

Population, consumption key to climate solutions

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In his inaugural address, President Obama said he would deal with the climate crisis. Remarkably, he also mentioned the need to examine our consumption. If population also becomes a focus, we finally may be able to respond to the climate crisis systematically, rather than in a piecemeal way.

Global climate change results from multiple, compounding factors. The “IPAT” formula explains this.

It describes how the impact (I) on the environment is a function of the size of the human population (P), multiplied by its affluence (A), which is the level of consumption, multiplied by its technology (T), which is the capacity of the mechanisms used to extract natural resources, make them into goods, and emit greenhouse gasses and other wastes:

Climate Impacts = Population X Affluence X Technology.

In the United States, discussion about stabilizing the population often is interpreted as being anti-immigration or anti-life. Efforts to shift consumption are seen as undermining the American way of life, socialist or worse. Few officials are thus willing to openly tackle the issues. Two of the three core drivers of climate change essentially have been taken off the table, leaving technological fixes as pretty much our sole focus.

This is a mistake. No matter how much we improve our technologies, the combination of rising population and consumption will increase greenhouse gas emissions and place our communities and families at risk.

Human consumption of natural resources now exceeds the Earth’s capacity to replenish them by 30 percent, according to the Global

Footprint Network, which measures such things. The past decade's economic growth was built on the accumulation of financial and ecological debt.

If demand continues at today's pace, by 2030 we will need an additional two planets to maintain our lifestyles.

Population growth magnifies the effects of overconsumption. The 6.5 billion of us living today produce about 30 billion tons of carbon dioxide annually. This comes to about 4.6 tons of CO₂ per person.

To stabilize climate, the Intergovernmental Panel on Climate Change said emissions must be reduced by at least 60 percent (and likely by 80 percent in the United States) by mid-century, meaning they must be cut to about 12 billion tons annually. If by 2050 there are, as projected, 9 billion people on Earth, the 12 billion ton allowance means per capita emissions would be cut to 1.3 tons per person.

So, the more people we have, the smaller will be each person's future emissions allowance. Yet, as with consumption, solutions to the climate crisis never include population.

This is unfortunate, because we can stabilize consumption and population and revitalize the economy, improve our quality of life, and along the way help stabilize the climate.

The solution to consumption is not to simply consume less. Both the supply and demand sides of the issue must be addressed.

On the supply side, we can dramatically increase what might be called our "environmental productivity." Ample data show that with new thinking and smarter designs, we can construct and power our buildings, vehicles and products with half the inputs of raw material and energy while achieving equal or greater levels of comfort and service. The McKinsey Global Institute, for example, last year concluded that global energy demand growth could be slashed by 50 percent between now and 2020 through increased energy efficiency alone.

That is the type of ambitious goal Lane County businesses, governments and utilities should set.

On the demand side, we can consume more responsibly and wisely. That involves consuming more of some things. We want to consume more renewable energy. We also want to consume more materials that, when spent, can be returned to the environment easily without harm to serve as nutrients for new biological growth.

At the same time, we can trim climate-damaging consumption without affecting our quality of life.

At home and work, for example, we can routinely turn off and unplug lights, computers, motors and electronic gadgets when not in use. We can cut our use of fossil fuels through greater use of public transportation and other steps, and shift impulse and status-based consumption away from hard goods to experiences such as an evening out with friends.

Population also can be stabilized. I'm not talking about population controls driven by coercive governments. Birth rates nearly have leveled off in many countries through a combination of poverty reduction, increasing the ability of women to control their own fertility, improved health care and nutrition to reduce mortality, and other steps.

Stabilizing consumption and population in these ways would benefit everyone, here and abroad, now and in the future. Success will require dogged determination and an unequivocal commitment to equity. But President Obama challenged American's to accept responsibility for the changes needed to right our ship.

It's time to openly acknowledge and systematically address all of the core drivers of climate change.

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