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## PLAN B

### *Rescuing a Planet Under Stress and a Civilization in Trouble*

Lester R. Brown

Earth Policy Institute® is a nonprofit environmental research organization providing a vision of an eco-economy and a roadmap on how to get from here to there. It seeks to reach a global constituency through the media and the Internet. Its primary publications are *Eco-Economy: Building an Economy for the Earth*, *The Earth Policy Reader*, and a series of four-page Eco-Economy Updates that assess progress in building an eco-economy. All of these can be downloaded at no charge from the EPI Web site.

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To Orville L. Freeman  
1918–2003

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Orville Freeman was one of the most remarkable public servants of the last century. A World War II veteran and three-term governor of the State of Minnesota, he placed John F. Kennedy's name in nomination for the presidency at the Democratic National Convention in Los Angeles in 1960. This chapter of Freeman's life is described in detail in Rodney Leonard's engaging new book, *Freeman: The Governor Years, 1955–1960*.

As Secretary of Agriculture from 1961 to 1969, Freeman was one of three Kennedy cabinet members, along with Dean Rusk and Stewart Udall, to serve throughout the eight years of the Kennedy-Johnson administration. After leaving the Department, he was for many years the CEO of Business International.

My relationship with Orville Freeman goes back to the U.S. Department of Agriculture, where I served as his advisor on international agricultural policy and later as Administrator of the Department's technical assistance agency, known then as the International Agricultural Development Service. Our official relationship quickly turned into a close personal one, as he became not only a mentor, but a friend.

One of the highlights of our years of working together came in 1965, when we negotiated the reform of agricul-

tural policy in India following a short harvest induced by a monsoon failure. This reform revitalized the country's agriculture, enabling India to double its wheat harvest in seven years, going from being the world's largest wheat importer to being self-sufficient in wheat.

Thus when I founded the Worldwatch Institute in early 1974, it was natural to turn to Orville Freeman to chair the Board of Directors. It could not have been a better choice. During our 21 years as Chairman and CEO we had a close and extraordinarily productive relationship.

Orville Freeman was a football player, playing backup quarterback on the University of Minnesota's national championship team; a Marine who won the Purple Heart for heroism when leading his unit onto the beach at Bougainville Island; and a lawyer. He had the dual distinction of being the youngest governor in Minnesota's history, at age 36, and then the youngest U.S. Secretary of Agriculture, at age 42. On February 20, 2003, the world lost a great public servant and I lost a lifelong friend.

## ACKNOWLEDGMENTS

Writing a book of this scope requires a lot of help from other people. First among these is Reah Janise Kauffman, our indefatigable Vice President, who so ably manages the Institute, allowing me to concentrate my energies on research. She coordinates our worldwide network of publishers and marketing of publications. In doing this and in negotiating speaking fees and bulk sales of our books, she has helped boost our earned income to where it now covers half of our budget. And as if this were not enough, she reviewed the manuscript several times, aiding in its evolution.

Janet Larsen, who anchors our research program, has provided invaluable support. I rely heavily on her for research help, assistance in the analysis, and judgment on how to present information. In research and writing, she is my alter ego and my best critic. Viviana Jimenez has been enormously helpful with research, working tirelessly to gather needed information while also providing administrative support.

Millicent Johnson, our Director of Publications Sales, uses her knowledge of customer services to manage our publications department, running the gamut from book procurement to order fulfillment. She also serves as our office quartermaster and assists with bookkeeping.

We'd like to especially thank the United Nations Population Fund for its generous support of *Plan B*. We are also indebted to the Carolyn, Geraldine R. Dodge, Farview, Richard and Rhoda Goldman, William and Flora Hewlett, Shenandoah, Summit, and Turner Foundations and to the Educational Fund of America. Their support enables us to provide and disseminate the vision of an eco-economy.

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I am indebted to more than a dozen reviewers of the manuscript, including Board members Judy Gradwohl and William Mansfield. Toby Clark brought his decades of experience as an environmental analyst and administrator to bear on the manuscript, providing both the broad structural suggestions and detailed commentary that money cannot buy. Readers are indebted to him for raising the book to a higher level.

Peter Goldmark, for many years publisher of the *International Herald Tribune*, was extraordinarily helpful in identifying the principal strengths and the weaknesses of the manuscript. Ellen Goldensohn, until recently editor of *Natural History*, provided useful feedback on overall structure. Douglas and Deborah Baker both reviewed the manuscript, helping me to think through some of the more complex technical issues.

Maureen Kuwano Hinkle drew on her 26 years of experience working on agricultural issues with the Envi-

ronmental Defense Fund and the Audubon Society to review several drafts of the book as it evolved. She provided valuable comments and encouragement all along the way.

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As authors know, finding an engaging title can be trying. This one was made easy. When I was describing the book concept to Catherine Cameron, Executive Director of the Wallace Global Fund, she said, "It sounds like Plan B to me." Thanks, Catherine.

We are supported by a network of dedicated publishers for our books and Eco-Economy Updates in some 19 languages—Arabic, Catalan, Chinese, Czech, English, French, Indonesian, Italian, Japanese, Korean, Persian, Polish, Portuguese (in Brazil), Romanian, Russian, Spanish, Swedish, Turkish, and Ukrainian. There are three editions in English (U.S.A./Canada, U.K./Commonwealth, and India), two in Chinese (mainland and Taiwan), and two in Spanish (Spain and Latin America).

