



Dear Reader,

This month we share with you a thought-provoking and action-inspiring interview with Lester Brown, author of *Plan B 3.0: Mobilizing to Save Civilization*. Lester Brown has been described by The Washington Post as "one of the world's most influential thinkers." This interview, conducted by Terrence McNally, was published on April 22, 2008 in <u>AlterNet.org</u>, an online news magazine that aims to inspire citizen action and advocacy on the environment, human rights and civil liberties, social justice, media, and health care issues.

Enjoy the reading!

Isabel Rimanoczy Editor

Quote of the Month

"Once you learn to see, it's difficult to go back."

Uncle Wilbur

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How Many Earth Days Do We Have Left?^[1] Interview with Lester Brown^[2]

by Terrence McNally

Terrence McNally: When you were involved in agriculture in the Kennedy administration, few thought about the environment, unless it was about conservation or wilderness. A bit later, environmentalism was usually local - a polluting factory or a threatened forest. Yet very early you had a global understanding of environmental issues. How did that happen?

Lester Brown: It was probably due to, first, living two and a half years in villages in India in 1956, where I could see the food/population problem beginning to unfold; and second, my training in the sciences, which gave me a feel for how natural systems work.

McNally: What has driven you to write Plan B, and then Plan B 2.0 and Plan B 3.0?

Brown: One of the goals of the Earth Policy Institute is to provide a vision of a kind of world we want, and a sense of how we get from here to there. Plan B was the first version of this.

With 3.0, we've changed the subtitle from Rescuing a Planet Under Stress and a Civilization in Trouble to simply Mobilizing to Save Civilization. We used to think about saving the planet, and that's still essential, but what's really at stake now is civilization itself.

We have a growing backlog of unresolved problems in the world: deforestation, collapsing fisheries, expanding deserts, falling water tables, eroding soils, you can go down the list. The fallout from these problems is becoming more and more difficult to manage, especially for governments in developing countries.

A number of countries have developed enough to bring down mortality but not enough to bring down fertility. With a rapid rate of population growth, they're caught in what demographers call "the demographic trap." If you can't break out of it, eventually you begin to break down.

17 of the top 20 failing states have rapid rates of population growth. These are the countries where most of the 70 million people added each year are being born. As this list of failing states grows each year, we have to ask how many failing states before we have a failing civilization? No one knows the answer. We haven't been there before.

On top of traditional environmental problems, we now have new stresses like soaring oil prices that put a lot of pressure on low and middle-income oil-importing countries. Then as the United States converts a growing share of our grain into fuel, we drive world grain prices to all-time highs, creating instability in low and middle-income countries that import grain. We face the risk that the combination of rising oil and food prices will greatly increase the number of failing states. I think the number of failing states in the world is now the key indicator as to whether civilization is going to succeed or fail.

McNally: The enormous global inequity in income and wealth breeds inequity in health, in education, and in all phases of life, doesn't it?

Brown: There is a vast opportunity gap, and those born into societies with few opportunities become recruits for international terrorist groups. In Africa, revolutionaries who want to overthrow governments simply recruit kids - 10, 12, 14 years old - give them guns and let them go. As I look at the world today, terrorism is a problem and a threat, but even bigger threats are the persistence of poverty, continuing population growth, and climate change.

McNally: In one of the earlier versions of Plan B, you pointed out the danger of our attention to terrorism distracting us from these other issues. In 3.0, you've knit those problems together even more clearly. Now you're saying they're no longer "either/or", but they are inextricably linked.

Brown: No question. The money we lay out to deal with things like population growth, environmental degradation, spreading water shortages, climate change, etc. is really the new security budget because these are the real threats.

The climate change threat is enormous. Last August an area of Arctic sea ice twice the size of

Britain melted in one week. Scientists have never seen anything like this before.

Greenland has an ice sheet a mile thick or more, covering almost the entire island, which is three times the size of Texas. The rate at which it's melting now is extraordinary. There's a large glacier on the west coast, where the ice sheet flows into the sea, 3 miles wide and a mile deep, and it's flowing at 2 meters an hour. Glaciers normally flow at 80-100 meters per year. This is 2 meters per hour!

McNally: How much has global temperature risen so far?

Brown: About one degree Fahrenheit over the last several decades. By the end of this century, temperature could rise anywhere from 3 to 10 degrees Fahrenheit.

McNally: But it's much greater than that at the poles, isn't it?

Brown: Yes. We report temperature changes as a global average, but we have to keep in mind that temperature rises faster over land than over oceans, faster near the poles than near the equator, and faster in the interior of continents than in coastal regions. In parts of Alaska, Northern Canada, Siberia and areas around the Arctic Circle including Greenland, temperatures have already gone up 3 to 7 degrees.

