

"Hazel Henderson's lucid and vigorous analysis points to a creative and hopeful future, in which cooperation becomes the most dynamic force in the world economy."

—Harlan Cleveland, President, The World Academy of Art and Science

BUILDING A



WIN-WIN

WORLD

LIFE BEYOND
GLOBAL ECONOMIC WARFARE

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An Excerpt From

*Building A Win-Win World:
Life Beyond Global Economic Warfare*

by Hazel Henderson

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CHAPTER 1

GLOBAL ECONOMIC WARFARE VERSUS SUSTAINABLE HUMAN DEVELOPMENT: FLASH POINTS, TRENDS, AND TRANSITIONS

After the Cold War, the six-thousand-year-old competition/conflict paradigm transmuted into the spread of market capitalism, global corporations, and competitive economic warfare. Management theorists and journals such as *Fortune* began to describe the global economy as a jungle or a new military theater for all-out economic warfare. The global economic warfare system collided with trends leading toward more sustainable forms of development. The common definition of sustainable development is “development which meets the needs of the present without compromising the ability of future generations to meet their own needs.”¹

While early writings on the need for a transition to sustainability were widely ignored or rejected, a considerable body of expert political and government opinion now exists that such a transition is urgent and necessary. In *Paradigms in Progress* (1991, 1995), I diagrammed three zones of transition. (See Fig. 1. Three Zones of Transition.) Influencing the emerging consensus on the need for a shift to sustainable development are at least six great globalization processes that are increasingly interactive at all levels and accelerating trends toward global interdependence. These include the

globalizations of (1) industrialism and technology, (2) work and migration, (3) finance, (4) human effects on the biosphere, (5) militarism and arms trafficking, and (6) communications and planetary culture.

The effects of these globalizations, including the erosion of the sovereignty of nation-states, are driving paradigm shifts in many countries toward reintegration of fragmented, reductionist academic disciplines; emerging studies of dynamic interactive systems; and a new focus on the life sciences and futures research. A set of post-Cartesian scientific principles based on a global life-sciences view includes the following: (1) interconnectedness, (2) redistribution, (3) heterarchy, (4) complementarity, (5) uncertainty, and (6) change. Today's post-Cold War landscape, with increasing uncertainty, cultural pluralism, and interpenetration, is producing much cognitive dissonance. Yet the new confusion also leads to the possibility of rapid paradigm shifts, social innovation, and learning. Ethnic, religious, and cultural conflict and negative scenarios, some tinged with nihilism and others bordering on paranoia, are increasing.²

I will not attempt to assign probabilities to any of these trends and scenarios since today's global system is so highly interactive and accelerating toward further interdependence. Seeking certainties can be comfortable but may not be the most realistic course. In a changing world, policymakers will need to scan broadly, make rapid course corrections, and sometimes resort to skillful improvisation. A useful review of recent global modeling finds many academic, business, and government models retrogressing toward competitive and economic paradigms, while grassroots movements are shifting toward sustainability.³ Easily the best global model of sustainability is *Global 2000 Revisited: What Shall We Do?* (Barney, Blewett, and Barney 1993).⁴

A systemic shift from the paradigm of maximizing global economic competition and gross national product (GNP) growth to a paradigm of more cooperative, sustainable development—which in earlier times might have taken hundreds of years—is at least possible in today's interdependent, rapidly evolving world system. Since these are complex, synergistic pathways of interpenetration, we will examine these trends from a cybernetic perspective, identifying key positive and negative feedbacks. As I elaborated in *Paradigms in Progress*, systems theory and dynamic change models are overtaking macroeconomics, which is based on the idea that economies are in a general state of equilibrium.

The basic models of change and growth come from nature. Nonliving and some living systems can be (1) homeostatic and kept in a steady state and structure (morphostatic), like the temperature in a house governed by a thermostat; or (2) living systems that can grow and change shape (morphogenesis), like children or human cities. These two processes are governed by feedback loops, which in the case of number one are *negative* feedback loops damping the effects of change and maintaining stability, and in the case of number two are *positive* feedback loops amplifying themselves and their cross-impacts and pushing the system into new structural forms. (See Fig. 2. Two Cybernetic Systems.) In 1995 the United Nations University Millennium Project was launched to provide a global capacity for early warning on long-range issues. Two hundred futurists and scholars from fifty countries, including myself, participated in the project's feasibility phase.⁵

I will examine the collisions between the historic, global, competition/warfare system and trends toward sustainable development at seven levels of the world system:

1. Global population and the biosphere
2. International and global governance structures
3. The global civil society and cultures
4. Nation-states, domestic policies, and democratic processes
5. Global markets, corporations, trade, and finance
6. Provincial, urban, and local governance
7. Family/community/individual values, ethics, and behaviors

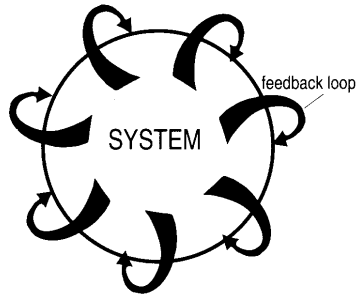
LEVEL 1: GLOBAL POPULATION AND THE BIOSPHERE

Over the next thirty years, global population is projected to grow by nearly two-thirds, from 5.5 to 8.5 billion people. Though this is a projection, substantial growth is inevitable because of the relatively large percentage of young people in today's population. This provides built-in momentum for further population growth, even as the number of children per family declines. Of the 8.5 billion people, about 7.1 billion will live in developing countries, primarily in urban areas. Population in industrialized countries, now 1.2 billion, is projected to rise to only 1.4 billion by the year 2025, with virtually all of that growth occurring in the United States.⁶ The exponential growth of human populations is an example of positive feedback loops at work—people

STABLE, EQUILIBRIATING SYSTEM

(Morphostatic—Structurally stable)

e.g., thermostat-controlled mechanical system; early agrarian or small-scale production economies (as conceived in market equilibrium supply-demand theories); reversible components and decisions

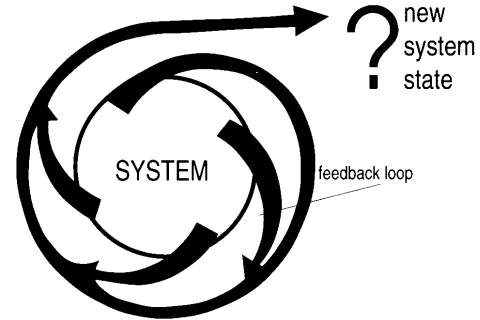


System internally dynamic, but stable structure maintained and governed by *negative* feedback loops.

UNSTABLE, DIS-EQUILIBRIUM SYSTEM

(Morphogenetic—Evolving new structure)

e.g., living, biological systems, human societies; large-scale socio-technical economic systems; rapid innovation and evolving structurally; many irreversible components and decisions



System internally dynamic and structurally dynamic, governed by *positive* feedback loops, which can amplify small initial deviations into unpredictably large deviations, which sometimes break through thresholds and push the system to a new structural state.

