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## Voice of a Global Citizen

## **Problems Are Interconnected -- and So Are Solutions**

One of the favorite maxims of environmentalists is that Everything is Connected to Everything Else. That idea is usually delivered with a heavy charge of negativity -- if you do something stupid in one place, it will lead to bigger problems somewhere else, or horrible disasters sometime in the future. Your ecological misdemeanors will come back to haunt you.

Environmentalists like to collect examples of Awful Interconnections, some of which you've surely heard:

Buy a fast-food hamburger and you will create a demand for cheap beef, which will be produced in Central American pastures, which will be created by chopping down tropical forests, which are the wintering grounds of the songbirds that glorify your summer and eat your mosquitoes. You will also contribute to poverty in Central America, which will encourage communist movements, which will have to be opposed, which will require constant funding from Congress, which will necessitate frequent speeches from the President, interrupting your favorite prime-time TV programs.

Build a dam on a river and you will stop the annual flood of nutrients that fertilizes the downstream soil; you will reduce the source of food for the fish populations in the estuary, thereby bankrupting the fishing fleet; your reservoir will flood historic monuments, prime topsoils, and endangered species; you will so alter groundwater levels that harmful metals will be leached out of the soil and become lodged in the bones of your children.

Buy a fast-food hamburger packaged in a foam-plastic container (hamburgers are sources of many ecological disaster-stories), and you will release chlorofluorocarbons that will wipe out the ozone layer, thereby allowing the sun's ultraviolet rays to penetrate, thereby frying most terrestrial forms of life. If the hamburger is wrapped not in foam but in paper and cardboard, you will contribute to the destruction of northern forests, which are slowly dying anyway from acid rain from the coal-fired electric plants needed for the ugly roadside signs that attracted you to the hamburger joint in the first place.

The way it is usually told, the message Everything is Connected to Everything Else is not fun to hear. It is intended to cause repentance and reformation. More often, of course, it causes guilt, fear, and an uncontrollable urge to avoid environmentalists.

What we are rarely told is that solutions are as interconnected as problems. One good environmental action can send out waves of good effects as impressive as the chain of disasters that results from environmental evil.

Take energy efficiency, for example. That doesn't mean deprivation of creature comforts; it means insulating houses, driving cars with better mileage, and plugging in appliances that deliver the same service for less electricity. Amory Lovins of the Rocky Mountain Institute says we could reduce electricity use in the U.S. by 70% with already-proven and currently-economic efficiency measures. We could cut our \$430 billion annual energy bill in half just by being as efficient as Japan and West Germany are.

Energy efficiency is a solution to economic problems -- it cuts costs to homes, businesses, and government. But look at all the other problems it solves. It could allow us to shut down every nuclear power plant in the country, eliminating the need for heroic financing, political hassle, evacuation planning, the disposal of undisposable wastes, and the bureaucracy of the Nuclear Regulatory Commission. It could free us from dependence on Persian Gulf oil and from involvement in Persian Gulf wars. It would do wonders for our trade and budget deficits. It would improve the air quality of our cities and go a long way toward solving the problems of acid rain and of global climate change.

Recycling is another favorite environmental solution -- a solution to the problem of where to put the garbage. It also reduces groundwater contamination from leaking landfills and air pollution from incinerators. It provides paper, metals, glass, plastics, rubber, oils and other raw materials for a host of businesses. It slows the depletion of forests and mines and reduces pollution from smelters, oil refineries, paper mills, and plastics factories. It saves a lot of energy, and therefore contributes to all the good interconnections listed in the previous paragraph.

Organic farming, practiced successfully by tens of thousands of farmers in this country, can cut a farmer's costs, helping to save the family farm and reducing the need for billions of dollars of farm subsidy. The use of fewer hazardous chemicals improves the health of farm workers and animals, reduces contamination of groundwater and lakes, restores wildlife populations, and eliminates the need for polluting chemical factories. It saves energy (half the energy used for agriculture goes into the manufacture of fertilizer).

Returning organic wastes to the land reduces soil erosion, improves water retention, slows siltation of downstream reservoirs, and reduces urban garbage.

Many of these environmental solutions are considered "uneconomic", but that is because the economics have been figured only for the most short-term and close-in links of the chains. If we calculated the effects on the whole system, we'd see that the wages of environmental sin may be deadly, but the wages of environmental good sense can be enormous.

Everything is connected to everything else on this planet. That can be good news as well as bad.

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