The west Antarctic ice sheet is not really on the continent itself, but is supported by a number of islands. When it starts to go, it could break up very quickly.

McNally: What might be the repercussions of that?

Brown: If Greenland melts entirely, that adds 23 feet to the sea. The west Antarctic ice sheet adds 16 feet - so together almost 40 feet. If that happens, many of the world's coastal cities would be under water. This is not going to happen in years or decades, but will be spread out over we hope at least a century or two. But still the rate becomes alarming. Even a one-meter rise in sea level threatens a lot of cities.

A large share of the world's population lives pretty close to the coast. If sea level were to rise 39 feet, there would be at least 600 million rising sea refugees. What happens to the price of land in the interior, if vast numbers are forced inland?

McNally: When people talk about melting glaciers, they usually refer to Greenland, the Arctic and Antarctica. You point out that throughout the world we depend on mountainous glaciers for a steady supply of water. Los Angeles, for instance, is vulnerable to this.

Brown: Mountain glaciers are melting everywhere. The Alps and Andes could be almost entirely gone in half a century. But I'm even more concerned about the Tibetan plateau. All the major rivers in Asia originate in the Himalayas: the Indus, the Ganges, the Mekong, the Yangtze, and the Yellow River.

McNally: These rivers sustain huge numbers of people.

Brown: During the dry season, the Ganges is fed by the ice melt from the Gangotri glacier, a vast glacier that could be gone entirely by mid century. If we can't close enough coal-fired power plants fast enough to save it, then the Ganges will become a seasonal river that no longer flows during the dry season. Imagine the consequences of that. Think about the Yellow and Yangtze Rivers that irrigate the wheat and rice fields of Asia.

McNally: Along with the US, China and India are two of the three largest grain-producing countries.

Brown: The two countries most affected by the melting of the glaciers in the Himalayas and the Tibetan plateau will be India and China, which happen to be the two countries now building most of the world's coal fired power plants.

McNally: In other words, they're putting up more and more greenhouse gases at a time when their very survival is dependent upon cutting them back. Those kinds of connections and interactions are some of our biggest blind spots, aren't they?

Brown: We face four big challenges right now. We need to stabilize climate, stabilize population, eradicate poverty and restore the earth's damaged eco systems.

We probably cannot stabilize population growth humanely unless we eradicate poverty. Stabilizing population means making sure that all youngsters get at least an elementary school education, girls as well as boys. It means providing basic health care, immunization against childhood diseases, the basic fundamentals of health care at the village level.

We have to provide reproductive health care and family planning services as well. There are at least 200 million women in the world who want to limit their number of children, but who lack access to family planning programs. The cost of family planning for these women over a year would be a tiny fraction of what we're spending in Iraq.

McNally: Iraq is now about 3 billion a week. Two years of Iraq funding could solve almost all the biggest problems we're facing. Talk about misspent resources!

Brown: In terms of annual expenditures, the total bill for Plan B is less than \$200 billion a year. I call it the New Defense Bill, because - terrorism notwithstanding - the real threats to our future now are climate change, continuing rapid population growth, continuing destruction of the economy's environmental support systems, the things that lead to failing states.

McNally: I've always said that the key to minimizing the threat of terrorism is to make terrorists pariahs in their own societies.

Brown: I can remember what we did in the post World War II period. Normally after you win a war, you pillage. Instead we launched the Marshall Plan to rebuild the very countries with which we'd been engaged in one of the most deadly wars in history.

McNally: Let's imagine civilization is our patient. We've talked about some of the symptoms: climate change, peak oil, loss of water and soil. Briefly, what are the diagnosis and the recommended treatment?

Brown: Looking at the world through an ecological lens, I see a mounting backlog of unresolved problems, many of them associated with population growth including deforestation, expanding desert, deteriorating grasslands, eroding soils, falling water tables. Very few of these trends have been turned around; instead they're getting worse and becoming more difficult to manage. Now add to that climate change and peak oil.

McNally: Peak oil is the moment at which we've taken half of the oil out of the earth. One might say, "Only half ... we're in good shape." But, once we reach peak oil, we've used up the easiest half, and every subsequent barrel becomes more expensive.

Brown: We have spent our lifetimes in a world where, except for an occasional blip here and there, oil production has always been increasing. In a world where oil production is no longer increasing, no country can get more oil unless another gets less, and that's a very different world. It creates a lot of tensions. It creates a politics of scarcity and rising oil prices. As the United States shifts an ever larger share of its grain harvest into the production of fuel, the world is now facing quite possibly the worst food price inflation in history.

McNally: When we did an interview on Plan B four or five years ago, you predicted the current battle for grain. Does it go into the gas tank of a rich person or the mouth of a poor person

Brown: Nearly 20 percent of the 2007 grain harvest has been used to produce ethanol to satisfy, at most, 4 percent of our automotive fuel needs. From an agricultural point of view, the automotive fuel demand is insatiable. The grain required to fill a 25-gallon SUV tank with ethanol would feed one person for a year.

