## Exit the Cornucopian Era: Enter the Era of Scarcity

The first lesson of economics is scarcity. There is never enough of anything to satisfy all those who want it. The first lesson of politics is to disregard the first lesson of economics.

**Thomas Sowell** 

One of the consequences of such notions as "entitlements" is that people who have contributed nothing to society feel that society owes them something, apparently just for being nice enough to grace us with their presence.

**Thomas Sowell** 

Would you live with ease, Do what you ought, and not what you please.

Benjamin Franklin Poor Richard's Almanac

Welcome to the world of scarcity! Humankind lives on a finite planet with nearly 7 billion people whose numbers are still increasing exponentially and whose ecological overshoot is approximately 150%. The human economy is dependent upon resources, particularly renewable resources, which are declining and will not increase as long as damage to the Biosphere continues.

Nature provides no entitlements, and humans cannot provide them if Earth's carrying capacity is exceeded. However, young people deserve entitlements such as health care and education. If parents and society cannot provide these, society will fail because a complex society needs healthy, well educated citizens. Entitlements will always decline in an era of scarcity, but education and health care must survive.

Using renewable resources more rapidly than Earth can regenerate them is, arguably, the ultimate unsustainable practice. Overuse now exceeds 150%, but overuse of resources has been advocated as the only way to maintain economic growth, which has already damaged the biospheric life support system (e.g., Cairns 2010). Nurturing the present biospheric life support system (which is the sixth one) might preserve the conditions that are so favorable to *Homo sapiens*. Even if nurturing were successful, many injustices (e.g., the growing disparity of wealth between the very rich and the very poor) would remain because nurturing the Biosphere after humankind has damaged it so badly will be difficult.

Rampant consumerism does not use resources wisely — for example, present use of fossil fuels, particularly coal, is changing Earth's climate in ways that threaten human society. Rampant consumerism has already damaged the Biosphere and may have pushed it close to an irreversible tipping point.

No amount of wealth will protect people from runaway climate change, which will occur if anthropogenic greenhouse gas emissions continue at the present or increased levels. The consequences of economic growth are being ignored because preventative measures for climate change <u>might</u> have adverse effects upon the human economy. However, the human economy is not more important than leaving a habitable planet for future generations.

Most citizens do not understand financial terminology well, such as the term *derivatives*. This illiteracy has cost them dearly, as has not understanding science and its terminology. However, economic growth is and has been a very high priority goal, so this illiteracy of economics is difficult to understand. Along the same lines, all parties need to understand the terminology when coping with global problems. Since the human economic system is a subset of the Biosphere, biospheric health is essential to the health of the economic system. Therefore, understanding terminology in the realm of science will aid the economic system.

On a finite planet with finite resources, humankind must arrange its priorities accordingly. Following is an illustrative accounting from 2010 of the general public's concerns.

50% unemployment and jobs 25% government deficit and spending 9% health care 7% war in Afghanistan 5% immigration 1% other 1% unsure

On the other hand, a global priority list corresponding to the major, global crises might include the following.

- (1) Protect and restore, as far as possible, the biospheric life support system.
- (2) Reduce Earth's human population to within Earth's carrying capacity for all humankind, which will require adjustment of many individual resource uses if the process is compassionate.
- (3) Eliminate ecological overshoot. Consuming resources at a rate beyond the biosphere's regenerative capacity is clearly not sustainable and is, therefore, both stupid and unsustainable.
- (4) Eliminate biodiversity loss and biotic impoverishment (i.e., reducing a species population size so that it is no longer of ecological significance).
- (5) Save some endangered, large carnivores and herbivores, regardless of their present numbers because they have major beneficial effects on the food web.
- (6) Treat corporations as artifacts created by humans, not as individuals. Their effects on the Biosphere must be regulated.
- (7) Develop a nurturing relationship with the Biosphere by having more association between humans and other life forms on Earth and become more literate about natural systems.

Giving priority to these goals will be an expensive undertaking, but the cost of doing nothing or doing too little, too late will almost certainly be far more expensive. Meeting these goals will require a diverse array of scientific information, and initially much of the evidence will not be pleasing or comforting. The scientific process has been exemplary in correcting errors for many years and must be left to credentialed scientists just as medical decisions are left to credentialed physicians. Harassment of scientists for political or ideological reasons markedly increases the risks for all society. The preponderance of evidence should be the basis for all policy decisions.

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## LITERATURE CITED

Cairns, J., Jr. 2010. Threats to the biosphere: eight interactive global crises. Journal of Cosmology 8:1906-1915.