A video by Lester Brown

Video Link

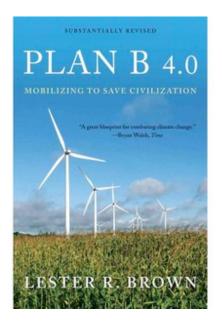
http://video.pbs.org/video/1864227276/

Resource written by David S. Wood, (B.S., M.S.) and Margaret Pennock (B.S., M.S.), 2010 Screenscope, Inc. Washington, D.C. edited by Mr. Brewer

OVERVIEW

"Plan B: Mobilizing to Save Civilization" focuses on environmental visionary Lester Brown and his sobering concerns about what humans are doing to Earth's environment. Brown makes it clear that continued human population rise coupled with the burning of massive quantities of fossil fuels are leading to an environmental catastrophe that threatens our future and the future of other living things that also call Earth their home. The time has come, Brown argues, for a dramatic shift in how we provide energy for our use and otherwise exploit the planet's natural resources. Everyone needs to take stock of what he or she is doing and contribute toward finding new, sustainable ways of inhabiting Planet Earth.

Brown is convinced that the time we have to make significant and necessary changes in our lifestyles is short. If we delay, we confront the real danger that we will soon witness environmental changes that will severely impact our planet, its living creatures, and even civilization as we know it today.



The following terms are used in the video and may need to be introduced to students:

■ **Agronomy**: the study of soil and plants, soil management, crop production, and land cultivation

■ **Biodiversity**: the variety of all life forms on Earth

Bush meat: the meat of wild animals used for food, especially in Africa

■ **Coal-fired power plant:** an electricity-generating plant that burns coal to generate electricity

■ **CO**₂ **Emissions**: the release of carbon dioxide into the atmosphere from substances that contain carbon, for example from the burning of gasoline and oil

Ethanol: a form of fuel known as a "bio-fuel" that comes from common agricultural plants such as sugar cane and corn; it is used as an additive to gasoline

Fossil fuel: fuels such as coal, natural gas, and petroleum that formed from ancient decomposed remains of plants and animals

■ **Glacier:** a large mass of ice and compacted snow that forms over land masses and moves slowly, shaping the land around it

■ Katrina: A devastating hurricane that hit the Gulf Coast in 2005, especially wreaking havoc on New Orleans, LA and surrounding areas

■ **Maya**: A tribe of Mesoamerican Indian people primarily inhabiting southeastern Mexico, Guatemala, and Belize. Mayan ancestors created a great civilization that was known for its written language, art, architecture and mathematics and that reached its zenith from 300 - 900 A.D.

■ **Micro-credit:** the extension of small loans to poor people who otherwise would not qualify for traditional loans to start entrepreneurial ventures and small businesses. Such loans have an impressive record of helping people generate income to be self-sufficient and even lift themselves out of poverty

■ **Pearl Harbor:** an inlet on the island of Oahu in Hawaii and the site of a U.S. naval base, which was attacked by the Japanese on December 7, 1941, spurring the United States to enter World War II

■ **Poaching:** the illegal catching of wildlife and fish ■ Shona Tribe: a member of a Bantu tribe living in present day Zimbabwe, in southern Africa

■ **Sumerians:** one of the world's oldest known civilizations established in the fourth millennium B.C. in Mesopotamia (present-day Iraq)

PRE-VIEWING ACTIVITIES

Use a wall map, desk map, or atlas to familiarize yourself with the geographical areas profiled in the video:

A. North America

- Washington, DC
- Utah
- Arizona
- B. Caribbean
- Haiti

C. Asia

- China,
- India,
- South Korea,
- Afghanistan,
- Pakistan,
- Bangladesh,
- Turkey, Philippines
- Beijing, China
- Seoul, South Korea
- Istanbul, Turkey
- Esenyurt, Turkey
- Himalayas
- Tibetan Plateau
- The following rivers : Indus, Ganges, Yangtze, Yellow
- Indian Ocean
- Suez Canal
- D. Arctic
- Arctic Sea
- Greenland
- E. Europe
- United Kingdom
- Copenhagen, Denmark
- Scotland
- Iceland
- F. South America
- Peruvian Andes
- Amazon river and surrounding rain forest
- G. Africa
- The following countries: Somalia, the Sudan, the Democratic Republic of the Congo, Chad, Algeria, Zambia
- Zambia's Luangwa Valley

■ What have you heard about global climate change? Do you know what human activities are thought to be causing it?

