

State of the World 2014

GOVERNING *for* SUSTAINABILITY



THE WORLDWATCH INSTITUTE

State of the World 2014: Governing for Sustainability

“This volume offers a variety of informed and often passionate voices on the interface of environmental degradation and risk with conceptions and models of governance that, if we can summon the will, would promote sustainable management of the global commons. A clear, lively, thought-provoking book, which serves well as a reasoned call to action.”

—**David M. Malone**, Rector of the United Nations University

“Achieving sustainable ways of living is inextricably linked to how we organize work in the future. *State of the World 2014* makes an important contribution by illustrating how trade unions, far from being outdated, will be at the forefront of a just transition. It is a challenging compilation—coming at exactly the right time.”

—**Sharan Burrow**, General Secretary of the International Trade Union Confederation

“For thirty years, the *State of the World* report has helped to map the gathering and then accelerating storm of environmental, climate, and resource crises. Identifying itself firmly with the collective interest of humanity as a whole living in harmony with nature, the annual report has sought to balance authoritative reporting of the increasingly bleak health of the environment with sustainable pathways out of the accumulating crises. In a world of competing sources of authority and power, the pursuit of atomized individual and national self-interests will court planetary disaster. This year’s *State of the World* report has its focus on governance: how, in a world without world government, we can and must make enforceable rules for using finite resources democratically, equitably, and, above all, sustainably, with fallible governments and imperfect markets working together for the common good.”

—**Ramesh Thakur**, The Australian National University, Editor-in-Chief, *Global Governance*

“*State of the World 2014* can be read as a ‘State of the Wealth’

report. Never before has wealth commanded so much power or been so concentrated—even to the point of threatening civilized life. Wealth becomes unable to offer, not just a better future, but any future. Therein lies its weakness and the hope that the major governance shift that sustainability requires can be brought about.’

—Roberto Bissio, Coordinator of Social Watch

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Since 1984, the nonprofit organization Island Press has been stimulating, shaping, and communicating ideas that are essential for solving environmental problems worldwide. With more than 800 titles in print and some 40 new releases each year, we are the nation's leading publisher on environmental issues. We identify innovative thinkers and emerging trends in the environmental field. We work with world-renowned experts and authors to develop cross-disciplinary solutions to environmental challenges.

Island Press designs and executes educational campaigns in conjunction with our authors to communicate their critical messages in print, in person, and online using the latest technologies, innovative programs, and the media. Our goal is to reach targeted audiences—scientists, policymakers, environmental advocates, urban planners, the media, and concerned citizens—with information that can be used to create the framework for long-term ecological health and human well-being.

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Governing for Sustainability

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Dedication

We are in a race between tipping points in nature and our political systems.

—Lester R. Brown, *Plan B* (2008)

The year 2014 marks the fortieth anniversary of the Worldwatch Institute and the thirtieth anniversary of the *State of the World* series, as well as the eightieth birthday of Lester Brown, the man who founded them both. Dedicating this book to Lester is especially apt because it focuses on governance, a topic that he has long recognized as the most powerful obstacle to creating a sustainable future.

When Lester created Worldwatch in 1974, solar panels cost 30 times as much as they do today, and wind power was used mostly to pump water. The first Macintosh computer would not be launched for another decade, and the World Wide Web for nearly two decades. But Lester was convinced that strong winds of change were blowing in fields as diverse as energy, communications, health care, security, and urbanization, and that they would combine to transform the human prospect in profound ways.

Transformational change, as Lester had learned with the Green Revolution, always brings side effects. Often, these side effects are unfortunate, and occasionally they are tragic. Lester wanted to build an agile institution that could anticipate those changes and help shape them in the public interest. He recruited a small band of synthesizers—people who could write clearly about complicated subjects for a general audience—to survey the primary literature for problems and opportunities which they were still small dots on the horizon. He took enormous delight when, in the second year of World-watch's existence, its five senior staff racked up more coverage in the *New York Times* than the entire Brookings Institution.

