

THE ENVIRONMENTAL BENEFITS OF GLOBALIZATION

Contributed by John A. Charles.

Rising global affluence is a good thing for environmental sustainability.

Environmental activists who criticize free trade often make two arguments. First, they criticize the American lifestyle as environmentally "unsustainable" and fear that adoption of similar values by other cultures through globalization would result in catastrophic shortages of finite natural resources. As summarized by environmental writer Alan Thein Durning, "if people in third world countries lived the same lifestyle as the average American, we'd need seven more earths" to provide all the natural resources.

While these are legitimate concerns, there is little evidence to support either argument.

Is the American Lifestyle Unsustainable?

Many "sustainability" advocates start from the premise that an open, dynamic economy is inherently unsustainable because producers and consumers are primarily concerned with their own self-interest. Without a centralized control mechanism, it is argued, the economy expands infinitely while the earth's resources are finite. Thus, promoting capitalism on a global scale will only accelerate the process towards eventual collapse.

Fortunately, empirical trends of the past 50-75 years suggest a very different conclusion. Economic indicators show that the U.S. economy is becoming steadily more efficient and less polluting over time, and there is no reason this trend should not continue indefinitely.

Measuring Sustainability

The most direct measure of sustainability is the amount of energy consumed per unit of economic output. If an economic system takes increasing amounts of energy over time to produce the same unit of output, then it's unlikely to sustain itself. On the other hand, an economy that actually does more with less energy each year is one that is built for the long haul.

The U.S. economy has shown a remarkable drop in energy intensity during the past 50 years. Between 1949 and 2000, energy consumption per dollar of Gross Domestic Product (GDP) dropped steadily from 20.63 thousand Btu to 10.57. In

Commented [h1]: Compare "Environmentalists", the term "activists" suggests protesters, tree sitters, radicals, soap dodgers.

Commented [h2]: Emphasis Quotes suggest THAT IT IS sustainable at current levels.

Commented [h3]: "Fear" suggests adoption is unlikely or exaggerated. "These people" do not worry or are merely concerned, they are fearful people. This and the word 'activists' are in themselves not worthy of criticism, but they do establish a tone which leads into a straw man fallacy (see end note). Coupled with the emphasis quotes on 'sustainable' and 'unsustainable', I feel the author's bias is established.

Commented [h4]: As an international student, do the two statements above seem unsupported by your experiences and perceptions? Do you think this article adequately disproves these arguments?

Commented [h5]: Emphasis quote suggests this is a new term, an idea that may not last, or is a political fad.

Commented [h6]: i.e free market, thus any criticism is anti-free market, i.e. socialist. A False Dichotomy is being established here.

Commented [h7]: Logically extended, this would apply also to historical economies as it is based on a fact of human nature (i.e. self-interest). He argues later that self-interest is not the primary concern in the excerpted portion and I think there has been some improvement in social consciousness of corporations, but self-interest is still the overwhelming motivator. However, what is overlooked is that the key difference between current and past economies is one of scale. Without the ability to mass produce, traditional economies were unable to place value on seemingly unlimited resources like water, air, or soil. Thus, historically self-interested producers were nowhere close to the threat of overconsumption as they are today, and so this is a new and unprecedented problem.

Commented [h8]: Loaded Language: checks and balances, regulations, standards, incentives are what many environmentalists call for. This term strongly suggests communistic ideology, not socialistic ideology.

Commented [H9]: The flaws in the essay don't invalidate the legitimacy of this trend, which is likely to continue and the statistics below support. However, the premise that THERE IS A TREND is used to argue against the premise that global resource consumption will be sustainable. First, we have to assume an unstated premise: that other developing nations will also follow this trend (will China and India also regulate for cleaner water and air?). Second, while things may improve, nowhere in this essay is the issue of scale of overconsumption by the U.S. addressed. The U.S. is using roughly 25% of the world's resources but only has 5% of the population. Simply put, do the statistics below suggest that the U.S. is effectively reducing these numbers and that if developing countries reach U.S. levels of consumption, how do the statistics provided by the essay COUNTER the argument of "seven earths" mentioned in opening paragraph. See also: <https://www.scientificamerican.com/article/american-consumption-habits/>

Commented [h10]: GDP is an effective but limited tool. This premise also does not answer the question of Earth's limits or our lust to consume. Only that we are making all our stuff more easily. A hopeful sign, but one does not address issues of resource limits and sustainable balancing. Consider modern weaponry, guns today are much more effective and take less energy to make than they did 50 years ago; therefore, war is less costly today than it ever was.

other words, at the beginning of the new millennium, we were able to produce the same economic output that we had in 1949 using only half as much energy.