Fig. 2. Two Cybernetic Systems

have more children who then have more children—and other complex factors, including declining death rates. Thus growth of sheer human numbers has become a flash point for confrontations over policy and paradigm changes.⁷

Longer-term population growth depends on the course of fertility decline in developing countries, which in turn depends on the effectiveness of family planning programs, progress in reducing poverty and elevating the status of women, and many other factors. A reasonable estimate is that global population will continue to grow, reaching ten billion in the year 2050.⁸ Population growth has a significant impact on the environment, but the relationship is not straightforward. Many other factors—government policies, legal systems, access to capital and technology, the efficiency of industrial production, inequity in the distribution of land and resources, poverty in the South, and conspicuous consumption in the North—interact to modify or amplify humankind's impact on the environment.

In *Paradigms in Progress* I described how population policies of the late 1980s were slowly refocusing beyond contraception to concerns for education and pre- and postnatal health care to prevent early childhood diseases and unnecessary infant mortality. This twenty-year evolution of population policies includes the shift in focus to the Indian Equivalents formula: $I=PAT$. In this formula, I (Impact) is the product of P (Population size) times A (per capita Affluence) times T (damage done by the Technology used to supply each unit of consumption). While the population hawks and doves in the North and South have reached some common ground, such as the IPAT approach, there is a long way to go. Women and children are still pawns in most policies. Raising the level of industrial countries' aid programs in health, family planning, education, and sanitation is a key priority. These programs clash with old paradigms, including those of patriarchy, elite decision making, militant nationalism, free trade, global corporate commercialism, and consumerism.

The cutting edge of population policy will also need to include assessment of the past decade's successes and failures. For example, in China, the greatest demographic experiment in human history has been under way for over a decade: the one-child policy. During the 1980s, as the policy took hold, China was the darling of population hawks. The more serious consequences of this huge, unprecedentedly swift demographic transition are still underreported. How will

China's current small cohort of "little emperors and empresses" cope with the enormous burden of millions of additional older Chinese citizens with life expectancies of seventy years? What will motivate each of these young people to work to support not only both parents but all the additional surviving elders? In just over a decade, China—still a developing society—has taken on the same kind of burdens as the countries of post-industrial Western Europe, North America, and Japan. Intergenerational conflicts are emerging and China's social security and health-care systems are facing huge strains as fewer active workforce participants must support growing numbers of aged dependents.

Only holistic global agreements around population issues can assure that leaders such as China, as well as Singapore, another early experimenter, will be emulated. By 1995, family planning in developing countries had reduced the average number of children born from 6 to 3.5, and China's fertility rate had fallen to below the 2.1 replacement level.⁹ The 1994 UN Summit on Population and Development in Cairo became a flash point as it examined the relationships between population growth, environmental degradation, demographic factors, and sustainable development. Its courageous secretary-general, Dr. Nafis Sadik, suggested a set of goals to be attained by the year 2015. These include reducing the infant death rate from the current 62 to 12 per 1,000 live births; lowering the maternal mortality rate to 30 per 100,000 women; extending life expectancy to seventy-five years in all countries; giving all pregnant women access to prenatal services; entitling all school-age children to complete their primary education; enabling contraception to reach 71 percent of the population; and making family planning information and services universally accessible.¹⁰

More controversial are important policy changes: redistributing land to the poor women who usually produce food on it; allowing women workers to form unions, such as the Self-Employed Women's Association (SEWA) in India; retargeting structural adjustment so that it helps not hurts the poor; taking social and environmental costs into account in trade pacts; and shifting military budgets to civilian sectors. As the EarthAction Network points out, if women's empowerment doesn't include such macro-policy shifts, as well as adequate credit for women's enterprises, mere education will do little but ready women for insecure, minimum-wage, or part-time jobs.¹¹ Similarly,

reproductive health programs must also target male responsibility for birth control and child support as well as the broader issues of declining social safety nets due to the pressures of competitive globalization. All of these issues between patriarchal expansionist paradigms and paradigms of human development are flash points of bitter confrontation.

The increase in population will affect resources and the environment in many significant ways. Population growth will heighten demand for food, energy, water, health care, sanitation, and housing. What is less clear is how the demand for such goods and services will be met and the effect this will have on the environment. A critical challenge for governments is to devise policies that mitigate the environmental and resource effects of population growth and also encourage a slowing in the rate of population growth. The United Nations Development Programme (UNDP) calculates that just 20 percent of government budgets in developing countries (U.S. \$88 billion per year) and 20 percent of bilateral development assistance from the North (\$12 billion per year) would be enough to meet these needs for all humanity. This 20/20 Compact, a win-win proposal at the 1995 UN World Summit on Social Development in Copenhagen, was widely accepted as common sense, but ridiculed in the world's dominant competitive marketplaces and media.

While global population is likely to double between now and 2050, the combined effects of rural-to-urban migration and natural urban population increase mean that urban populations are likely to triple—another flash point for fundamentally new approaches. Given relative population growth rates and incomes, migration pressure appears likely to be strong from North Africa into southern Europe, from Latin America into the United States, from East and Southeast Asia into North America and possibly Japan, and from the southern tier of former Soviet republics into Russia.¹² Migration also occurs within countries. In the United States, there has been continuing migration in recent decades to coastal areas of the Pacific and the Gulf of Mexico; more than 50 percent of the U.S. population now lives within seventy kilometers of a coastal area. In China, there are growing migration pressures from the arid and relatively poor interior to the economically booming coastal provinces. But by far the most dramatic internal migration pattern—found in nearly every country—is migration from rural to urban areas.

The world's population is urbanizing much faster than it is growing. There are several reasons: declining resource availability per capita; shrinking economic opportunities in rural areas; and hopes of jobs, opportunities, and services in urban areas. In virtually every country, per capita consumption of goods and services is higher in urban areas than in rural communities, although gaps are wide between rich and immigrating poor in burgeoning squatter settlements, often without basic municipal services. Urban populations exhibit consumption patterns that are unlike those of rural populations and have a different kind of environmental impact. City residents, particularly in industrial countries, tend to consume more industrial goods and energy-intensive services. Urban populations everywhere create concentrated air and water pollution and solid waste, which can reach crisis proportions in cities experiencing both rapid GNP growth and immigration, such as Bangkok, Thailand; Mexico City, Mexico; and São Paulo, Brazil.

