Date of completion: 21 October 2009

## Lessons from Avoiding Overpopulation: "Primitive" Polynesians\*

This posting is a simultaneous submission for "Climate Change and You: Putting a Face on Global Warming," EcoRes Forum Online E-Conference #3, October 19-29, 2009. Further information available at <a href="https://www.eco-res.org">www.eco-res.org</a>.

History is a vast early warning system.

Norman Cousins

Since humankind persists in carrying out global experiments (e.g., global heating) with Earth's biospheric life support system and since islands often experience biological phenomena that occur more rapidly on them, they are worth studying. Charles Darwin was the first person to use islands to study speciation. The small Pacific island of Tikopia has avoided overpopulation and is worthy of examination. "The small size of the island of Tikopia and its isolation has meant that for generations past the maintenance of an adequate relation between quantity of land and population has been a problem of fundamental importance in the economy of these natives. In olden days they appear to have attained a rough equilibrium, and kept it by various mechanisms of adjustment; in recent years this has tended to be upset as a result of contact with European civilization" (Firth 1983, p. 367). In 1929, the population was 1281 (Firth 1983, p. 368). "... until recent years the population of Tikopia was normally in a state of equilibrium with its food supply" (Firth 1983, p. 373). This situation was partly the result of occasional famines. "The relation of population to natural resources is not expressed in purely individual terms, but in terms of family equilibrium" since each family has a finite portion of the land (Firth 1983, p. 373). The number of people on each family tract of land is kept sustainable by (1) celibacy, (2) coitus interruptus, (3) abortion, (4) infanticide, (5) war, (6) sea-voyaging (especially by young, unmarried men).

"It might be thought that the so-called sanctity of human life is not an end in itself, but the means to an end, to the preservation of society. And just as in a civilized community in time of war, civil disturbance or action against crime, life is taken to preserve life, so in Tikopia infants just born might be allowed to have their faces turned down, and to be debarred from the world which they have merely glimpsed, in order that economic equilibrium might be preserved, and the society maintain its balanced existence" (Firth 1983, p. 376).

If the planet's population were only 1 billion, instead of nearly 7 billion, humankind's present lifestyle would not be a problem. Earth has more humans than it can sustain, and approximately 215,000 new mouths (births minus deaths) are added daily. Obviously, nurturing the biosphere is an act of enlightened self interest. Global heating and other types of climate change might destroy millions of species and civilization, but a new, different biosphere will emerge – almost certainly one that will not favor humans as the present one does. Saving the present biosphere is essential to the survival of civilization. Talking about the dangers to economic growth is a transparent tactic. Where would the economy be without humans?

## LITERATURE CITED

Firth, R. 1983. We, the Tikopia. Stanford University Press, Stanford, CA.