Lester's early work assessing India's agricultural situation resulted in broad policy shifts that saved millions of lives. His book *Who Will Feed China?* (1995) made him a household name in that vast country. His works on redefining national security helped bring about a shift in the way that military leaders and diplomats around the world view environmental issues. Among his myriad honors, Lester has won a MacArthur Fellowship, the United Nations Environment Prize, the Blue Planet Prize, and 20 honorary degrees. He has no plans to retire.

At the same time, Lester leads a life that is true to his values. He lives modestly and eats a healthy diet. In 2009, he placed third in the 75–79 age group in the Cherry Blossom National Championships 10-mile race in his hometown of Washington, D.C.

Over the last 40 years, Lester has written more nonfiction books than most Americans have read. His books are filled with original ideas that range across an incredibly broad canvas. It is altogether fitting that this book, addressing the most important institutional challenges to a sustainable future, is dedicated to Lester R. Brown.

—Denis Hayes

President, Bullitt Foundation

Founder, Earth Day Network

Former Senior Fellow, Worldwatch Institute

Acknowledgments

Acknowledgments are meant to thank the people who have had important roles in making a book possible. With *State of the World* there are always many such people, and this presents the obvious problem of where to begin. But this year, there is absolutely no doubt about where to begin: with Linda Starke.

As inaugural editor, Linda was present at the creation of *State of the World* when it was launched in 1984. She also edited every subsequent edition through 2013, when she decided it was time to cut back on her workload. The 2014 *State of the World* is thus the first edition in the report's history to have been produced without the benefit of her sharp eye, her legendary skills as a production manager, and her strong, reasoned opinions. That is a remarkable record of accomplishment, and to the extent that *State of the World* has maintained a reputation for clear writing, thought-provoking content, and responsible scholarship, Linda deserves a huge share of the credit.

Stepping into Linda's role is Lisa Mastny, who has already built a reputation for being nimble and meticulous in her editing of multiple other Worldwatch research reports. Continuity and the report's crisp, accessible look are provided by long-time graphic designer Lyle Rosbotham, whose involvement with *State of the World* stretches back more than a decade.

Worldwatch Institute and its projects, including *State of the World*, have benefited over the years from the invaluable financial support of a variety of institutions and foundations. This year, we would like to extend our deepest appreciation to the following: Ray C. Anderson Foundation; The Asia Development Bank; Carbon War Room; Caribbean Community Secretariat (CARICOM); Climate and Development Knowledge Network (CDKN); Del Mar Global Trust; Embassy of the Federal Republic of Germany in the United States; Energy and Environment Partnership with Central America (EEP); Estate of Aldean G. Rhymer; Garfield Foundation (discretionary grant fund of Brian and Birnie Garfield); The Goldman Environmental Prize; The William and Flora Hewlett Foundation in partnership with Population Reference Bureau; Hitz Foundation; INCAE Business School; International American Development Bank; International Climate Initiative (ICI) of the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU); Steven C. Leuthold Family Foundation; The Low-Emissions Development Strategy – Global Partnership (LEDS-GP); MA Royalty Inc. Sustainable Energy Fellowship Program; the National Renewable Energy Laboratory (NREL) and the U.S. Department of Energy; Organization of American States; The Population Institute; Randles Family Living Trust; V. Kann Rasmussen Foundation; Renewable Energy Policy Network for the 21st Century (REN21); Serendipity Foundation; The Shenandoah Foundation; Towson Creek Foundation; Turner Foundation; United Nations Foundation; United Nations Population Fund (UNFPA); Johanette Wallerstein Institute, Inc.; and Weeden Foundation.

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State of the World has found a good home at the highly regarded sustainability publisher Island Press, which is publishing and distributing the report in English for the third year in 2014; thanks once again to Emily Turner Davis, Maureen Gately, Jaime Jennings, Julie Marshall, David Miller, Sharon Simonian, and the rest of their fine team. We also owe a profound debt of gratitude to our international publishing partners for their commitment and hard work in translating, distributing, and communicating the results of the report year after year. Specifically, many thanks to Universidade Livre da Mata Atlântica/Worldwatch Brasil; Paper Tiger Publishing House (Bulgaria), China Social Science Press; Worldwatch Institute Europe; Gaudeamus Helsinki University Press (Finland); Organization Earth (Greece); Earth Day Foundation (Hungary); Centre for Environment Education (India); WWF-Italia and Edizioni Ambiente; Worldwatch Japan; Korea Green Foundation Doyosa (South Korea); FUHEM Ecosocial and Icaria Editorial (Spain); Taiwan Watch Institute; and Türkiye Erozyonla Mücadele, Ağaçlandıma ve Doğal Varlıkları Koruma Vakfı (TEMA), and Kültür Yayınları Is-Türk Limited Şirketi (Turkey).