Cities have been experiencing multiple crises of unsustainability. The \$1.2 billion budget gap in Los Angeles caused massive cuts in health and social services to its nine million residents.¹³ Murder rates in Washington, D.C., and Rio de Janeiro, Brazil, reached 60 per 100,000. New York City's tribulations led to a downgrading of its bonds by Standard and Poor's in 1995. City employment fell by nine thousand jobs in the first quarter, and the city's budget of \$31.5 billion required \$3.1 billion to balance. One-shot sales of city assets included a \$2.3 billion "sale" of its water and sewerage systems—a fiscal gimmick of shuffling debt between city agencies.¹⁴

Populations in the industrialized world in 1995 were about three-fourths urban, compared with about one-third in the developing world. Newly industrialized Latin America is already as urbanized as Europe. By the year 2005, half of the world's people will live in urban areas; by the year 2025, that number will be about two out of three.¹⁵ The rate of urbanization is a product of migration and the birth rate among the urban population. In the industrialized world, migration was a gradual process: from 1875 to 1900, the annual rate of urban growth was 2.8 percent.¹⁶ In the developing world, urban populations have grown at an annual rate of about 4 percent from 1975 to 1990. Such rapid urbanization places enormous strain on developing countries to provide the infrastructure necessary to support their populations. By 2025, four billion people in developing countries will be

classified as urban—equivalent to the world's total population in 1975.¹⁷ The UN Habitat II Conference in Istanbul, 1996, is drawing much needed attention to urbanization.

Global collision of the two paradigms continues on additional key issues around population: (1) per capita consumption and waste in industrial societies, the environmental impacts of which are multiplied manyfold over those of populations in developing countries, even though they are growing faster; and (2) the growing consensus that population growth can best be stabilized by educating and empowering women, coupled with the further evidence that empowering women as educators, food producers, and family providers is a key factor in development. For example, one-third of all households worldwide are headed by women. The *Human Development Report*, 1995 found that \$16 trillion is missing from the global economy each year—\$5 trillion represents the unpaid work performed by women and men, and \$11 trillion is the additional unpaid work of women.¹⁸ This crucial role of women in development has been obscured for decades by the competitive GNP-growth paradigm, which deems unpaid production for use-value “noneconomic.” Empowerment of women is opposed by fundamentalists in many patriarchal religious traditions, such as Islam and Roman Catholicism, as well as by many of the world's predominantly male decision makers.

By 1995, other flash points included issues of how to tame the economic warfare in the global casino—fiercely opposed by most bankers, finance ministers, and global, corporate free-trade interests. Women at the 1995 UN Conference on Women and Development in Beijing demanded taxes on currency speculation, arms sales, and global pollution, including my own statement declaring that taming the global casino is a women's issue. In the sustainable development paradigm, economic issues are recontexted holistically as population/environment issues. These clashes are explosive because they involve not only paradigm and behavioral shifts but also a significant rearrangement of social influence and economic/political power.

Growing human populations expanded croplands and reduced forested areas worldwide by 20 percent between 1700 and 1980. In North America, some seventy-two million hectares of forest were cleared. Globally, the pace has accelerated, with more cropland expansion occurring between 1950 and 1980 than in the previous 150 years. Soil degradation has followed; agricultural activity has reduced

the world supply of organic carbon in soil humus by about 15 percent of its original preagricultural stock. Carbon loss occurred at a rate of roughly 300 million metric tons per year over the past 300 years, but within the past 50 years the rate rose to as much as 760 million metric tons per year.¹⁹

It is estimated that since World War II, 1.2 billion hectares, or about 10.5 percent of the world's vegetated land, has suffered at least moderate soil degradation as a result of human activity. This is a vast area, roughly the size of China and India combined. If lightly degraded soil is included, the total affected area rises to about 17 percent of global vegetated land. The most widespread degradation has occurred in Asia, where about 450 million hectares are at least moderately degraded; and Africa, where moderate or worse degradation affects 320 million hectares. For the world as a whole, the principal causes of soil degradation since World War II have been overgrazing, deforestation, and agricultural activities.²⁰

In 1995, the dominant economic growth paradigm calling for more industrialization of agriculture, bigger farms, and increasing fertilizer and pesticide applications (in the name of efficiency) ran into fresh evidence of diminishing returns. World grain stocks fell precipitously in 1995 as measured by the Worldwatch Institute, and by year's end the UN Food and Agricultural Organization corroborated that they were at a twenty-year low, "below the minimum necessary to safeguard world security."²¹ Free trade in agriculture touched off bitter wrangling between the United States and Europe over protecting their respective farm sectors, while their farmers rioted and destroyed their crops for TV cameras. Environmentalists jumped into the debate on cutting farm subsidies in both the United States and Europe. U.S. environmentalists formed a coalition with the National Taxpayers Union Foundation demanding cuts in corporate welfare of \$33 billion—from the \$1 billion annual giveaway to the mining industry via the Mining Act of 1872 and the \$500 million given to timber companies to subsidize "bargain basement sales" of timber from U.S. national forests, to the \$425 million export-marketing subsidies to agribusiness and \$460 million for another dam in Colorado.²²

The disposal of human waste directly affects the quality of freshwater resources. Contaminated drinking water, in turn, transmits diseases such as diarrhea, typhoid, and cholera. These diseases were widespread during the late nineteenth and early twentieth centuries

in Europe and North America, where they ranked among the leading causes of death and illness.²³ In the 1990s, water wars were predicted for many arid countries. The “Green Revolution” was reassessed in *The Economist* as using too much water and too many fertilizers, thereby creating salinated soils.²⁴ Air pollution in growing cities is reaching levels critical to public health, not only in Mexico City but also in all major cities experiencing rapid GNP growth, particularly in Latin America and Asia.

From 1850 to 1990, the consumption of commercial energy (from coal, oil, gas, nuclear power, and hydropower) increased more than one hundredfold, while use of biomass energy (fuel wood, crop waste, and dung) roughly tripled. The combustion of fossil fuels (coal, oil, and gas) emits carbon dioxide (CO₂) into the atmosphere. CO₂ constitutes the largest source of greenhouse gases, which trap infrared radiation that would otherwise escape into the stratosphere. Since the Industrial Revolution, atmospheric concentrations of CO₂ have increased by about 25 percent. Worldwide consumption of fossil fuel from 1860 to 1949 resulted in the release of an estimated 187 billion metric tons of CO₂. Over the past four decades, fossil fuel use has accelerated, creating an additional 559 billion metric tons of CO₂. Emissions from fossil fuel use have increased 3.6 times since 1950. From 1950 to 1989, the United States was the largest emitter, followed by the European Community and the former Soviet Union. Land use change, including deforestation for agricultural purposes, is responsible for an additional estimated 220 billion metric tons of CO₂ since 1860.²⁵

This flash point had, by 1990, influenced the creation of the Montreal Protocol on chlorofluorocarbons (CFCs) and the *Agenda 21* treaties on climate change and forests. In July 1995, *Scientific American* published satellite photographs of Antarctica’s melting ice packs and data showing that the continent’s temperature had increased 2.5 degrees Celsius in the past fifty years. In its August 3, 1995, edition, *The New York Times* reported data on the depletion of ozone—now less than 40 percent of that measured in the 1960s. The bad news was the national backsliding on implementing and strengthening environmental treaties after multiple backlashes from corporations and state governments and their consultants and scientists.

