

AN INVENTORY OF HOPE

a special issue devoted in its entirety to

THE RESTORATION OF CONFIDENCE

The Case for Optimism

We do face risks for survival, but if we change course, there are probabilities of a decent life for all people. Here are 10 major steps that must be taken now.

by Maurice Strong

Are we headed for planetary doomsday? Is the human prospect as bleak and unpromising as the prophets of doom suggest? I believe that there is a *case for hope*, that doomsday is not inevitable.

- There is hope in the dawning realization of our basic interdependence in caring for and sharing the world's precious resources.

- There is hope in the attitudes of young people, in their questioning of the competitive, materialistic values of our society, in their awakened sensitivities to its inequities and injustices.

- There is hope in the courageous experimentation of some people, particularly youth, with new, simpler, more human life-styles, which are pioneering new concepts of growth and alternatives to traditional development patterns.

- There is hope in the growing number of positive examples of the way the creative uses of technology, combined with political will, can indeed produce a better and more livable environment.

- There is hope in many parts of the developing world where traditional val-

ues and cultures have been harmonized with modern technology to permit the achievement of a quality of life that is in no way inferior to that enjoyed by the wealthier societies and in many ways has much to teach them.

- There is hope in the nature of man himself, man at his best, and in the evidence in our past that we can and do respond to appeals to our higher values and our larger concepts of enlightened self-interest.

I am fully persuaded that the case for hope must begin with a realistic acknowledgment of the fact that we do indeed face risks to our survival and, perhaps more importantly, to the survival of the qualities and values which endow human life with its higher purposes and meaning. Doomsday is possible—even probable—if we continue on our present course, but it is not inevitable. It is possible to opt for a future of unparalleled promise and opportunity for the human species. But this future can come about only if we make a radical change in our present course.

The same science and technology that has given us the power to effect such a destructive impact on our natural environment and resources can help provide the means not only to control that impact but also to give all people access to at least the basic requirements for a decent life.

Let me set out 10 major steps that I believe we must take to achieve this end:

A NEW APPROACH TO SOCIETAL DECISION-MAKING. Our present dilemma points up serious deficiencies in societal decision-making processes. Clearly, our past decisions have not been producing the results we expected. No one consciously decided to pollute our air or waters, to produce the urban squalor that afflicts so many of our cities, to destroy so much of our natural endowment of plant and animal life, and to produce the glaring disparities between rich and poor that characterize our global society. But, nevertheless, these conditions now confronting us are the products of our past actions—the unforeseen results of decisions taken to meet other narrower, short-term objectives.

It is evident that we must develop better methods of evaluating the full consequences of those decisions which significantly affect both the physical and the social environment—before such decisions are made.

Societal management in the environmental age requires prime emphasis on the management of the whole system of relationships of the individual activities that combine to affect man's own development and well-being. This approach will assume even more importance than

Maurice Strong is Secretary-General of the U.N. Conference on the Human Environment and former president of the Canadian International Development Agency.

the management of any individual activity within the system. It also will require that we develop better techniques of allocating the real costs of activities to those who benefit from them, of assigning real value to such traditionally free goods as water and air. It means drastically revising our concepts and methods of evaluating the future. If we continue to value the future by means of present methods of discounting future values at current interest rates, it would not be good economics to preserve the oceans, the atmosphere, and the other precious resources of our "only one earth."

STABILIZING WORLD POPULATION. This goal should be achieved quickly in the industrialized countries that are already moving in that direction—and at the earliest feasible date in most other countries. The timing of population stabilization will vary considerably from country to country, reflecting the very different situations that exist in the balance among population, resources, and development goals. But it is essential that on a global basis the goal must be to stabilize population growth by the first quarter of the next century. Stabilization will be difficult to achieve in the developing countries in particular. Some of them are already facing the prospect of population limitation through famine and disease, and these forbidding prospects will undoubtedly accelerate if efforts to limit population in more humane ways prove too little or too late. Zero growth can be brought about only by increasing the incentives for reducing family size by spreading the benefits of development more widely and by evolving improved techniques of family planning for those thus motivated to use them.