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As always, the people for whom no thanks can be adequate are this year's chapter and text box authors. This group of outstanding scholars, activists, and journalists gave generously of their time and expertise, coped graciously with our editing requests, and delivered strong content in a timely fashion. They each found a place in their busy lives for contributing a piece of this, the 40th Worldwatch Institute anniversary edition of *State of the World*. We are deeply grateful.

Tom Prugh and Michael Renn
Project Directors
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Foreword

David W. Orr

David W. Orr is the Paul Sears Distinguished Professor of Environmental Studies and Politics at Oberlin College in Ohio.

If men were angels, no government would be necessary. If angels were to govern men, neither external nor internal controls on government would be necessary.

—James Madison¹

Long before the climate crisis was “the greatest market failure the world has ever seen,” it was a massive political and governmental failure. The knowledge that carbon emissions would sooner or later threaten the survival of civilization was known decades ago, but governments have done very little about it relative to the scale, scope, and longevity of the problem. The reasons for their lethargy are many, but one in particular stands out.²

For half a century, a concerted war has been waged against government in Western democracies, particularly in the United Kingdom and the United States. Its origins can be traced back to the most virulent strands of classic liberalism once arrayed against the entrenched power of royalty. Its present form was given voice by Ronald Reagan, who reoriented the Republican Party and much of U.S. politics around the idea that “government is the problem,” and by Margaret Thatcher in Britain, who ruled in the conviction that there was “no such thing as society,” only atomized self interests. Other forces and factions joined in an odd alliance of ideologists, media tycoons, corporations, and conservative economists such as Friedrich Hayek and Milton Friedman.

Many other factors contributed to the hollowing out of Western-style governments. Particularly in the United States, wars and excessive military spending contributed greatly to deficit, impoverishment of the public sector, and declining credibility of public institutions. The rise of multinational corporations and the global economy created rival sources of authority and power. Electoral corruption, gerrymandering, and right-wing media contributed to public hostility toward governments, politics, and even the idea of the public good. The Internet helped as well to partition the public into ideological tribes at the expense of a broad and civil public dialogue.

But the war against government is not what it is purported to be. Indeed, it is not a war against excessive government at all, but a concerted campaign to reduce only those parts of government dedicated to public welfare, health, education, environment, and infrastructure. But conservatives virtually everywhere support higher military expenditures, domestic surveillance, larger police forces, and exorbitant subsidies for fossil fuel industries and nuclear power along with lower taxes on corporations and the wealthy.

The upshot is that the public capacity to solve public problems has diminished sharply, and the power of the private sector, banks, financial institutions, and corporations has risen. As countervailing and regulatory force, the power of democratic governments has eroded, and with it much of the effectiveness of public institutions to foresee, plan, and act—which is to say, govern.

A different pattern has emerged in China, which joins capitalism and authoritarian government. For a time, at least, it has been rather more effective at solving problems associated with rapid growth: building infrastructure, and deploying renewable energy. As the climate and environmental crisis

grows, however, so too the traffic jams, air pollution, water shortages, and public dissatisfaction. It remains to be seen whether the marriage of authoritarianism and public engagement can work over the long term.³

Elsewhere, the number of failed states with tissue-thin governments is growing under the weight of population growth, corruption, crime, changing climate, and food shortages. Poverty and the lack of basic services, including education, contribute to a sense of hopelessness that feeds the anger that drives young men, in particular, into radical groups, further threatening stability. The foreseeable future offers little respite. We face what John Platt once called “a crisis of crises,” each amplified by the others. A rapidly warming Earth occupied by 10 billion people and 193 nation-states, some armed with nuclear weapons, some clinging to ancient religious and ethnic hatreds, and still others holding fast to their economic and political advantages, threatens the survival of civilization.⁴