This is an important **indicator** of sustainability, but there are many others as well:

- **Air quality.** Between 1970 and 1997, U.S. population increased 31 percent, vehicle miles traveled increased 127 percent, and gross domestic product increased 114 percent -- yet total air pollution actually **decreased** by about 31 percent.
- **Water quality.** In 1972, approximately 36 percent of American streams were usable for fishing and/or swimming. This had **increased** to 64 percent by 1982 and 85% by 1994.
- **Timber supply.** The net growth of timber has exceeded the levels of timber harvest every decade since 1952. According to the U.S. Forest Service, we currently grow about 22 million net new cubic feet of wood per year, while harvesting only about 16.5 million, a net increase of 36 percent annually.
- **Agricultural production.** In the past 30 years, the production of food grains in the United States increased by 82 percent, while the amount of land used for growing remained relatively constant. Planted areas for all crops today in the U.S. is actually lower than it was in 1930; this has **freed** up land for other noncommodity uses such as wildlife habitat and outdoor recreation.
- **Availability of mineral resources.** Resources that were once considered scarce are now **known to be abundant**. Between 1950 and 2000, the proven reserves of bauxite went up 1,786 percent. Reserves of chromium increased 5,143 percent, and quantities of copper, iron ore, nickel, tin and zinc all went up by more than 125 percent. The 1970s **forecasts** of doom for oil proved to be spectacularly wrong; the retail price of gasoline in the late 1990's (adjusted for inflation) was **cheaper** than at any time in history.

The **rise in living standards** has had tremendous public health benefits as well. The infant mortality rate in the United States dropped from 29.2 per thousand in 1950 to 7.1 in 1997. Since 1980, the death rate for cancer has dropped more than 11 percent for individuals between the ages of 25 and 64. As a result of these and other similar trends, the life expectancy for all Americans rose from 70.8 years in 1970 to 75.8 by 1995.

Wealthier is Healthier

Although it's **counter-intuitive** to many environmental advocates, rising affluence is an important prerequisite to environmental improvement. Empirical research first

Commented [h11]: Yes, one indicator only.

Commented [h12]: In 1970 Congress passed the Clean Air Act, <http://www.epa.gov/air/caa/>

California passed tougher legislation which car manufacturers follow because it is such a large economy.

Both of these are "centralized control mechanisms"

Written in 07, how does this support stand against his earlier suggestion that countries are **unlikely** to adopt American lifestyles **AND** current pollution levels in Beijing.

Commented [h13]: Clean Water Act passed in 1972. Omission of the EPA role in these levels is suspicious and misleading. What is also overlooked here is the development of the Western states where agriculture is overconsuming groundwater resources and where droughts (a factor that will likely be exacerbated by climate change) have severely hurt crop output.

Additionally, consider

http://news.nationalgeographic.com/news/2003/05/0515_030515_fishdecline.html

Is this sustainable?

Or if we want to consider water quality on a global scale, consider the Pacific garbage patch:

http://en.wikipedia.org/wiki/Great_Pacific_garbage_patch

Commented [h14]: Industrialization has provided plastics (not really degradable) and metals as cheaper materials. However, consider deforestation levels in the Amazon (non-replenishable) and the demand from other nations.

Also, consider paper production, already in decline due to electronic media, but the idea that one acre of hemp can produce four times as much paper as trees is discussed in this link. Business majors might want to follow through on the math here, but note the comments on sources and credibility.

<http://skeptics.stackexchange.com/questions/16252/does-one-acre-of-hemp-yield-as-much-paper-as-4-acres-of-trees>

Commented [h15]: Food grains pretty much refers to corn here. Now an industrialized product that produces many other goods. Crop rotation is still an extreme idea even though soil depletion from monoculture crops is widely seen as problematic.

Commented [h16]: Because we can strip mine more efficiently and on a scale that was unheard of in 1950

http://en.wikipedia.org/wiki/Surface_mining

Since much of this is unseen (not in my home state though) I'd suggest the following film

<http://www.zeitgeistfilms.com/film.php?directoryname=manufacturedlandscapes>

Commented [h17]: Peak Oil while considered theory (as is evolution) is commonly accepted.

To call Peak Oil into question would undermine some other principles used here, specifically the law of supply and demand.

http://en.wikipedia.org/wiki/Peak_oil

Commented [h18]: Use of retail price is wholly disingenuous without information on tax schedules. This is only valid support if it holds up at price of barrels.

Commented [h19]: Evidence that follows supports medical advances, not standards of living. Consider rising levels of obesity, diabetes, mental illnesses caused by stress, etc. Cancer deaths drop because we treat it better, but has cancer rate fallen also? Unlikely, as our increased use of toxins is widely considered to be the cause of many cancer forms.

Commented [h20]: This is mildly insulting to those who would disagree as counter-intuitive could be read as "difficultly understanding."

