

Population presents the Y6B dilemma

By Carl N. McDaniel

Twelve years ago, few suspected that we would be spending millions of dollars to address a problem known as Y2K. That year — 1987 — was Y5B. Now we have reached Y6B.

If you're like most people, you're about as familiar with Y5/6B as most of us were with Y2K in 1987. Yet, Y2K is a trivial issue when compared to the challenges associated with Y6B — the Year of Six Billion. United Nations' demographers have designated Oct. 12 as the symbolic day that the human population will reach 6 billion.

I know you've heard it all before. Why should we think the followers of Thomas Malthus, who predicted population problems 200 years ago, are finally correct? Well, truth to tell, human

population over-shoots are not easily recognized until after the fact. That is, when the population has peaked and is headed down. Prudence would have us avoid positive proof of over-shoot.

To do so, we need to stabilize our population at a level where every person can live well. Thus, the most obvious Y6B challenge is to strive aggressively to provide for Child-6-billion and all of the rest of us.

Most people want clean air, healthy nutritious food, safe water, a secure home, basic health care, a good education and a satisfying job. Is it possible for everyone to have these things?

Nobody knows, but a few numbers are informative. Statistics compiled by a variety of population-watch organizations show, among other things, that 8 percent of us now face chronic shortages of fresh water while 45 percent periodically are without a reliable, safe supply of drinking water. About 13 percent do not get enough to eat and more than 30 percent of children younger than 5 are underweight. Ten percent of U.S. students drop out of high school, and a high school education is available to only 5 percent of African teenagers. In Afghanistan, 150 infants die for every 1,000 live births; the world average is 57 per 1,000 live births. One billion people (30 percent of the work force) are unemployed or earn too little to meet basic needs.

The challenge of providing for 6 billion people is truly daunting, perhaps impossible. This leads to the unavoidable second challenge of Y6B — stabilize the human population as soon as possible. Again the numbers are overwhelming. With 33 percent of us under 15 worldwide and yet to enter our reproductive years, the potential future growth is enormous, even with declining growth rates. Our current rate of growth is 1.4 percent per year — a rate which, if maintained, would result in a doubling of world population by 2048. The U.S. growth rate at 0.9 percent is the highest among more-developed nations.

Curbing this rapid growth cannot be accomplished with a one-size-fits-all solution. The challenge is to tailor the approach to the culture. We have many

success stories — Japan, Thailand and Costa Rica; to name a few, have gone from growth rates of about 3 percent in the middle of the century to 0.2, 1.1, and 1.8 percent, respectively — each with its own approach. We do know that contraceptive use universally reduces fertility rates. Providing education and jobs for women is also effective.

It is not, however, just a population size problem, but also lifestyle issue. six billion people cannot achieve North American standards of living. Conservative estimates indicate that for every-body to live in a sustainable way at our level of consumption would require two additional Earths. Thus, sustainable levels of consumption and efficient use of resources are critical in addressing the Y6B challenges.

Yet, what is most important in the long run will be acknowledging and addressing the fact that our expanding economies are in fundamental conflict with the preservation of ,our life support systems — the atmosphere, soils, and waters as well as the biological diversity that make life and .civilization possible in the first place. we are in the sixth episode of mass extinction of species in the past 600 million years. As the aggregates of organisms that clean our water, provide our food, and make the very air we breathe are lost, civilization, perhaps even human existence, will not be possible.

Yes, Y2K is obvious and important. The Y6B dilemma, how-ever, is an abstraction and hidden from us. As a colleague recently commented, “I can get any kind of bagel with whatever topping I want. Where is the problem?” Yet, if we do not seriously and aggressively address Y6B, now, it will bite us hard in unanticipated ways that will be most unpleasant.

Carl N. McDaniel, a professor of biology, is director of the Undergraduate Environmental Science Program at Rensselaer Polytechnic Institute.

For more information about population issues, see these Web sites:

- <http://www.prb.org>
- <http://www.rpcv.org>
- <http://www.worldwatch.org>
- <http://www.ucsusa.org>
- <http://www.zpg.org>