Warmer and more acidic oceans will be less capable of supporting humankind. Massive storms, rising seas, higher temperatures, and disassembling ecologies will disrupt food production, public health, water systems, urban settlements, transportation, electricity supplies, and the capacity to meet a growing number of emergencies. Climate destabilization will grow worse for many decades to come. Presuming that we stabilize carbon dioxide (CO₂) levels in the atmosphere by, say, 2050, the effects will last for centuries, perhaps millennia, and no society, economy, and political system will escape the consequences. That is where we are headed.⁵

What’s to be done? Of many possibilities, three stand out. First, avoiding the worst that could happen will require sharp reductions of CO₂ emissions trending toward zero by mid-century. We are possibly close to a threshold beyond which climate change will be uncontrollable no matter what we do. To avoid that possibility, we will have to quickly sequester the remaining reserves of fossil fuels that cannot be safely burned. To do so, the choices are roughly to:

- a) confiscate fossil fuels from their present owners; or
- b) compensate their owners, rather like the British ended slavery in the Caribbean in the nineteenth century;
- c) rapidly deploy alternative technologies and thereby render fossil fuels uncompetitive;
- d) geoengineer the atmosphere in order to lower temperatures and buy us time to think of something better to do; or
- e) some combination of the above.

The particularities and perplexities of various policies aside, if civilization is to last, we must permanently remove reserves of coal, oil, tar sands, and natural gas from the asset side of the economic ledger, but without collapsing the global economy.⁶

A second and related priority will be to reform the global economy to internalize its full costs and fairly distribute benefits, costs, and risks within and between generations. By one reckoning, the majority of the costs of economic growth has been offloaded on the poor and disadvantaged. Most of the accumulation of CO₂ presently in the atmosphere is from the industrialized nations.⁷

There is little prospect of a peaceful transition to a better future without achieving a much more equitable distribution of wealth in an economic framework calibrated to the laws of entropy and ecology. But that economy will be a great deal more like the “stationary state” predicted by John Stuart Mill in 1848 than the “casino capitalism” or “turbo capitalism” of the post-World War II era. A sustainable and fair economy will be one that pays its full costs, creates no waste, and deals far more in public goods and necessities such as housing, education, public infrastructure, and collective goods than in financial speculation and consumerism.⁸

A third and related priority will require a significant change in how we relate to future generations. Economist Kenneth Boulding once facetiously asked, “What has posterity done for me...lately?” The

answer, of course, is “nothing.” But a decent regard for posterity is inseparable from our own self-interest, as Boulding argued. Yet posterity presently has little or no legal standing, and so its right to life, liberty, and property exists—if at all—under a darkening shadow of the effects of the behavior of previous generations, mostly our own.⁹

We have long assumed that benefits flowing from one generation to the next were overwhelmingly positive. But that is no longer as true as it once was. The burdens imposed by a worsening climate and associated environmental havoc place the lives and fortunes of our descendants in great jeopardy. They will have no defense unless and until foundational environmental rights are codified in law, solidified as a core value in politics, and embedded in our culture.

Other challenges loom ahead. Soon, millions of people will have to be relocated from sea coasts and from increasingly arid and hazardous regions of Earth. Agriculture everywhere must be made more resilient and freed of its dependence on fossil fuels. Emergency response capacities everywhere must be expanded. The list of necessary actions and precautionary measures is very long. We are like a ship sailing into a storm and needing to trim sails, batten hatches, and jettison excess cargo. But how will we decide to do comparable things in the conduct of the public business?¹⁰

We have four broad pathways, each with many variations. The first is to let the market manage by the mysterious workings of the proverbial “invisible hand.” There are many purported advantages to doing so. In theory, markets require no political consensus, government programs, or public planning. In the right circumstances, they are agile, creative, and adaptable. But markets always perform far better in neoclassical textbooks than they do in reality. The truth is that they have a consistently poor record of foresight, or concern for the disadvantaged, or fairness, or whales, or grandchildren, or democratic institutions...unless it turns a profit.