Clearly, global economic growth is colliding with population and environmental trends, including desertification, ozone depletion,

and the proliferation of space debris in low earth orbits used by commercial satellites. All are challenging the global “business as usual” paradigm and driving the shift toward sustainable development. Key factors in such a shift—the evolution of more efficient and, therefore, environmentally benign technologies, and changes in human values, belief systems, lifestyles, and governance—are explored throughout this book. Wild cards include sudden, nonlinear ecosystem breakdowns, such as rampant viral and bacterial diseases caused by destruction of their former ecological niches, as well as human behavioral factors such as increased international travel, migration, and high-risk lifestyles.²⁶ The sheer drama of clashing paradigms and flash points creates material for the front pages of newspapers and for best-selling books—for example, on the Ebola virus. Environmental issues become more global—beyond the borders of any one nation—requiring holistic, cooperative policies, standards, and agreements between nations as discussed in Chapters 12 and 13.

All these flash points illustrate the unsustainability of expansionist competitive paradigms and are wake-up calls to reframe policies and restructure institutions in fundamental ways.

LEVEL 2: INTERNATIONAL AND GLOBAL GOVERNANCE STRUCTURES

Governance of human societies is changing rapidly in the face of competitive globalized commerce, technology, and finance. Accelerated by the collapse of the Soviet Union and the rising number of breakaway states, membership in the United Nations in 1995 had risen to 187 countries. Some futurists estimate that there will be at least 1,300 countries by the year 2000 (Naisbitt 1994). Local ethnic and traditional rivalries and conflicts have reappeared, such as in the failed states of Somalia and former Yugoslavia. The fall of apartheid and the rise of the new democratic South Africa have provided more optimistic models.

The history of the twentieth century can be viewed as a series of ghastly experiments at governing human societies of unprecedented numbers using hierarchical, competitive, conflict models. These experiments included Stalin’s bloody consolidation of the former Soviet Union and Mao’s repressive efforts to mold a “great leap forward” in China, as well as two world wars to check German and Japanese expansion. Over 95 percent of the experience of human

societies is in managing small, homogeneous populations in long-settled habitats, and we have developed a range of diverse cultural strategies to survive in many different ecosystems. Only some 5 percent of our collective experience has been with warring state systems.

Thus our traditional cultural DNA codes are vital packages of software supplying rules of interaction that have helped human societies to fit sustainably within the constraints of various ecosystem niches. At the turn of the twentieth century, debates about human governance itself became deeper, as we will see in Chapters 8 and 11, and the literature on the decline and fall of earlier human civilizations was reexamined. As we are about to enter the twenty-first century, the de facto global governance exerted by corporations and financiers has been examined more closely by Richard Barnett and John Cavanaugh in *Global Dreams* (1994), and David Korten in *When Corporations Rule the World* (1995).

Human governance and social regulation strategies have ranged from conquest, slavery, and the enforced consolidations of colonialism, to voluntary unions such as the United States of America, the European Union, and the United Nations, with the principles of subsidiarity, sovereignty, democracy, and human rights as checks to maintain diversity. Diversity of cultures and social regulations are as important to human survival as is biodiversity, since these cultural DNA codes represent the collective repertoire of human experience as well as social and behavioral learning. However, few have studied this human cultural storehouse to identify which behavior patterns, traditions, and taboos have historically allowed adaptation to new conditions and improved survival chances. Some studies, such as those of the New Zealand Maori by Andrew P. Vayda and of the Ik people in Africa by Colin Turnbull, have identified how stressed human cultures can develop dysfunctional and even life-threatening values and behaviors, such as those inherent in global competition.²⁷

Today, we need to study cultural DNA codes to see which values and behaviors may improve the survival chances of the human family. If the computerized data bank of these cultural DNA codes (discussed in Chapter 8) had been researched, collated, and analyzed, we might have already found that some of the most useful survival behaviors and values correlate with the essential teachings of the world's great religions. These teachings are summarized in different versions of the Golden Rule and are also principles of cybernetics, systems

analysis, and game theory: “Do as you would be done by.” Honesty, reciprocity, tolerance, cooperation, sharing, and even altruism seem to be enduring values for the long-term governance of human societies. The proactive version of the Golden Rule is pure systems theory: “What would happen if everyone acted this way?” Perhaps we humans already know how to build a win-win world where we share the earth equitably and peacefully with each other and all species.²⁸ Competition is also a useful survival strategy found in most ecosystems, interacting with cooperation as species coevolve. In human societies, competition can evolve from fighting to negotiating. Economic competition can be benign and competition between ideas is vital. Faulty assumptions and hypotheses can be vanquished by the advance of science. A win-win world combines these two strategies, competition and cooperation, with human ethics and creativity.

The contemporary pressures of population growth and eroding environmental quality are, perforce, accelerating human learning via direct negative feedback from nature, such as acid rain and ozone depletion. Since its founding in 1945, the UN, for all its shortcomings, has focused on the great issues before the human family (peacekeeping, education, culture, health, and human rights) while struggling with older doctrines of militarism, economic warfare, and national sovereignty (even when upheld to protect repressive regimes). Since the UN’s first Conference on the Human Environment in 1972 through successive conferences on population, food, habitat, renewable energy, and resources, including the Earth Summit in Rio in 1992 and the Conference on Human Rights in Vienna in 1993, new global patterns have emerged:

1. UN conferences have helped place fundamental global issues firmly on the political agendas of member nation-states.
2. These fundamental global issues have been advanced by the UN in concert (if not always collaboration) with the burgeoning group of civil and nongovernmental organizations (NGOs), both national and global.
3. The mass media, predominantly television and radio, has also advanced these global issues—albeit often inadvertently. Since the issues reflect broad human interests, the images of famine-stricken children dying unnecessarily, burning rain forests, dying fish, and fired oil wells in Kuwait began competing with

more familiar images of military violence and criminal mayhem.

These three interactive processes involving UN actors, NGOs, and mass media are culminating in a slowly developing world public opinion—i.e., another global level of “process governance” is emerging. The proposed expansion of the World Court to include an International Criminal Court (which one day might be televised) is gaining support.²⁹ For decades, UN agencies worked quietly, convening member-states to develop protocols and prototype global governance structures in specific functional areas, such as the International Postal Union (IPU), the International Air Traffic Association (IATA), the World Meteorological Organization (WMO), and the International Atomic Energy Agency (IAEA). These have brought order and much desirable regulation to postal services, airline schedules, air traffic control and safety, weather prediction, and monitoring of nuclear proliferation. None of these global agencies have oppressed people politically since their jurisdictions are so narrow and clearly circumscribed. They have, however, reduced some of the sovereignty of the nations who agreed to them, or to use Harlan Cleveland’s phrase, the nations “pooled some of their sovereignty” voluntarily (Cleveland 1993). *Agenda 21*, signed by 178 governments at the UN Earth Summit in Rio in 1992, involved hundreds of such global agreements, most prominently on use of the world’s forests, on protecting biodiversity, and on climate change. All these agreements address the need to shift human industrial and economic activities into a new, more efficient course, toward sustainable development, and are examined further in Chapters 12 and 13.

