



HUMAN ECOLOGY

Problems and Solutions

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Synthesis and Recommendations

Summary

To recapitulate, we would outline the present world situation as follows:

1. Considering present technology and patterns of human behavior, our planet is grossly overpopulated. Between 2 and 3 billion people are not being properly cared for now. Under such circumstances, the contention of some that many more people can be easily and properly cared for in the near future is preposterous. When every human being has abundant and varied food, adequate clothing and shelter, first-rate medical care, ample educational opportunity, and freedom from war and tyranny, then perhaps consideration of whether more people can be given first-class accommodation on Spaceship Earth will be appropriate.

2. The large absolute number of people and the rate of population growth are themselves major hindrances to fulfilling the above-named needs of all of mankind.

3. The limits of human capability to produce food by conventional means have very nearly been reached. Problems of supply and distribution already have resulted in roughly half of humanity being undernourished or malnourished. As many as 10-20 million people are starving to death annually.

4. Attempts to increase food production further will tend to accelerate the deterioration of our environment, which in turn may eventually reduce the capacity of the Earth to produce food. It is not clear whether environmental decay has now gone so far as to be essentially irreversible; it is possible that

the capacity of the planet to support human beings has been permanently impaired.

5. There is good reason to believe that population growth increases the probability of a lethal worldwide plague and of a thermonuclear war. Either could provide a catastrophic "death-rate solution" to the population problem; each is potentially capable of destroying civilization and even of driving *Homo sapiens* to extinction.

6. Perhaps more likely than extinction is the possibility that man will survive only to endure an existence barely recognizable as human—malnourished, beset by chronic disease, physically and emotionally impoverished, surrounded by the devastation wrought by an industrial civilization that could not cope with the results of its own biological and social folly.

7. There are no simple answers to these threats, no technological panaceas for the complex of problems comprising the population-food-environment crisis. Of course, technology, properly applied in such areas as pollution abatement, communications, and fertility control, can provide valuable assistance. But the essential solutions entail dramatic and rapid changes in human attitudes, especially those relating to reproductive behavior, economic growth, technology, the environment, and resolution of conflicts.

Recommendations: A Positive Program

Although our conclusions are necessarily rather pessimistic, we wish to emphasize our belief that the problems can be solved. Whether they will be solved is another question. A general course of action that we feel will have some chance of ameliorating the results of the current crisis is outlined below. Many of the suggestions will seem "unrealistic," and indeed that is how we view them. But the world has been allowed to run downhill for so long that only idealistic and very far-reaching programs offer any hope for the future.

1. Population control is absolutely essential if the problems now facing mankind are to be solved. *It is not, however, a panacea.* If population growth were halted immediately, virtually all other human problems—poverty, racial tensions, urban blight, environmental decay, warfare—would remain. On the other hand, direct attacks on these problems will ultimately fail if the human population continues to grow. The situation is best summarized in the statement: "Whatever your cause, it's a lost cause without population control."

2. Political pressure must be applied immediately to induce the United States government to assume its responsibility to halt the growth of the American population. Once growth is halted, the government should undertake to influence the birth rate so that the population is reduced to an optimum size and maintained there. It is essential that a grassroots political movement be

generated to convince our legislators and the executive branch of the government that they must act promptly. The program should be based on what politicians understand best—votes. Presidents, Congressmen, Senators, and other elected officials who do not deal effectively with the crisis must be defeated at the polls, and more intelligent and responsible candidates must be elected. It is unfortunate that at the time of the greatest crisis the United States and the world have ever faced, many Americans, especially the young, have given up hope that the government can be modernized and changed in direction through the functioning of the elective process. Their despair may have some foundation, but we see no choice but to launch a prolonged and determined attempt to wrest control of the political system from the special interests which now run it and to turn it over to the people.

3. A massive campaign must be launched to restore a high-quality environment in North America and to *de-develop the United States*. De-development means bringing our economic system (especially patterns of consumption) into line with the realities of ecology and the global resource situation. Resources and energy must be diverted from frivolous and wasteful uses in overdeveloped countries to filling the genuine needs of underdeveloped countries. This effort must be largely political, especially with regard to our overexploitation of world resources, but the campaign should be strongly supplemented by legal and boycott action against polluters and others whose activities damage the environment. The need for de-development presents our economists with a major challenge. They must design a stable, low-consumption economy in which there is a much more equitable distribution of wealth than in the present one. Redistribution of wealth both within and among nations is absolutely essential, if a decent life is to be provided for every human being.

4. Once the United States has clearly started on the path of cleaning up its own mess, it can then turn its attention to the problems of the de-development of the other DCs, population control, and ecologically feasible development of the UDCs. It must use every peaceful means at its disposal to persuade the Soviet Union and other DCs to join the effort, in line with the general proposals of Lord Snow and Academician Sakharov.

5. Perhaps the major necessary ingredient that has been missing from a solution to the problems of both the United States and the rest of the world is a goal, a vision of the kind of Spaceship Earth that ought to be and the kind of crew that should man her. Society has always had its visionaries who talked of love, beauty, peace, and plenty. But somehow the “practical” men have always been there to praise smog as a sign of progress, to preach “just” wars, and to restrict love while giving hate free rein. It must be one of the greatest ironies of the history of the human species that the only salvation for the practical men now lies in what they think of as the dreams of idealists. The question now is: can the self-proclaimed “realists” be persuaded to face reality in time?