Unsupervised markets work against the interests of the larger society. As Karl Polanyi once warned, “To allow the market mechanism to be sole director of the fate of human beings and their natural environment, indeed, even of the amount and use of purchasing power, would result in the demolition of society.” In sum, markets do many things well, but for things that cannot be priced, they are ineffectual and autistic to human needs and ecological imperatives.¹¹

The second alternative is to bolster public institutions and governments at all levels. Indeed, in the face of climate change, subnational governments are becoming more agile with alliances between states, provinces, and regions. Cities are coming together in creative ways to implement climate actions that presently cannot be taken at national levels. The results are often more effective, cheaper, and better fitted to particular situations than national policies. Networks of agencies and nongovernmental organizations stitched together by electronic media are capable of rapid interdisciplinary responses to the challenges. But inevitably, these efforts are limited because they are contingent on the powers and policies associated with sovereign national governments.¹²

A third pathway, then, is to create and maintain effective, agile, accountable, and democratic central governments. Centralized governments alone have the capacity to respond at the scale necessary to effect changes appropriate to the “long emergency.” They alone can wage war, grant or withhold rights, control currencies, manage fiscal policies, respond to large-scale crises, regulate commerce, and enter into binding international agreements. With respect to climate change, only central governments can effectively price or control carbon for an entire country. Only effective central governments can command the resources required to mobilize entire societies.¹³

But a yawning chasm exists between current performance and the quality of governance necessary to meet the exigencies of the long emergency ahead. As James Madison put it, “The great difficulty is this: You must first enable the government to control the governed; and in the next place, oblige it to control itself.” Governments today cannot consistently control themselves because they are decimated

by a plague of corruption that devours the public interest in virtually every political system. It infects the media, economy, banking system, and corporations. This is the fountainhead of our political misfortunes, and of most others.¹⁴

The solution is not so much new government agencies as it is, in political philosopher Alan Ryan's words, "the slow implementation of better governance by weeding out corruption and ignorance." And that will require a rigorously enforced separation between money and the conduct of the public business. The struggle to separate money from policy making and law will, in time, come to be seen rather like historic battles against feudalism, monarchy, and slavery.¹⁵

There is, however, a caveat leading to a final pathway. Little or no improvement of politics or governance is possible where ignorance, ideological superstitions, and indolence reign. Effective government, in its various forms, will require an alert, informed, ecologically literate, thoughtful, and empathic citizenry. Whether and to what extent this will be democratic remains to be seen. The limitations of democracy as practiced in consumer-oriented, corporate-dominated societies are well known. Unreformed, they will be more debilitating under the conditions we will experience in the twenty-first century.

But our past successes, notably those of World War II and the Cold War, have bred overconfidence that democracies will succeed in dealing with an entirely different kind of threat, one with time-lag between causes and effects and with deadlines beyond which loom irrevocable, irreversible, and wholly adverse changes. Relative to climate change, David Runciman writes that the "long-term strengths [of democracies], if anything, make it harder. That is why climate change is so dangerous for democracies. It represents the potentially fatal version of the [over] confidence trap."¹⁶

Even so, is a new birth of democracy possible? Is it possible to create new and more effective forms of citizenship in the twenty-first century? Is it possible to use television and the Internet to organize an active and strongly democratic society, from neighborhoods to planetary politics? Is it possible for nongovernmental organizations and diverse, cross-cultural citizen networks to accomplish what present forms of politics and governance cannot do? Time will tell.

What we do know is that citizens, networks, corporations, regional affiliations, nongovernmental organizations, and central governments will all have to play their parts. The twenty-first century and beyond is all-hands-on-deck time for humankind. We have no time for further procrastination, evasion, and policy mistakes. We must now mobilize society for a rapid transition to a low-carbon future. The longer we wait to deal with the climate crisis and all that it portends, the larger the eventual government intrusion in the economy and society will necessarily be, and the more problematic its eventual outcome.

We have entered the rapids of the human journey. Whether we can avoid capsizing the frail craft of civilization or not will depend greatly on our ability and that of our descendants to create and sustain effective, agile, and adaptive forms of governance that persist for very long time spans. One hopes that these will be strongly democratic, but there is no guarantee that they will be, especially over times far longer than that of the Chinese empire or the Catholic Church. It's never been done before. But that could be said prior to every major human achievement as well.

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