■ What are some of the consequences of global climate change on the planet? How do you think each consequence could affect populations of people and civilizations in general?

■ What civilizations have you heard about that disappeared? If you were to choose one or two of the most important factors that you think help sustain civilizations, what would they be?

Could these factors be affected by global warming? In what ways?

■ In what parts of the world is human population rising the fastest? In what parts of the world is development the fastest?

What are the possible consequences of these trends?

What threats do you see confronting your future?

Part 1: Distress Signals from 35,000 Feet (Starts at Minute 00:04; Length: 4 minutes)

Plan B begins with Lester Brown flying over the Arctic Sea from Washington, D.C. to Beijing, China. He notes the ice below fracturing, and he then notes that the Arctic Sea Ice, as well as ice in the Himalayas and other places, is melting at a rapid pace, due to human-caused climate change. Himalayan glaciers feed major Asian rivers, which hundreds of millions of people depend upon for their agricultural, domestic, and industrial needs. What would happen, Brown wonders, if these rivers were to dramatically diminish because of climate change?

1. What is the connection between glaciers high in the Himalayan Mountains and hundreds of millions of people living in the lowlands of India, China, and Bangladesh?



Source: Mehta, Samir. "The Himalayas." International Rivers. Web. 22 Mar. 2012. < http://www.internationalrivers.org/south-asia/himalayas>.

Part 2: Who Will Feed China? (Minute 00:08; Length: 9 minutes)

Lester Brown is in Beijing, China to share his concerns about climate change with government officials and the general public. His message: China's incredibly rapid industrialization is endangering the country's water supply and therefore its food supply. This could have major global repercussions: While China may be able to avert widespread famine by paying for massive food imported from other countries, it will, in doing so, drive food prices higher around the world, making it vastly more difficult for the planet's poorer countries to feed their own populations. In an interview on English- language television, he encounters resistance to his point of view. The program host insists on focusing on the responsibility of the United States to address climate change first and foremost. Lester Brown considers this issue a distraction; the point he is trying to make is that all countries will be impacted by climate change, so all must contribute to solving this looming menace.

1. How will China's rapid industrialization threaten its food supply?

2. What global impact will occur if China is forced to import massive amounts of food to feed its people?

Part 3: A Road Trip

(*Minute 00:17; Length: 4 minutes*)

Lester Brown continues on his journey to Japan, Korea, India, Turkey, and Italy. In India, he learns that the Indian prime minister knows how important the Himalayan glaciers are to the country's people, but that he is perplexed as to how to address the problem. In Korea, he witnesses a massive public protest over environmental policies, which suddenly turns violent. Brown considers this a portent: a glimpse of what might very well happen if human-caused climate change continues unchecked.

1. Why does Lester Brown think climate change will lead to increased violence?

Part 4: Ancient Civilizations (*Minute 00:21; Length: 5 minutes*)

During Lester Brown's world tour, he often had time to think, and what crystallized in his mind at this time was that food shortages have led to most of the examples of civilization collapse throughout human history. The Sumerians in the ancient Middle East, the Classic Mayan civilization in Middle America, and the Great Zimbabwe culture in Africa are all examples of societies that came undone because of environmental abuse leading to famines. Brown sees the fates of these ancient civilizations as warning signs, showing us what might happen today if we likewise damage our environment so that food becomes scarce and great numbers of people go hungry.