Agenda 21 spawned scores of national action plans promoting a shift toward sustainable development. By 1994, presidential-level commissions on sustainable development existed in over forty countries.³⁰ In these national activities, diverse constituencies interacted and learned from each other how to align their efforts toward this more comprehensive national goal. In the familiar tug of war between new paradigms and entrenched interests, implementation of *Agenda 21* by the UN Commission on Sustainable Development was checked by member-nations’ backsliding and unwillingness to pay their share to finance it. In truth, implementation does not require new funds but simply a paradigm shift. Nations merely need to stop financing unsustainable activities, to cease subsidizing waste and pollution. In

the United States, for example, two NGOs, the National Taxpayers Union and Friends of the Earth, proposed a “Green Scissors” budget-cutting campaign setting forth \$33 billion of needed cuts in federal subsidies to corporations. State-level subsidies in the United States, as well as subsidies hidden in unaccounted for social and environmental costs, are also huge—but few researchers are paid to assess them. Shifting the focus of budget priorities challenges entrenched interests and demands much political skill, will, and marshaling of media and public opinion.

The interactions between UN actors, NGOs, the media, and public opinion are driving the sustainable development agenda forward, however. Sustainable development is an integrative paradigm providing a framework that allows the many disparate actors to reframe their issues in a larger context, and unexpected opportunities for synergy and win-win policies often emerge. Backlashes from the dominant paradigm have ranged from the “eco-realism” of economists armed with studies showing that environmental improvements have been made, to new organizations arising in the United States to protect economic freedoms and property rights, to corporations suing environmental activists.³¹ Environmentalists have responded with detailed critiques of their critics. The U.S. Congress has shredded environmental protection legislation on budget and cost-cutting grounds, while the President’s Council on Sustainable Development has proposed win-win strategies.

Just as the Earth Summit in 1992 showed that ecology and economics were two disciplines that needed integration, and participants at its Global Forum of NGOs produced the coalition strategies to push for ecologically sustainable economic development, both the UN’s Fiftieth Anniversary and the Social Summit in Copenhagen in 1995 produced cross-cutting analyses that showed interfaces between all the issues. New policy options were revealed and helped to identify the coalitions that must be built to promote them. Haltingly, the world community is learning systems thinking: how to differentiate between issues that can best be handled by policies at the local and national level and issues that cross national borders. A critical mass of grassroots globalists, socially responsible investors, public officials, and business leaders has yet to form the needed coalitions to face down entrenched interests and institutions. A survey by the Americans Talk Issues Foundation indicates that the American

people, at least, understand the need for regulation of some global activities. Symbolically, 1995 also marked the fiftieth anniversary of the dropping of atomic bombs on Hiroshima and Nagasaki—the most devastating flash point of the twentieth century.

As democracy continues to sweep the world, nations are more skittish about putting their young soldiers in harm's way in televised trouble spots around the world. Many member-states prefer to delegate problems to the UN's blue-helmeted peacekeepers. In 1994 and 1995, surveys showed that a majority of the U.S. public wanted the UN to "take the lead" in dealing with international conflicts. This requires more dependable funding for the UN because many member-states are in arrears; for example, in 1995 the United States owed over \$1 billion. Some world leaders are also receiving more television coverage and general approval for making peace than war and coming to understand that peace treaties are the ultimate in photo opportunities.

At the same time, traditional military definitions of security have been gradually giving way to new definitions of environmental security and human security (from safe streets to secure jobs). This new human security paradigm may allow some further restructuring in UN member-states, and of the UN itself, consolidating focus on preventive peacemaking and sustainable development. Dr. Oscar Arias Sánchez, Nobel Peace Prize winner and founder of the Foundation for Peace in Costa Rica, is a pioneer in persuading countries to demilitarize. Sixteen countries have followed Costa Rica's lead in abolishing its military in 1949. Although these are some of the world's smallest nations, they include Panama and Haiti, which under the leadership of President Aristide began the process of demilitarizing in 1995. Teams from the Foundation for Peace demonstrate the development advantages of retraining armies for police work and civilian and infrastructure projects.³² Guatemala, with its bloated army and human rights and judicial abuses,³³ as well as other Central American countries, cannot fail to notice Costa Rica's progress: a 94 percent literacy rate, universal health care, an exemplary criminal justice system, and increasingly ecological resource management have earned Costa Rica "First World" ranking in the Human Development Index.³⁴

Global military budgets have continued their average 3 percent annual decline since 1985, resulting in a peace dividend of \$935 billion, although most nations used the funds for deficit reduction, i.e.,

paying interest on their past debts. Dr. Arias has proposed a Global Demilitarization Fund to channel future peace dividends, from further projected declines in military spending, into retraining military personnel and converting arms facilities to civilian production.³⁵ Ironically, the five permanent members of the UN Security Council are still the main arms merchants to the world, with the United States shamefully in the lead. About thirty million people are still employed in the world's armed forces, and vast arsenals of nuclear and conventional weapons still remain. The global conflict paradigm is still very much in evidence. Peacekeeping, however, and ways to fund the UN's role in *preventing* conflict (i.e., sustainable development) are rising on the agenda of many member-states and UN agencies.³⁶ (See Fig. 3. Military Spending and the Peace Dividend.)

The UN needs restructuring to recognize its maturation beyond a largely charitable organization to which member-states voluntarily give alms. The UN is now an indispensable global institution that must be strengthened and reshaped to meet global situations undreamed of in 1945: from peacemaking and keeping, to caring for refugees, to cleaning up global pollution and refocusing industrial growth toward sustainable development. The UN must now be placed on a solid financial foundation by making dues from member-states mandatory, with interest accruing on arrears and continued delinquency leading to loss of voting rights, as U.K. Prime Minister John Major observed at the UN's fiftieth anniversary ceremony in New York on October 22, 1995, and the European Union emphasized in 1996.

In addition, several reports and commissions point to the need for the UN to possess the authority to impose taxes, at least on global arms trading and currency speculation, and to impose fees for use of the global commons, such as space, the oceans, Antarctica, and the electromagnetic spectrum.³⁷ The UN could administer tax treaties for international pollution, such as carbon dioxide emissions, and for the repayment of the industrial Organization for Economic Cooperation and Development (OECD) countries' "pollution debt" to the developing countries. This debt is estimated in the tens of trillions of dollars—far outweighing the total debt currently owed by countries of the South to Northern banks. Another imperative is restructuring the UN's Bretton Woods institutions to make their operations democratic, accountable, and transparent.