Additionally, there is a big gap between affluence and consumption. In America, a lower-class family of 4 can easily out consume an

published in 1992 by the World Bank showed that the statistical relationship between per capita income and certain kinds of pollution is roughly shaped as an inverted U. In other words, economic growth is bad for air and water pollution at the initial stages of industrialization, but later on reduces pollution as countries become rich enough to pay for control technologies.

Wealth creation also changes consumer demand for environmental quality. The richer people become, the more they tend to value environmental objectives such as safe drinking water, proper sewage disposal, and clean air. Once these basic needs are met, they begin raising the bar by demanding such "amenities" as scenic vistas and habitat for non-game wildlife. As their income rises, they increasingly have the financial resources to act on these values by imposing appropriate regulations on polluters and purchasing technologies that provide environmental benefits.

A recent report by the World Trade Organization reinforces these points. The report concludes: "One reason why environmental protection is lagging in many countries is low incomes. Countries that live on the margin may simply not be able to afford to set aside resources for pollution abatement...If poverty is at the core of the problem, economic growth will be part of the solution, to the extent that it allows countries to shift gears from more immediate concerns to long run sustainability issues. Indeed, at least some empirical evidence suggests that pollution increases at the early stages of development but decreases after a certain income level has been reached. . . ."

Many so-called "sustainability" advocates argue for greater central control of the economy through government intervention, but every place this has been tried has proven to be a failure. Some of the most polluted cities on the face of the earth are in countries formerly or currently under socialist rule. Leaders of the former Soviet Union and East Germany were as confident in their ability to run the economy as local sustainable development advocates are in Oregon, but they found out that eliminating market competition also eliminated incentives to develop innovative technologies that use resources more efficiently.

THE FOLLOWING SECTION DOES NOT APPEAR IN SOURWORK

Does Free Trade Promote an Environmental "Race to the Bottom?"

It's often asserted by trade critics that multi-national corporations, if unrestrained by government oversight, will shop around for countries with lax environmental regulations. This will exert a downward pressure on pollution control efforts, fostering an environmental "race to the bottom."

Commented [h21]: Including Curitiba Brazil?

Commented [H22]: It could be argued that Beijing became so polluted only after China shifted to a market economy.

Commented [h23]: These are not examples of socialist rule, but communistic dictatorships. Germany and Scandinavia might merit some discussion here as better models for green Socialistic economies.

Commented [h24]: Is it fair to compare Soviet ministers overseeing hundreds of millions of people to local residents arguing for zoning restrictions within their own city?

There is little evidence to support this hypothesis. Studies have shown that such issues as access to markets and labor costs are far more important to companies looking to locate new facilities. When those new facilities are built, there are many reasons why managers tend to maintain high environmental standards, even when not required to do so. As a study by Daniel Esty and Bradford Gentry ("Foreign Investment, Globalization, and the Environment," 1997) concluded: "First, many companies find that the efficiency of having a single set of management practices, pollution control technologies, and training programs geared to a common set of standards outweigh any cost advantage that might be obtained by scaling back on environmental investments at overseas facilities. Second, multinational enterprises often operate on a large scale, and recognize that their visibility makes them especially attractive targets for local enforcement officials . . . Third, the prospect of liability for failing to meet standards often motivates better environmental performance. . . ."

Other research has shown that, within given sectors in given developing countries, foreign plants are significantly more energy efficient and use cleaner types of energy than domestic plants (Gunnar Eskeland and Ann Harrison, "Moving to Greener Pastures? Multinationals and the Pollution Haven Hypothesis," National Bureau of Economic Research, 2002).

Conclusion

It is human nature to seek out others and exchange ideas, products and services. Attempting to limit that impulse, whether in the name of environmental sustainability, fighting communism, or some other moral crusade, is likely to be a costly and futile undertaking. Perhaps nowhere has this been more vividly demonstrated than in Cuba, where the U.S. has enforced a trade embargo for more than 40 years. Despite the embargo, American consumer products are widely available in the Cuban underground economy, and American dollars tend to be the currency of choice. Meanwhile, the primary purpose of the embargo -- to oust Fidel Castro -- has obviously failed.

The evidence shows that our preference for free trade is not in conflict with our desire for environmental quality. On the contrary, income derived from free trade is a prerequisite for most types of environmental gain. Wealthier people place greater value on environmental amenities, and they have the resources to pay for them. True environmental advocates should embrace global wealth creation as a fundamental strategy for achieving environmental sustainability.

Commented [H25]: There is support for corporations becoming more environmentally aware and for the reasons stated. There are also shareholder activists who purchase stock in companies to make them more green. But considering the number of corporations in the world, their extent of outsourcing, and their use of smaller subsidiaries to handle dirtier aspects of business, it's hard to take this paragraph as a statement for corporations in general.

