CHAPTER 36

EVOLVING TOWARD AN EVIDENCE-BASED/ETHICAL VALUE-BASED SOCIETY TO NURTURE EARTH'S BIOSPHERE

"OUR BRETHREN ARE ALREADY IN THE FIELD! WHY STAND WE IDLE?"

Patrick Henry

* "THE ULTIMATE ISSUE IN ENVIRONMENTAL ETHICS IS WHAT CONSTITUTES EACH INDIVIDUAL'S RESPONSIBILITY FOR MAINTAINING THE CRUCIAL NATURAL SERVICES THAT THOSE ECOSYSTEMS SUPPLY TO HUMANITY."

Paul and Anne Ehrlich

HUMANITY'S IRRESPONSIBILITY — THE USE OF NATURAL RESOURCES TO STIMULATE ECONOMIC GROWTH — HAS ENDANGERED BOTH CIVILIZATION AND THE SPECIES.

- Interest in the common good of all life forms (i.e., the Biosphere) is uncommon.
- Human population growth together with increasing per capita consumption, if continued, will result in collapse of the present Biosphere.
- Climate change and other anthropogenic disasters (e.g., Fukushima nuclear power stations) should persuade humanity to become more aware of scientific evidence and reflect on ethical/moral values, especially the intergenerational ones.
- If humanity intends to nurture the Biosphere, it must begin at once, i.e., before more damage to the integrity of the Biosphere occurs.

THE CENTRAL GOAL IN NURTURING THE BIOSPHERE SHOULD BE THE COMMON GOOD OF ALL LIFE ON EARTH (I.E., THE BIOSPHERE) OF WHICH HOMO SAPIENS IS A PART.

- Humanity is dependent upon the Biosphere both as a life support system and for renewable resources that are essential to the human economy.
- At present, humanity is badly damaging the Biosphere, which will collapse if present, unsustainable practices continue.
- Humanity evolved in the present Biosphere and is unlikely to survive in the Biosphere that replaces it.
- Time is growing very short to make the transition to nurturing instead of exploiting the present Biosphere.

DURING WAR WORLD II, PEOPLE OF MANY NATIONS UNITED VOLUNTARILY FOR THE COMMON GOOD BECAUSE WAR THREATENED THE COMMON GOOD IN AN EASILY UNDERSTOOD WAY.

- Even in the United States, the "... defense industry was suffering an acute shortage of animal fats..." to produce smokeless gunpowder during World War II. The First Lady, Eleanor Roosevelt, as spouse of then U.S. President Franklin Roosevelt, had an appeal in her daily newspaper column, "My Day," for housewives to save kitchen fat to support the war effort.¹
- The U. S. military for World War II was financed by war bonds purchased by the general public, often at rallies with movie stars as "salespersons." Although the bonds paid interest, this endeavor was a remarkable effort for the common good.
- In the United States, a draft procured individuals for the war effort in World War II, so the military represented U.S. families in protecting the nations for the common good.
- Mobilization for the common good was swift and nearly universal in the United States in World War II why not use such a mobilization in peacetime?

IN CONTRAST TO THE UNIFIED EFFORT OF WORLD WAR II, THE DANGER RESULTING FROM DAMAGE OF NATURAL SYSTEMS (I.E., THE BIOSPHERE) HAS NOT ELICITED AN EFFECTIVE RESPONSE.

- "... U.S. consumers rank last of 17 countries ... in sustainable behavior, ... U.S. consumers are among the least likely to feel 'guilty about the impact' they have on the environment ... yet they are near the top in believing their individual choices could make a difference ..."²
- If individuals in the developing world had a per capita consumption-ofresources behavior similar to the per capita consumption of the developed world, biospheric collapse would be highly probable. *Homo sapiens* may still have time to actually live sustainably on a finite planet with finite resources. May it be so!