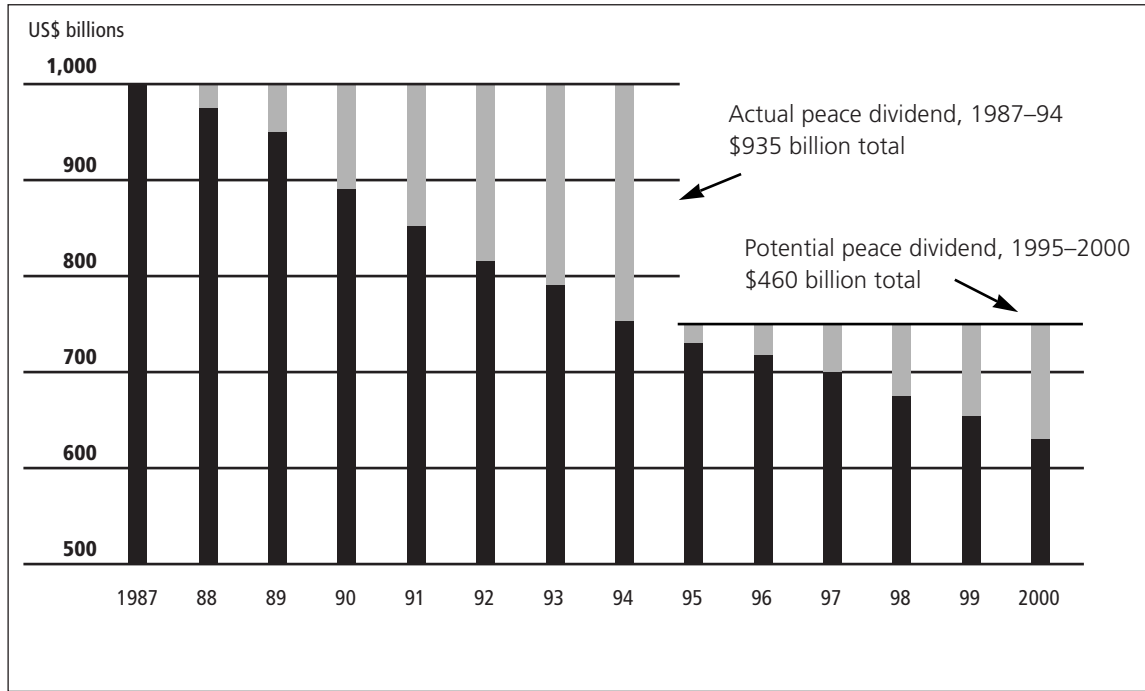


Fig. 3. Military Spending and the Peace Dividend

Source: *Human Development Report, 1994*, United Nations Development Programme

Neglecting the UN and international agreements could be as dangerous for the world in the 1990s as was the refusal of the United States to join the League of Nations after World War I, leading to that organization's demise and later to World War II. We humans do not have to replay that historical drama yet again. The last years of the millennium, with all their flash points and wake-up calls, will be a good time to advance increasingly necessary forms of global cooperation. Such cooperation can not only move human societies toward sustainable development but also integrate fragmented policies and eliminate programs now at cross purposes, at the same time respecting diversity and subsidiarity.

LEVEL 3: THE GLOBAL CIVIL SOCIETY AND CULTURES

As I discuss in Chapter 6, social innovation in many societies comes from the grassroots, not from entrenched elites who tend to be comfortable with the status quo. Therefore, social innovation creates friction with existing institutions and leads to flash points, i.e., opportunities for human learning. The new alliances between NGOs and certain UN and national government actors, together with mass media coverage, are creating a new force in world affairs, the independent civil society, that challenges both nation-states and global corporations. Few textbooks in global geopolitics and economics yet reflect the rise of this "independent sector," both within and increasingly across national borders. Conventional paradigms in political science, international relations, and economics do not embrace this emergent property of democracies and even authoritarian regimes.

The global civil society does not fit within conventional economic theory, with its limited schema of public and private sectors. Thus, the emergence of this powerful sector, along with the informal, unpaid sectors of national economies, has caught most economists by surprise. A recent report, "International Networks for Addressing Issues of Global Change," calls for a global array of nested networks to "cross-pollinate information between business, government, academia, and NGOs."³⁸ The general reaction of decision-making elites to the rising global civil society has been one of alarm, because citizen groups see the issues differently from the official and mainstream interpretations of reality. In "Citizen Movements for Greater Global Equity," in 1976, I described many such citizen groups already working for greater government and corporate accountability, democratic

participation, human rights, social justice, consumer and employee safety, and environmental protection.³⁹

By 1995, the global independent sector had grown by several orders of magnitude (particularly in the United States and Canada, where by 1977 there were over one million such groups in the environmental field alone).⁴⁰ Much of this growth in the 1980s was in response to the laissez-faire policies of the Reagan and Bush administrations. Today, many governmental and business leaders acknowledge that they can't lead or govern without consultation with a wide spectrum of civic groups, as well as the more familiar labor unions and other interest groups. Responses range from advertising, lobbying, and public relations efforts, to educating or engineering the consent of such groups and their legislative allies, to inviting them into executive board rooms and administrative deliberations. The conceptual distance between current leaders and elites and NGO harbingers of democracy is still vast. For example, the 1994 U.S. Institute of Peace conference, "Managing Chaos," was billed as "a national conference on the roles of NGOs, governments, and international organizations in coping with international conflict in the twenty-first century." Its brochure noted "NGOs will replace nation-states in the twenty-first century as the principal actors in managing international conflict."

The UNDP and the World Bank began in 1995 to restructure their approaches and their lending as "partnerships" with civil society groups. James Gustave Speth, administrator of UNDP, in a speech before the "We the Peoples" NGO Conference celebrating the UN's fiftieth anniversary, proudly acknowledged his twenty-year civic activist background. (I had collaborated with him in those days on nuclear proliferation concerns.) Speth coined a new acronym—CSO, for civil society organization—and announced that UNDP would henceforth focus on poverty eradication: i.e., sustainable development to UNDP would mean "development that is pro-poor, pro-jobs, pro-women, and pro-nature." Speth added that most past development had not supported sustainable human development. At the UNDP, the paradigm has officially shifted.⁴¹

Particularly on issues of sustainable development, "first nations" (indigenous peoples) have allied with other civil society groups to do more than put pressure on governments to live up to treaties. Aboriginal land claims, such as those now being adjudicated in Canada, Australia, and New Zealand, are also based on the legitimate

claim that indigenous peoples have been stewards and wise custodians of these ancestral lands—maintaining and enhancing their biodiversity. Court battles for return of these lands are buttressed by the need for more sustainable development. Thus the claims are supported by many other civil society groups, as in the case of eighty-seven thousand people representing forty-four aboriginal nations in land claim settlements in British Columbia, Canada.⁴² In addition, the world has seen citizen organizations as parties to international treaties. In coalition with small businesses and farmers in Denmark, citizen groups helped derail the implementation of the Maastricht Treaty and forced leaders to confront its “democracy deficits.” This triggered popular referenda in France, Norway, and other European countries over democracy, human rights, and social and environmental issues of subsidiarity. Another paradigm had shifted.