Consider Nike, once a company renowned for its use of sweatshops and unfair labor practice overseas, is now the type of global citizen Charles is referring to, but what is their share of the global shoe market? They only make athletic shoes, so I would like to know how many Chinese and Indians are wearing Nike, and how many companies that are not "global citizens" are using up resources to shoe those billions of feet, are those companies operating overseas? Do most of them or just some of them even have "global visibility"?

And that is just one industry for a highly popular consumer good. How many steel companies, oil companies, mining companies, fishing companies, lumber companies can a typical person even name? Likely no more than a few if any, so such companies are not operating "visibly".

Commented [h26]: This premise can be easily extended to legalization of all drugs. The author may or may not support that idea, but it is a consequence of this line of thought.

Commented [h27]: Again, a hardline communist dictatorship. Also, has unfettered and unregulated capitalism been a boon to Latin American countries that have followed that path?

Commented [h28]: Valid support for the futility of economic sanctions and also inadvertently good support for any counter that would extend his argument to the next step as noted above.

BUT the example here doesn't seem to argue so much for that point AS MUCH AS it seems to be inserting a patriotic punch at the conclusion. The analogy here is that the struggle between environmentalists and capitalists IS EQUAL to the struggle between Democratic America and Soviet Tyranny.

Commented [h29]: Considering that the greatest culprits and perpetrators of environmental damage is arguably large multinational corporations and, to a lesser extent, governments, the inclusion of these Social Institutions to the Common Man is disingenuous. It suggests that a CEO or President will act in the environments best interests because that's what you the reader would do. A reader who is very likely concerned about the environment, as they have chosen to read this article.

Commented [h30]: An ambiguous statement. I hope he means "populations that have more economic wealth in general" and not "rich folk" but the obvious potential for misreading suggests sloppiness or surreptitiousness

ARGUMENT OVERVIEW

PREMISE 1: There is a problem.

Note that he acknowledges the problem by writing the essay in the first place and by mentioning that pollution and efficiency have improved, but he does not acknowledge the scale, but only refutes the fact that “we’d need seven more earths.”

PREMISE 2: Technology has begun to solve the problem without a “centralized control mechanism”.

The evidence provided does support the U trend but not if it is sufficient as none of the improvements are directly compared to the harm predicted by his opponents (i.e. 7 earths). Most importantly, **the role of government was central** in much of the support he cites, which greatly undermines his claim.

PREMISE 3: Richer consumers demand more environmentalism.

Affluence leading to more green economies (once they’ve industrialized) is a valid premise. I would extend the support to Maslow’s hierarchy of needs to show how newly industrialized countries are playing a fast and dirty catch up until they can afford to be more efficient. However, there is not a clear connection between affluence and consumption; better schools, neighborhoods, and hospitals are not the problem, millions of cheap disposable plastic products ARE. The focus of the argument is consumption, and billions of citizens around the world going through a stage where they consume equally to what Americans are consuming now is not really addressed by this premise. It could be used to counter his own point by showing that there is hope, and to support a conclusion that we should move forward in that direction, but this is not what this essay does. INSTEAD:

CONCLUSION: Government regulation will slow economic growth and thus the development of problem-solving technologies (second sentence of conclusion).

This conclusion is NOT supported by the premises. Furthermore, the omission of the government’s role in some of the environmental improvements is disingenuous. Additionally, the overall characterization of government is limited to Soviet Russia, East Germany, and Cuba. These are all failed governments and it’s unclear if any of these governments even tried to be environmental. Nor does the U.S. imposed embargo directly relate IN ANY CLEAR WAY to governments attempting to regulate industrial efficiency or resource consumption; it was an act of pure political retaliation on a political enemy.

In addition, he is making the following logical fallacies:

False Dichotomy: socialism & progressivism are not even discussed in this argument. It is capitalism OR Soviet Russia style communism. This rhetoric is typical of the cold war era but is rather trite in 2007.

Straw Man: environmental activists “advocate” for a “centralized control mechanism”. Thus, the activist is now a proponent of communistic ideology at worst (or anti market socialism at best). The activist has no voice here and so can be easily hacked to pieces. By not representing middle ground or acknowledging the success of even limited controls - global wealth creation could be seen as code for a laissez fair economy.

The majority of this essay was published in *Sourcework*, a textbook for beginning college writers. It is one of the essays provided to students to practice analysis writing, all of which are from nationally established writers. Charles' essay appears to be included as a local selection since the authors are from Portland State University.

Because this particular essay was so problematic, I removed it from the options as a source for student papers, added the missing section from the original source ([which](#) is no longer accessible), and added commentary. It is provided here under Fair Use.

While this document was provided as an example for undergraduate students of what a thorough rhetorical analysis could look like and with some instruction on particular claims, it was used for deeper discussion and reading with graduate students.

Dollahite, Nancy & Julie Haun. *Sourcework: Academic Writing from Sources*. 2nd edition. Boston, Heinle, Mar 23 2012.