Twenty percent of underlying problems cause eighty percent of significant effects.

Overpopulation and Overconsumption:

Where Should We Focus

By Michael G. Hanauer

March 1998

We Have So Many Choices

There are many pieces to our environmental puzzle, which when assembled can ensure that our planet and everything on it have a joyful ride now and into the indefinite future. We call that sustainability, and this is our work, our goal and our passion. But that sustainability can and must be achieved without each of us manipulating all of the puzzleâs pieces. Each of us must decide which pieces to focus on ö which ones we feel are overarching in their effect, which ones we as individuals and organizations can impact, and which are most overlooked. In science, there is a rule of thumb called the 20-80 rule which says that 20 percent of the underlying problems often cause 80 percent of the significant effects. To be successful in the longer term, an individual or organization needs to choose carefully.

Because the United States so severely aggravates so many of the worldâs environmental problems, because of our responsibility to set an example for the world, and because this is my home, I believe that we should place a significant emphasis on our domestic problems (but certainly not entirely). All solutions require support and action at the local level, whether you consider local to be a nation, or an individual community. ãThink Globally, Act Locallyä makes a lot of sense from any perspective.

Much of the environmental movement has chosen to pursue specific issues such as pollution, forests, global warming, species diversity or open space ö perhaps because these are the problems we each see in our own backyards. To those with a more overarching view, consumption and population issues stand out because they are largely local and because they are causal, that is they occur at a community level and tend to underlie or exacerbate many individual problems. Both of these pieces are important to our ride toward sustainability. Where should we place our emphasis and our resources?

Technology rarely produces lasting solutions, only additional difficult choices and tradeoffs.

How Do We Choose From the Causal Two?

There are many widely read books with titles like Fifty Easy Ways to Save the Earth. Almost all of these books approach issues from the point of view of reducing (over)consumption. We often hear how the U.S. has 5 percent of the worldâs population, yet consumes 25 percent of its resources. Itâs also true that the developed world, with 23 percent of the population, uses about 66 percent of the Earthâs resources. Yes, it can sound like just a consumption problem, but the magnitude of this consumption actually makes population even more important to preserving our environment and quality of life!

In many environmental and population circles, the traditional thinking dictates that the problem in developing countries is overpopulation, while in the developed world the bulk of the problem is overconsumption. This oversimplification, that the U.S. has mainly a consumption problem, purveys easy, feel-good answers to many environmentally conscious individuals and organizations. Such feel-good answers are dangerous because they lead to incomplete actions by masking the enduring effects of population growth. Letâs explore further.

In the developed world, per capita consumption levels are all within the same order of magnitude. Yes, in highly populated sections of Western Europe and Japan levels are somewhat lower than ours (often due to smaller and more expensive living spaces, higher energy costs, and fewer cars), but not vastly different. On the other hand, most third world consumption levels are between 0.5 and 5 percent of ours. This vast difference is not because these people recycle, use little plastic or donât drive a turbo-charged car ö it is because they have no car, no central heat, no refrigerator, and maybe no house at all!

It is this lack of the most basic items, items which most of us believe every human should be able to have, which make up most of the consumption difference between the haves and the have nots. In the developed world, even if every effort were made to cut frills and inefficient consumption, these basics still have us out consuming a third world citizen by a factor of five to fifty. Reasonable levels of consumption are not morally wrong, in fact most of us believe that they are desirable. We need to allow all of the worldâs citizens a reasonable lifestyle while at the same time heading toward sustainability. This will require a leap in consumption for developing countries, a practical and therefore smaller reduction in consumption for developed countries, and population stabilization or reduction for all. Population levels are critical to the dream and are too often overlooked.

What About the Effects of Conservation and Recycling?

In a broader sense, the idea of reducing consumption can and should incorporate the industrial processes that produce the goods and dispose of the pollutants, in addition to what and how much is consumed by individuals. Processes that will produce fewer waste byproducts, use more abundant or replaceable resources, or facilitate recycling can help to reduce environmental impact. In addition, affecting these kinds of changes may be done faster than changing population trends. But we must also recognize that with increasing population, gains from conservation and recycling are likely to be quickly overwhelmed. Still, such efforts are an important part of the solution.

Isnât Technology Our Ace in the Hole?

Frequently, we believe that technology can solve any problem. The inherent fallacy in this approach is that the greatest cause of new problems is techno-fix solutions to old problems. Even our present population growth was brought on by technology which prevented or cured disease and allowed large gains in food productivity (often by increased use of fertilizers and pesticides, and cruel treatment of farm animals). But, the most important implication here is that technology rarely produces lasting solutions, only additional difficult choices and tradeoffs. An example is the solar or electric automobile. The batteries are polluting in production and disposal. The solar panels are polluting to produce, the power generated to charge the vehicle usually requires power plants, and we still keep gaining more cars.

And what about the choices for those power plants? Burning fossil fuel uses (foreign) oil and contributes to the greenhouse effect, nuclear generation involves safety concerns and the problems of spent fuel disposal, hydroelectric plants and their associated dams spoil our riversâ natural beauty and harm wildlife ö and raise the question of just how many dams can be built? What about solar, fusion, and power too cheap to meter? Even if such methods can one day produce meaningful amounts of energy, what are the side effects and other tradeoffs?