McNally: So the shift of grain to ethanol raises grain prices for us and the rest of the world condemns millions to starvation - all to supply a speck of our energy demand.

Brown: We're in an ironic situation where as taxpayers we are subsidizing the conversion of grain into ethanol, and therefore a rise in our own food prices. So we pay twice, on April 15 when

we settle our taxes and then every time we go to the supermarket checkout counter.

McNally: Let's shift to solutions - eradicating poverty, family planning, education and so on. You say that for \$200 billion a year we could solve them. What are the solutions?

Brown: To slow climate change, we've devised a plan to cut carbon emissions 80 percent - not by 2050, which is what politicians like to talk about - but by 2020.

McNally: An 80 percent reduction in 12 years. How do we do it?

Brown: There are three components to the plan: first, dramatically and systematically raise the efficiency of the world energy economy; second, massive investment in renewable sources of energy; and third, increase the earth's tree cover by planting billions of trees.

On efficiency, let me offer one simple example that most people are familiar with. If we replace incandescent bulbs with compact fluorescents, we can cut global electricity use 12 percent, allowing us to close 700 of the world's 2360 coal fired power plants.

40 percent of the world's electricity currently comes from coal, but by 2020 we see wind providing 40 percent.

McNally: In a dozen years you see wind replacing coal as the dominant energy source?

Brown: There's 100,000 wind turbines in operation today, so that means building about a million and a half more producing two megawatts each: 3 million megawatts in global wind generating capacity. But a million and a half wind turbines over a dozen years is peanuts compared with producing 65 million cars a year, which we do now.

The Texas state legislature and the Republican governor, Rick Perry, are putting together a package to harness that state's abundant wind energy. They're planning about 23,000 megawatts of wind energy, which will do away with 23 coal-fired power plants and supply half the state's residential electricity.

McNally: How quickly will that happen?

Brown: By 2020. They're moving very fast. We can install a million and a half wind turbines and combine that technology with plug in hybrids. Add a second storage battery and a plug-in to a Toyota Prius and you can recharge the batteries at night. The car's batteries become a storage facility for wind energy.

McNally: Toyota says they'll have plug-ins by 2010, and they're in competition with other companies who say they'll have it quicker.

Brown: The big competition right now is between Toyota with the modified Prius and GM with the Chevrolet Volt. The gasoline equivalent cost of running cars on cheap wind-generated electricity is less than a dollar a gallon.

McNally: Wow! Will it take tax subsidies or incentives to get us to ramp up wind and renewables?

Brown: The key is to get the market to tell the environmental truth, and right now the market does not do that. The market does a lot of things well, but it does not do a good job of incorporating what we call the "indirect cost" or what economists call "externalities." For example, the climate change and pollution costs of fossil fuels. The simple way to do that is to add carbon taxes and offset that increase by lowering income taxes.

McNally: Make it tax neutral, so that your pocket book bite is the same at the end of the year. But instead of taxing labor or work, which we want more of; we tax pollution and greenhouse gases, which we want less of.

Brown: So we end up with more jobs and less climate destruction - a win/win situation.

McNally: In terms of transforming our industries, you point to World War II, which you lived through.

Brown: In his State of the Union address one month after Pearl Harbor, President Roosevelt announced that we were going to produce 25,000 tanks, 60,000 planes, 20,000 artillery planes. It was extraordinary. No one had ever seen arms production like this.

Then he called in the leaders of the auto industry and said, "Guys, guess what, we're going to ban the sale of private automobiles in the United States." The automobile industry had no choice but to switch to producing arms. And we didn't produce just the 60,000 planes, which was the goal, we produced 229,000. We exceeded every one of those arms production goals.

McNally: So it is your sense that we could make that same kind of a massive shift if leaders take this seriously?

Brown: No question. It didn't take decades to restructure the US industrial economy. It didn't take years. We did it in a matter of months. That's the exciting and encouraging thing about what we're challenged with now. It is entirely doable.

We have it in our power to restructure the world energy economy and avoid disastrous climate change. All we need is the leadership, the vision, and the will.

Plan B 3.0: Mobilizing to Save Civilization, by Lester R .Brown, released in 2008, can be downloaded free at http://www.earthpolicy.org/Books/PB3/Contents.htm

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^[2] After working with the US Department of Agriculture in international agricultural development, Brown helped establish the Overseas Development Council, then founded Worldwatch Institute, publishers of annual State of the World and Vital Signs reports. In 2001, he left Worldwatch, founded Earth Policy Institute, and published Eco-Economy: Building an Economy for the Earth.