EVOLVING TO SUSTAINABLE CONSUMPTION AND RECYCLING BEHAVIORS THAT WILL ENABLE HUMANITY TO LIVE SUSTAINABLY WILL REQUIRE ENDING HUMAN POPULATION GROWTH AND COMPASSIONATE REDUCTION IN POPULATION SIZE AND CONSUMPTION OF RESOURCES TO MATCH OR BE BELOW BIOSPHERIC REGENERATION OF RESOURCES.

- S Addressing resource / population issues is long overdue.³
- (*) "... some of the religious and political opposition to family planning that too often is based on narrow, no-evidence-based biases that ignore the incontrovertible evidence of the positive health and family benefits of child spacing" must be addressed.³
- (*) However, family planning must be based on scientific, evidence-based data on the Biosphere's longterm carrying capacity for humans at the global level.

A FAREWELL TO THE THROW-AWAY CULTURE AND FOSSIL FUEL USE IS TAKING TOO LONG.

- * "The current oil and gas boom in continental North America poses a difficult policy question: How are we to reduce climate emissions in an era of continuing, and even increasing, oil and gas supplies?"⁴
- Whenever a new technology appears (e.g., solar panels), lamentations are heard about the jobs that will be lost in the old technology (e.g., coal-fired power plants). However, no mention is made of the jobs created by the new technology. When automobiles replaced horse-drawn carriages and wagons, manufacture of horse whips declined and those jobs were lost — but automobiles provided many new jobs. No one now mourns the loss of makers of horse whips — they probably opened gas stations.

EARTH'S DOMINANT SPECIES HOMO SAPIENS MUST EXHIBIT MORE SELF CONTROL AND NOT APPROPRIATE RESOURCES, INCLUDING SPACE, FROM OTHER SPECIES FOR A PERCEIVED "NEED" FOR ECONOMIC GROWTH.

- Humanity cannot continue to add 1 billion additional people to Earth every 12 years.
- Exponential human population growth requires appropriation of resources from the 30+ million other life forms with which *Homo sapiens* shares the planet.
- Anthropogenic greenhouse gas emissions are causing rapid, often irreversible, climate change that is threatening the Biosphere.
- Lack of human self control involving reckless use of resources is an unethical behavior threatening the quality of life of future generations.

♣ "I'M NOT SURE THAT TREATIES ARE PASSÉ, BUT THE 21ST CENTURY HAS PRODUCED NOTHING TO HELP ME WITH A COUNTER ARGUMENT."⁵

- (*) "What will not work is to surrender our initiative to a kind of consumerist green chic, in which we choose to 'live sustainable lives' by buying greener products and doing nothing else."⁵
- * Normatively, the upside of the Anthropocene is that we're no longer able to sustain the conceit that nature and humanity are separate. Maybe that will cause us to behave more respectfully toward our planet, but it is pretty hit or miss right now." 5
- Little robust evidence exists that shows humanity is progressing toward an evidence-based/ethical valuebased society to nurture the Biosphere. However, this transition must be completed before the present Biosphere collapses and makes survival of *Homo sapiens* difficult, if not impossible.

AN EVOLVING RELATIONSHIP WITH A COMPLEX, DYNAMIC SYSTEM, SUCH AS THE BIOSPHERE, REQUIRES A KNOWLEDGE OF THE EXISTING SCIENTIFIC LITERATURE, AN AWARENESS OF THE PREPONDERANCE OF SCIENTIFIC EVIDENCE, CRITICAL THINKING TO SELECT THE HIGHEST QUALITY EVIDENCE, JUDGMENT OF THE MOST APPROPRIATE SCIENTIFIC EVIDENCE SUITABLE FOR POLICY DEVELOPMENT, REALIZATION THAT UNCERTAINTY WILL ALWAYS EXIST IN LIFE, RECOGNITION THAT CIVILITY IS ESSENTIAL IN BOTH SCIENTIFIC AND PUBLIC DISCOURSE AS IS AN UNBIASED VIEW OF SCIENTIFIC EVIDENCE.

- Solicy making involving scientific evidence requires public literacy about the scientific process.
- The news media would benefit, as would the general public, when scientific evidence is reported in a synthesis rather than as isolated evidence.⁶

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