The global civil society is driving new intellectual approaches to the fundamental issues facing human societies. These groups are free of mainstream institutional blinders and are often able to envision alternative solutions and demonstrate the effectiveness of their social innovations in their own communities. Such grassroots models include micro-lending to village entrepreneurs; small-scale technologies that are labor and skills intensive, inexpensively raising the productivity of small farmers; and agricultural processes such as those offered by the Post-Graduate College in Chapingo, Mexico. Many local initiatives are networked and supported by Appropriate Technology International,⁴³ on whose advisory council I serve. Fifty exemplary, innovative community models were showcased by the Friends of the UN in 1995. All prove that citizens working together in the informal and independent sectors can solve many problems better than distant government and business leaders. Often what leaders can do is get out of the way by repealing bureaucratic red tape that hampers grassroots self-help. Beneath the headlines of the Mexican peso crisis are such good news stories from Chapingo as well as satellite-fed courses and programs of the Instituto Tecnologia in Monterrey. Mass media could, if refocused, rapidly spread the news about all the pragmatic social and technological innovations to inspire hope and replication. The African continent’s good news in South Africa and Botswana was overshadowed by the massacres in Rwanda, war-lordism in Somalia, and capricious military rule in Nigeria, where General Sani Abacha jailed the democratically

elected president Abiola and the former president Obasanjo, executed civilian protesters, and ran the oil-rich economy into a \$37 billion external debt.⁴⁴

Other flash points include citizen campaigns over the past decade to protest the insensitive, often unjust, and environmentally unsustainable project lending by the World Bank, as well as its loans for structural adjustment. This culminated in the 1994 coalition, "Fifty Years Is Enough," and their campaign to shut down the World Bank if it and the other Bretton Woods institution, the International Monetary Fund (IMF), could not be radically restructured and their lending refocused for sustainable development. Surprisingly, this campaign coincided with laissez-faire views in the United States,⁴⁵ as well as more middle-of-the-road views from *The Economist*, which advocates downsizing the World Bank and the IMF and possibly merging them. The World Bank, as a result of being ostracized at the Earth Summit, hired a few noneconomists and brought in some of its harshest critics to teach its staff about the local impacts of bank loans and policies. One result of this change of direction is the Global Environment Facility (GEF), jointly managed by the World Bank, UNDP, and the UN Environment Program (UNEP). The GEF, under this tripartite management, loaned \$918 million for environmental projects in Mexico alone in 1994. If freed from World Bank control, however, the GEF could shift toward sustainable development and environmental enhancement.

Restructuring the Bretton Woods institutions caught academics and mainstream institutions by surprise. Hundreds of university seminars and conferences were scheduled in 1995 on these issues and the subject of sustainable development. Here again, many corporate and government futurists ignored the early stirrings of citizen movements for perfecting democracy, social justice, and sustainable development. Women form the backbone of grassroots citizen organizations, and their role in global production and development is now being recognized by UN agencies, governments, and businesses.⁴⁶ Current leaders can lighten their burdens by learning to delegate some control to many such responsible and resourceful groups.

LEVEL 4: NATION-STATES, DOMESTIC POLICIES, AND DEMOCRATIC PROCESSES

Nations have become too small to solve the big global problems and too big for their local problems. Rallying cries and flash points have

been around democracy, self-determination, and devolution. These slogans have unwound into an array of Pandora's boxes—offering new learning experiences—from rebellions against Moscow in the Caucasus and Black Sea regions to the drive by U.S. conservatives and Republicans in 1995 to reclaim states' rights from the national government. The confused rhetoric of budget battles has included arguments over unfunded mandates, block grants, and repeal of “onerous national standards,” i.e., affirmative action, civil rights, environmental rules, and so on, and their federal enforcement. All this was in search of traditional American Dream goals of individual liberty, property rights, and the pursuit of happiness. These goals, however, had become intransitive in the complexities of technologically mature, urbanized, industrial societies.

In *Creating Alternative Futures* (1978, 156–58), I noted that Alexis de Tocqueville had foreseen all this as far back as 1835 in *Democracy in America*. He noted, along with his praise and enthusiasm for the American experiment, its tendencies that might lead to *economic* totalitarianism. More persuasive than Karl Marx, de Tocqueville, a systems thinker, reasoned that equality of political condition would lead to increasing incomes, which would lead to greater demand for manufactured goods, which would require greater division of labor. This specialization (which Adam Smith hailed for its efficiency) would increase the relative differences in income and “mental alertness” between workers and owners, which would result in a “manufacturing aristocracy.” As the U.S. “restoration” of 1995 proceeded, others re-sounded this alarm, including Kevin Phillips in *Arrogant Capital* (1994), Michael Lind of *The New Republic* in *The Next American Nation* (1995), following Christopher Lasch's *The Revolt of the Elite* (1995). All predicted that an entrenched, white, elite overclass would continue to prosper while every other U.S. group would shrink to comparative “third world” levels of deprivation.

Second thoughts about devolution and states' rights came not only from advocates of the poor, underprivileged, disabled, children, and the environment, however, but also from business. Nothing is worse for national corporations than complying with crazy quilts of different state laws, taxes, and enforcements. I discovered this while chairing Citizens for Clean Air in New York. Once New York and California were pressured into enacting smog controls on cars, the Detroit auto industry went to Washington demanding that these stan-

dards be set nationwide—as they were in 1968. As then, so in the 1990s. In August 1995, *Business Week* editorialized against devolution as “political hype generating suspicions that the entire effort is a shell game by national politicians to shift the burden of cutting the federal budget to the states.” The lead article, “Power to the States,” traced the history since 1789 of the American tug-of-war between Washington, D.C., and the states over slavery, tariffs, and racial segregation, through the Civil War to the New Deal, when Franklin Roosevelt exercised federal power over labor relations and Social Security was enacted, to Richard Nixon and federal environmental standard-setting.⁴⁷

As most U.S. citizens know, state and local governments in the United States are often the *most* corrupt, dominated by financial and corporate special interests. Local politicians almost routinely line their pockets, thanks to inside information on where airports, roads, and other projects are to be sited, allowing profits for politicians and their friends from real estate and construction deals. As the Republican Congress members dished out federal taxpayers’ dollars to states in block grants for welfare, transportation, Medicaid, job training, and the environment, many observers pointed to the problems of state and local corruption. Worse, there was the inevitable problem of “free riders”: states might compete to shut out the poor and needy while offering their natural resources and “pollution havens” to industry—just as was occurring at the global level. Would this lead to a similar “race to the bottom,” as in the lowest-common-denominator economic playing field and global financial casino, or would it lead to more train wrecks as the two parties collided on the budget?

An earlier flash point during the late 1980s had led to the end of the Soviet Union. Mikhail Gorbachev initiated a new international debate about governance and the state of the world.⁴⁸ His speeches and actions advocating perestroika and glasnost electrified the world, accelerating the inevitable breakup of the Soviet Union and the revolutions in Eastern Europe. It has been a triumph of common sense that so many politicians, regardless of ideology and tradition, have begun moving toward democratization and markets—with the aid of newly free mass media, which has accelerated the inevitable restructuring.

