## The Environmental Benefits of Globalization

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**Previously filed under:** Environment 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 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.

There is little evidence to support the notions that wealthy lifestyles are "unsustainable" and that global trade will always seek out locations offering the weakest environmental protection.

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 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.

# 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."

There is little evidence to support this hypothesis. Studies have show 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

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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.

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