1. What types of environmental damage might lead to wide spread famines?

2. People have always gazed at the ruins of ancient civilizations and wondered why they disappeared. Do you think we could ever inflict environmental damage so severe that future generations will wonder the same thing about the remains of our civilizations? Why or why not?

Ancient Civilizations (Minute 00:21; Length: 5 minutes)

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http://cache.io9.com/assets/images/8/2008/08/medium_tokyo_genso_1.jpg

Meat... Milk... And Eggs... (Minute 00:26; Length: 7 minutes)

This segment describes three recent global trends that, taken together, are making the challenge of feeding the world's people even more daunting. First, billions of people are becoming more affluent and are aspiring to attain the living standards we enjoy in the United States. This means that they want to eat more protein: meat, milk, and eggs. Animal products require much more land to produce than grains and vegetables, so to increase animal production people will put more pressure on agricultural land and appropriate more forests and other natural habitats for crops. Second, the world's population is continuing to rise, with today's 6.7 billion people expected to increase to over *9 billion* by the middle of this century. These added billions will want to eat. Third, we are now mixing ethanol, which is made from grain, with gasoline. Huge amounts of grain are going toward filling the gas tanks of our vehicles, leaving less for people to eat. Combined, these three factors reinforce the necessity of addressing human-caused climate change so that food production does not plummet.

1. What three factors are making it increasingly difficult to feed the world's people?

Failing States (Minute 00:33; Length: 8 minutes)

Today, as in the past, environmental abuse is contributing to the demise of nations. Haiti is a case in point. Years of deforestation and associated soil erosion have left Haiti the most impoverished nation in the Western Hemisphere. Many people consider it a "Failed State", a country unable to ensure that its people obtain adequate food, shelter, education, and security. Lester Brown believes that unchecked climate change will make it increasingly difficult for poor countries to provide for their populations so, in the future, we will likely see more failed states resembling Haiti. How many failed states, Brown wonders, will it take before we can say that we have a failing global civilization?

1. How has environmental degradation led to poverty in Haiti?

2. Do you think other countries, especially in the developing world, are also witnessing similar environmental degradation? Do you think some might become "Failed States"? What might happen if a lot of countries ended up like Haiti?

3. How might climate change make it more difficult for poor countries to provide for their citizens?

The Economic Truth (*Minute 00:42; Length: 6 minutes*)

The damage created by Human-caused climate change costs us money! We have to pay to clean up the aftermaths of deadly storms, heat waves, drought, and flooding, and we have to pay for the loss of biodiversity that climate change is bringing about. Businesses incur costs in manufacturing for, among other things, raw materials, labor, and energy. For the most part, however, they do not have to pay for the environmental damage that they indirectly help create. Those costs typically fall on the rest of us. In this segment, Lester Brown and noted economist Paul Krugman argue that this needs to change. They maintain that corporations need to take into account the environmental damage they are bringing about and put it onto their balance sheets. Primarily through their use of fossil fuels to generate energy, corporations are significant factors in global climate change, and they need to consider the resulting damage as an expense for which they are responsible. If they do, the true cost of producing the items that they manufacture will become apparent. Hopefully, this will serve as an incentive for corporations to find alternative cleaner and less expensive ways of obtaining energy.

1. Why do standard business accounting procedures fail to accurately reflect the true costs of manufacturing?

2. How do these standard accounting practices contribute to global climate change?

The 29th Day (Minute 00:48; Length: 3 minutes)

In this segment, Lester Brown introduces the parable, The 29th Day. The parable illustrates exponential growth, the point being that environmental crises can suddenly and dramatically surface where no impending crisis had been apparent before. Environmental crises, in other words, can sneak up on us unless we pay attention to what we are doing and take timely steps to address them before they become catastrophic.

1. What is the connection between the 29th Day parable and global climate change?



http://blogs.the-american-interest.com/wrm/files/2010/01/end-of-the-world-2.jpg