But the new democrats still must avoid several potential dangers. They must not simply equate democracy with other forms of

decentralization, privatization, and markets; and they must avoid being caught up in the widening confusion about the two key individual signals from people to their decision makers in government and business—*votes* and *prices*. Today, these two vital forms of feedback are failing to deliver enough timely information on the effects of policies to guide and correct decisions, both in the United States and Russia as well as every country in the world. Votes every two or four years are too slow and cannot refine voters' feedback on multiple issues, while prices that do not incorporate the full spectrum of social and environmental costs can guide markets into unsustainable paths, as discussed further under Level 5.

Democracy has emerged as a necessary process to manage the complexities of reorganizing human societies for this next quantum leap, as discussed in Chapter 11. Group decision making must now embrace

1. how to control our own population,
2. how to redesign our production and distribution systems to operate within ecological tolerances so as to be sustainable over the long term,
3. how to clean up the backlog of toxic and hazardous conditions created by our unsustainable forms of industrialization, and
4. how to do all this as equitably and therefore as peacefully as possible.

Ironically, the search for the will of the people to guide social change stalled in the United States itself—as in the 1992 and 1994 elections when polls found frustration and mistrust of government run by special interests at an all-time high.⁴⁹ Just as other countries were looking to the United States, Washington, D.C., seemed to be having a nervous breakdown. National policies, old and new paradigms, are clashing before baffled voters, but are not yet seen as part of a systemic shift to more sustainable development.

The same policy flash points around devolution, budgets, joblessness, poverty gaps, and environmental degradation are evident in most OECD countries. Only new sustainable human development paradigms and new systems of national accounts can address these issues. Taxes should be redesigned to discourage unhealthy behavior and encourage healthy, productive activities. For example, governments can reduce today's widespread subsidies to business for often

Obsolescent Sectors (Unsustainable, entropic)

- Industries, companies based on heavy use of nonrenewable energy and materials.
- Bureaucratic, large, less flexible.
- Nonrecyclable products, packaging.
- Military contracting.
- Products involving toxic, nonbiodegradables, polluting materials, throwaway items.
- Planned obsolescence.
- Chemical pesticides, inorganic fertilizers.
- Heavy farm equipment.
- Polluting, inefficient capital equipment, process machinery, processing systems.
- Extractive industries with low value added.
- Fossil fuels, nuclear power generation.
- High-tech, hospital-based medical care.
- Highly processed foods.
- Advertising encouraging waste and polluting practices.
- Shopping center developers.
- Speculative real estate development.
- Large, fuel-inefficient vehicles.
- Monoculture farming.
- Hardwood and tropical forest products.
- Capital- and energy-intensive tourism.

Emerging Sectors (Sustainable, low entropy)

- Industries, companies based on efficient use of energy and materials and human skills.
- Entrepreneurial, small, flexible.
- Recyclable products, remanufacturing.
- Conservation, innovation.
- Fuel-efficient motors, cars, mass transit.
- Solar, renewable energy systems.
- Communications, information services.
- Infrastructure, education, training.
- Space communications satellites.
- Peacekeeping, surveillance of treaties.
- Efficient capital equipment, processes.
- Restorative industries, reforestation, desert greening, water-quality management.
- Health promotion and disease prevention.
- Organic agriculture, low-till systems.
- Integrated pest management.
- Pollution control, cleanup, and prevention.
- Natural foods.
- Waste recycling and reuse.
- Community design and planning.
- "Caring" sector.
- Eco-Tourism.

Fig. 4. Restructuring Industrial Economies

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irrational capital investments, which promote automation and downsizing, and at the same time offer employment tax credits to encourage full employment, or reduce some of the heavy penalties levied on employment. Nations must focus on restructuring wasteful sectors, on redirecting and changing the rules of this global economic warfare game in order to move toward sustainable development. However, forces of globalization, not national governments, are driving these industrial restructuring processes. (See Fig. 4. Restructuring Industrial Economies.) National governments must restructure *themselves*, rethink their roles vis-à-vis local levels, realign priorities, and reconnect with their electorates in new ways if they are to govern effectively. This paradigm shift will take decades.

LEVEL 5: GLOBAL MARKETS, CORPORATIONS, TRADE, AND FINANCE

All countries face the global economic warfare scenario of cutthroat competition, creeping budget deficits, and jobless growth, as well as the other vicious circles described throughout Part I. (See Fig. 5. Vicious Circle Economies.) Yet these vicious circles are now serving as flash points for transition—all the crises in the global casino have provided the needed if painful feedback. Just as feedback from individuals is vital if we are to enhance democracy and improve decision-making processes at all levels, so feedback from consumers is vital to correct prices and guide business decisions and capital markets. By 1995 it was widely acknowledged that the price system does not reflect many social and environmental costs or longer-term impacts of production on future generations. Most economic textbooks advocate discount rates in cost-benefit analyses that systematically lower time horizons by calculations of “present value” that deem worthless any benefits not realized within ten years. This narrow-gauge, short-term maximization formula still underlies most economic decision making, not only in the private-sector markets but also in government projects, bond issues, etc. This formula also pervades macroeconomic management.

The new economics of sustainable development (of less-than-perfect markets and often-irrational actors) is filtering into textbooks, corporate board rooms, and government agencies as well as the business media (for example, *The Economist*, a bastion of economic orthodoxy, via its environmental editor, Frances Cairncross and her book

Costing the Earth). The key theoretical consensus now emerging is that prices, if they are to function as sound feedbacks to markets, governments, and consumer decision making, must accurately reflect, to the greatest degree possible, social and environmental costs. Eco-labeling in Germany, France, Canada, the United States, and other OECD countries now helps consumers choose eco-efficient products. Social and environmental audits are becoming more common in corporate annual reports, as summarized in *Coming Clean*.⁵⁰

Social and environmental treasures that are deemed priceless—national monuments, natural wonders, aesthetic and spiritual values—must be determined by democratic processes, i.e., voting and other enhanced forms of participation discussed in Chapters 10 and 11. A working consensus on the necessity of correcting the pricing system, codified in the OECD's 1970 "Polluter Pays Principle," is shared by the International Chamber of Commerce, the World Business Council for Sustainable Development, the Business Council for the Social Summit, the World Business Academy, and the Social Investment Forums in the United States and the United Kingdom, as well as the Minnesota Center on Corporate Responsibility, the Council on Economic Priorities, the Social Venture Networks in Europe and the United States, and countless professional societies, including the International Society for Ecological Economics, the Society for the Advancement of Social Economics, Economists Allied for Arms Reduction, the International Association of Architects, and various accounting groups and insurance agencies. Such groups have produced new statements of principles embodying these concepts of accountability including, for example, the Caux Principles and the CERES (Coalition for Environmentally Responsible Economies) Principles, with fifty signatories including General Motors and other major corporations and small businesses.⁵¹

This consensus reflects the 1970 Polluter Pays Principle, promulgated by the OECD. However, just as it took twenty years for the Polluter Pays Principle to be incorporated into today's consensus on correcting the price system, implementing the correction of prices at all system levels has just begun. The growth since the early 1980s of socially responsible investment funds is now helping to capitalize emerging sectors of more sustainable economies. Approaches to moving economic decisions toward sustainable development are still fragmented, however.

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