These translations are often the work of environmentally committed individuals. In Iran, for example, Hamid Taravati and his wife Farzaneh Bahar, both medical doctors, are concerned not only about the health of their patients but also that of the earth. Our collaboration began 14 years ago at Worldwatch, when Hamid began

publishing *State of the World* in Iran. Farzaneh's translation of *Full House* won the Ministry of Culture's award for the best translation of a foreign book.

In China, Lin Zixin, with whom I've worked for nearly 20 years, was responsible for publishing *Eco-Economy*, personally leading the team of translators. I am also grateful to him for arranging a trip to Inner Mongolia and Gansu provinces that helped me better understand the pressures on the land in China's northwest.

In Japan, Soki Oda, who started World Watch Japan nearly 20 years ago, leads our publication efforts. He is already hard at work planning the outreach effort for the release of the Japanese edition of *Plan B*. Junko Edahiro, my interpreter in Japan, has also been extraordinarily helpful. In addition to organizing Japan for Sustainability, she has put together several highly successful fundraisers in Japan for the Earth Policy Institute.

Gianfranco Bologna, with whom I've worked for nearly 25 years, arranges for the publishing of our books in Italian. As head of World Wildlife Fund Italy, he is uniquely positioned to assist us in this effort.

In Brazil, Eduardo Athayde is responsible for translating our books into Portuguese, where he has done an excellent job of organizing fast-paced promotional tours in that country's major cities.

And in Romania, President Ion Iliescu, who started publishing our books some 16 years ago when he headed Editura Tehnica, personally assumes responsibility for getting our books out quickly in Romanian.

A small organization like EPI relies on the goodwill and dedication of many people. A growing number of individuals and organizations are posting our Eco-Economy Updates on their web sites. We are grateful to all, and I especially thank the individuals or groups who translate and post them, including Leif Ohlsson

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This book would not be complete were it not for the editing of Linda Starke, a veteran editor of my books. Linda's sure-fire editing, insight, and environmental knowledge sharpened the book in many ways. Thanks also to Liz Doherty, who responded to our needs for a quick design and layout even though she was starting a new full-time job, and to Ritch Pope, who prepared a useful index.

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Lester Brown

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## PREFACE

Two years ago I wrote a book entitled *Eco-Economy: Building an Economy for the Earth*, which argued that the environment was not part of the economy, as many corporate planners and economists believe, but instead that the economy was part of the environment. If we accept this latter view, I wrote, it follows that the economy must be designed so that it is compatible with the ecosystem of which it is a part.

*Eco-Economy* described this environmentally compatible economy, noting that we now have the technologies to build it. Almost everything we need to do to build this new economy, I noted, is now being done by one or more countries in the world.

*Plan B* not only argues further for the restructuring of the economy, it points out why this needs to be done at wartime speed. Time is running out. Whereas historically we lived off the interest generated by the earth's natural capital assets, we are now consuming those assets themselves. We have built an environmental bubble economy, one where economic output is artificially inflated by overconsumption of the earth's natural assets. The challenge today is to deflate the bubble before it bursts.

The most vulnerable economic sector may be food,

where the bubble is most obvious. The overpumping of an aquifer to expand food production in the short run almost guarantees a drop in production in the long run. Although grain production has declined in some smaller countries, it is now declining in China. Over the last five years, China's grain harvest has dropped from 390 million to 340 million tons—a drop equal to the grain harvest of Canada.

Thus far China has been covering its shortfall by drawing down stocks, but it can do so for only another year or two. When China enters the world grain market for massive imports, it will put heavy pressure on exportable grain supplies. We will not have to read about this in the newspapers. We will see the effects at the super-market checkout counter. Rising food prices may be the first global economic indicator to signal serious trouble between us, now 6.2 billion, and the earth's ecosystem.

The scope of *Plan B* has been limited so that it will be short enough to be read by busy people. There is, for example, no chapter on biological diversity. Yet the principal policy recommendations—stabilizing population and stabilizing climate—are central to protecting the diversity of life. The traditional approach of protecting biological diversity by fencing off land as parks or preserves, as valuable as that is, is not enough. If we cannot stabilize population and if we cannot stabilize climate, there is not an ecosystem on earth we can save.

Nor do I deal with water pollution in any detail. I have concentrated on the emergence of water scarcity as a defining issue of this new century. To the extent that water pollution is reducing the usable supply of water, it is further exacerbating emerging scarcity.

And I have not included environmental education. My good friend Ray Anderson, CEO of Interface, urged that I promote environmental education, especially in business schools. Ray is right. We desperately need to pro-

duce a generation of environmentally literate business and financial leaders for tomorrow, but it is my hope that today's business leaders will hear the call to greatness outlined in *Plan B* and respond to it.

And finally, my apologies for using material that I published earlier in articles, *Eco-Economy Updates*, and even in my last two books. I think it was Ken Galbraith who said, "Self-plagiarism is an indulgence of authors that publishers ought not to tolerate."

It is time to redefine security. Ironically, on September 11, 2001, I was in New York to give a luncheon talk on *Eco-Economy* to the science and environment staff of the *New York Times*. Needless to say, that talk was never delivered. The shift in attention from environmental issues to terrorism that began on that fateful date continues to this day.

The basic point of *Plan B* is that our principal threats are now more environmental than military. Terrorists are a threat. But the destruction wrought by terrorists is likely to be small compared with the worldwide suffering if the environmental bubble economy collapses.

And, finally, I do not have the credentials for writing this book. Nor do I know anyone who does. But someone had to give it a try.

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