

EDITORIAL

Forests on a full Earth

Objective: a return to a wholesome human habitat

The continued operation of the biosphere as a wholesome human habitat would be expected to emerge as one of several persistent collective purposes in human affairs. Daly (1993) has pointed to the challenge as accommodating the transition from an empty Earth, where resources exceed demand, to a full Earth, where demand routinely exceeds the resource. Forests are so large in every aspect of the biophysics of the human habitat that their functional integrity is intrinsic to that purpose. How can the functional integrity of forests on a full Earth best be assured on a global basis over the next decades as all pressures on the human habitat continue to soar? Such is the challenge before the World Commission on Forests and Sustainable Development, now completing its final hearings and preparing its report. The Commission was established in 1995 as a non-governmental group of distinguished citizens from the forested countries to do what governments had been unable to do in 1992 at the Rio Conference, namely to address the critical global and international issues of forests in the context of the emergent public interests, as opposed to continued destructive commercial exploitation. The Commission's staff and offices are in Geneva. Its report will be released in 1998.

Any answer to the above question is wrapped in a host of considerations of human rights, the various elements of the public interest and dreams of social, economic and industrial development. Reliable supplies of clean water, clean air, food free of poisons, a stable and predictable climate, as well as a place to live in peace under a democratic government, are all increasingly recognized as basic human rights. The issues come increasingly to the fore as we realize that virtually every square metre of the Earth capable of supporting people is now inhabited by a surging human population that is totally dependent on living resources. Whatever the hopes and aspirations of individuals, the land and forests are finite. The land is not only divided among increasing numbers of forest dwellers but also sought by others for competitive purposes. The competition is the product of the growth in human numbers, the expansion of agriculture, and commercial or industrial interests . . . or simply greed and corruption. There is little room for compromise. Unless addressed directly, the conflicts only increase, following a course well-defined in history, usually with the displacement or elimination of the people who find themselves most effectively in the way. Those displaced accumulate in the slums of cities and the landscape becomes systematically impoverished, sometimes to the point of dysfunction.

Human rights in an expanding global economy

Human rights in a world that is full cannot be expected to yield systematically to continuously expanding industrial or other appetites for land and forests. Uncertainties of land tenure in forested areas feed the desires of corrupt governments in collusion with equally corrupt industrial interests to grant lucrative concessions over the objections of forest dwellers, the common welfare and common sense. Stabilization of land use is necessary to provide for the emergent public purposes of stability in global climate and regional energy budgets, to provide for local water supplies of high quality, as well as local supplies of fibre and fuel, and other forest products and services. The stabilization also sets clear limits on the scale of the resource and the size of the population it can support.

The requirements of a full world with a stable and sustainably-wholesome human habitat clearly call for the planning of land use, the assignment of ownership of land and responsibilities in management, and sufficient perspective globally to assure that the Earth's biophysical systems will continue to function normally. 'Normal' function does not include a warming of the Earth at rates of $\geq 0.1^\circ\text{C}$ per decade, but might include a warming at 0.1°C per century.

A prescription

The objective is equity, stability and sustainability in a world that is full and where demands on all resources continue to soar. The principal instrument for global co-operation on such issues is the series of treaties developed around environmental issues. The most successful are the Framework Conventions, especially the 1985 Vienna Convention for the Protection of the Ozone Layer (UNTS 26369) plus its 1987 Montreal Protocol on Substances that Deplete the Ozone Layer, as amended and adjusted in London in 1990 and Copenhagen in 1992 (UNTS 26369). The 1992 Framework Convention on Climate Change (UNTS 30822) will have its most critical test in December 1997, at the Third Conference of the Parties in Kyoto. The success of this treaty will depend in part on the world's ability to manage forests globally: to shift from continuous loss of forests (with the release of carbon as carbon dioxide and methane) to stability of forested areas and an increase in carbon storage in trees and soils. This emergent global consideration joins a host of regional and local considerations of patterns of land use that recognize basic human rights as pre-eminent. They do not emerge from simple considerations of 'sustainable forestry' or 'ecosystem management' or from any other technical adjustment in forestry. They do require a fundamental agreement among the nations. The core of such an agreement will have to be an understanding as to the division of land among various uses, an ecological land-use plan that will accommodate the biophysical limits of a finite Earth that is now full. Such a plan starts locally and protects all interests, but recognizes above all the necessity for restoring and protecting the biotic function of the landscape in the interest of the public at large. The challenge is complex, urgent, demanding, and, in a full world, not open to easy compromise. The proof of effectiveness will be conspicuous when the sum of local actions produces a world that works as a human habitat . . . and promises to continue working for the indefinite future.

Reference

Daly, H.E. (1993) From empty-world economics to full-world economics: a historical turning point in economic development. In: *World Forests for the Future*, ed. K. Ramakrishna & G.M. Woodwell, pp. 79–91. Yale, USA: Yale University Press.

George M. Woodwell
Advisory Editor