson (2009) revisited steady-state economics, offering a vision of prosperity without growth. All provided visions of sustainability and our commonalities.



SOURCE: Global Footprint Network, FAO, 2006b. Available from http://www.footprintnetwork.org/press/LPR2010.pdf

Figure 3. Reducing our ecological footprint. The chart shows what would happen to the global ecological footprint if humans obtained 95 percent of needed energy from renewable sources and ate a Malaysian diet. Other trends remain the same. *(© WWF. Living Planet Report 2010. p. 41 Figure 34. wwf.panda.org. Some rights reserved.)*

The Future

Few societies display the relationships that Hartmann associates with sustainability, and world leaders have yet to resolve the problems associated with economic and ecological debt that shape a continuing global crisis. Although it presents a simplistic scenario, Figure 3

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suggests that sustainable alternatives are indeed possible. As the alter-globalization protests of 2011 showed, change can start anywhere and everywhere, as social movements confront different emerging contingencies, contradictions, and possibilities amid the myriad relationships that, as David Harvey (2010) observes, produce and reproduce global society. People in Western liberal democracies may appear to want and vote for the present unsustainable system, but history reminds us that change is inevitable and that desirable change generally requires effort.

See also Brundtland Report; Millennium Development Goals; United Nations.

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Human Rights

Human rights and sustainability are both transnational concepts and thus are best treated in the framework of global, transnational history. That is to say, narrowly focused national histories would not enable us to comprehend the global significance of these ideas. At the same time, the more traditional framework of international history—or the history of international affairs—would also be inadequate given that individuals with their myriad identities (gender, race, class, religion, "normal" or "disabled," and so on) are objects of human rights considerations and sustainable development strategies as much as, or even more than, nations as political entities and economic systems. Human rights, after all, is a principle that is founded on the concept of the unity and diversity of human beings, which have existed since the origins of the species, whereas environmental sustainability has to be understood in the context of the first appearances of the geosphere and the biosphere billions of years ago. The human sphere emerged much later and has interacted with, and made use of, the geosphere and the biosphere, producing food, energy, and raw materials with which to undertake economic development, to such an extent that the sustainability of all three spheres—geological, biological, and human—has become a principal concern of the contemporary world.

The conceptualization of history, in particular of the contemporary period, as global and transnational, helps to establish a connection between human rights and sustainability, for these two are among the significant phenomena of the last several decades. To understand this connection, therefore, we must keep in mind other developments in late-twentieth-century global and transnational history such as globalization, migrations, and

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