Technology usually provides many options, each of which has different side effects. Making a choice often requires selecting the lesser of a number of evils. Today, because of higher population levels, the NIMBY (Not In My Back Yard) syndrome makes it nearly impossible to rationally choose -- often none are really acceptable. Almost every choice involves leaving something behind in somebodyâs backyard.

Population Size Matters Most to the Big Picture and Over the Longer Term

Overpopulation actually occurs at a lower point with a higher standard of living.

Even where new technology or reduced consumption might help, consider the following:

1. Population growth directly drives increasing overall consumption, but not vice versa. The existence of a person necessarily consumes resources, takes up space, and disposes of waste products. In the poorest regions of the world, localized destruction is taking place due primarily to overpopulation because per capita consumption is at subsistence levels. When we talk about the affluent U.S., consumption takes on even more significance. But, by accepting that ãreasonableä levels of consumption are O.K., we must bring population into the formula since each additional person has a much more significant impact on the ecosystem. Overpopulation actually occurs at a lower point with a higher standard of living.

2. Population growth creates problems beyond the impacts of excess consumption. Will just decreasing consumption have an appreciable or lasting effect on reducing the crowds at our national parks or our loss of open space? Can just dealing with consumption halt the loss of personal freedoms, privacy, the loss of direct political representation, the inability to find solitude or the reduction of stress or crime? Can dealing with consumption alone reduce traffic or lines at the mall or supermarket, or will it just reduce the amount people buy per trip? Will just reducing consumption stop urban sprawl, or just alter the form and time it takes to happen? Will only reducing consumption keep our communities from raising taxes to continually provide more infrastructure, more services, and more schools?

3. Overpopulation has many additional social impacts as well. Wilderness, quiet, privacy and the need for occasional solitude are important to individuals in a civilized society. These are all things we lose as the population expands and takes up more habitat. More than simply concern for an excessive ãecological footprint,ä we need wild spaces and living space to nurture our spirit.

4. Pushing people together also perpetuates a loss of personal freedom. Just because we can live in a small cluster home, survive with more traffic, cope with more regulations or tolerate a government with a more diluted political representation, does not mean that we should. How long can our society tolerate ever increasing population? Donât we want a quality of life for ourselves and future generations that is much better than just tolerable?

5. Conflict and stresses are much more likely when people are pushed closer together. When we are in a denser environment, our neighborâs actions have a more adverse impact upon us. We are forced to limit our actions with respect to the rights of others, to put up with losing some rights, or having additional regulations to

enforce our rights. This conundrum is further aggravated as resources become more scarce.

6. Just reducing consumption will do relatively little over the long term to save the 20 thousand species of plants and animals we are pushing off the planet each year. Habitat loss, probably the biggest direct problem, is impacted by our individual ecological footprints. While reducing consumption will reduce the size of that footprint, the total habitat loss will only grow if population continues to grow. Much of the worldâs habitat loss is greatly aggravated by U.S. population growth.

7. Like other discrete environmental issues, overconsumption has many components, each of which will need to be confronted with analysis, committees, bureaucratic agencies, standards, regulations and funding. Population stabilization (or eventual reduction), which will alleviate so many other underlying problems, is actually easier and less expensive to accomplish if we just acknowledge its impact and make the effort to do so.

Population is not getting the attention it should. There are many organizations with programs aimed at reducing consumption. Because many people choose to believe that dealing with consumption is
the answer ö they often donât acknowledge that stopping population growth is a necessary component of the solution. While two countries (China and India) have larger populations than the U.S., from the point of view of global environmental impact it is the U.S. that is the most overpopulated. Many of the most intractable global environmental problems, such as the greenhouse effect and ocean pollution, are largely caused by the U.S. and the developed world. With per capita consumption levels likely to grow significantly worldwide, and likely to shrink only marginally here, the multiplier effect of each U.S. resident continually becomes ever more critical.

Population Matters Most to a Practical Solution

In a survey by Utne Reader of its own (very environmentally concerned) readers, only 21 percent said they would be willing to do without a car and only 13 percent would forgo their Quarter-Pounders with cheese. With a major effort we might be able to marginally lower U.S. consumption rates, but that reduction will be (and has been) overwhelmed by population increases. Between 1970 and 1990, 93 percent of the increase in U.S. energy use was due to population growth.

Meat, fish, low-yield vegetables, shrink wrap, paper, autos, and personal computers are not morally wrong. The higher the population, the more personal choices we must give up and the lower the resulting quality of life. Just reducing consumption here without bringing it to third-world levels will do little to lower our

All environmental organizations need to incorporate the population connection into their programs or all will ultimately fail.

impact if population keeps growing. Those fifty, easy, feel-good ways to save the earth are worthwhile, and are even an important part of our total ride toward sustainability. But when those easy answers publicly mask the need to ask and resolve hard questions about our nationâs population growth, those answers become a problem in themselves.

U.S. population is now at 269 million. Census Bureau projections indicate that our population is likely to surpass one-half billion in the coming century. Important analysis and calculations from the biological and physical sciences support the contention that U.S. population is now at about double the sustainable level. Attainable reductions in consumption will not do the job if we do not also stop population growth. We all want a truly sustainable world which can support a reasonable standard of living with reasonable levels of consumption for all.

Population growth is important in itself, and in its effect on overall consumption growth. In the long term, stopping population growth is a necessary part of the sustainability equation. All environmental organizations need to incorporate the population connection into their programs or all will ultimately fail.

If population organizations and activists donât keep the population issue front and center, who will?