In an era when the borders of the world are closed to large-scale immigration, the population growth of each nation is first and foremost a matter of its own responsibility; the economic and social pressures it creates and the effect on development goals primarily affect its own national situation. The population of individual nations becomes a world concern when its activities and needs begin to impinge on the resources and rights of others, whether as a result of increased population growth or the increased demands of existing populations. This situation is clearly going to happen in many cases—in some cases it is already happening. Therefore, to say that population is first and foremost a national



Joseph Scrofani

"Creation of a new international economic order" in which "civilization is char

responsibility does not relieve us of the need to see it as a global concern.

REDUCING DEMAND ON NATURAL RESOURCES AND ENVIRONMENT—A NEW COMMITMENT TO CONSERVATION. The consumption habits and production methods, particularly in the industrialized societies, must be significantly altered to reduce the demand on scarce resources and pressures on the natural environment. It must go far beyond the development of "add on" pollution-control technologies to the redesign of industrial systems and a much broader distribution of industrial capacity. Energy conservation in particular is a high priority. The fact that Sweden, whose standard of living is comparable to that of the United States, has a per capita

energy use only about half that of the United States illustrates the fact that significant reductions can be effected in energy use without materially affecting living standards. Indeed better use of resources and care of the environment can be accompanied by significant increases in the real quality of life. Consumers must be prepared to modify their demands, particularly for the kind of variety in consumer products that represents differences in packaging and presentation more than in substance. Consumers must also be prepared to accept the higher prices that will be necessary for assuring that product costs incorporate fully the cost of the environmental protection to which they give rise.

The ethic of abundant resources must give way to the ethics of scarcity and



zed by a network of interdependencies, global in scale," can save the future.

conservation. Higher costs provide greater incentives for the development of more efficient methods of using and reusing natural resources. Greater emphasis must be placed on the development of less-energy-intensive technologies, more closed-system methods, low-entropy and recycling technologies.

INCREASING WORLD FOOD SUPPLY WITHOUT DESTROYING THE ECOLOGICAL BASIS FOR SUSTAINED PRODUCTION. Feeding the world's growing population and achieving adequate nutritional standards is one of the most urgent issues of our generation. But this goal must be accomplished without destroying the ecological basis on which sustained production of food depends. Ecologically sound management of productive agri-

cultural land is absolutely indispensable to meeting the world's food-supply problems on a long-term basis. Use of fertilizers and chemical pesticides should be carefully controlled to assure a maximum contribution to increased food production and a minimum of risks of secondary consequences that could largely offset or wholly negate the benefits of such increases. We must arrest the tragic loss of productive agricultural land through the march of the deserts, massive soil erosion, and salination caused by the mismanagement of man's activities. We must make more effective use of human, animal, and other organic wastes as fertilizers and develop more effective non-chemical methods of pest control. We must drastically reduce large-scale losses of food grains during

storage, processing, and handling, which approach one-third of the total harvested in some developing countries. We should maintain reserves, stocks of food, and other vital resources in quantities sufficient for meeting foreseeable emergencies. This should be done, as is being proposed with respect to food in relation to the World Food Conference, under a system of shared international responsibility, both for costs and resource use.

REDIRECTING THE URBAN REVOLUTION. The industrialized countries first made the fundamental transition from a primarily rural to a largely urbanized society, and now the developing countries are doing so. This transition is both a product of our new technological civilization and the focus of many of its dilemmas. Urban areas have, on the whole, been growing at rates about double those of overall population growth. In 1950 there were 75 cities with a million or more inhabitants and a total population of 174 million; in 1970 there were 162 such cities, including four that had 10 million or more inhabitants, and the total population was 416 million; it is estimated that by the year 1985 there will be 273 cities with 1 million or more inhabitants, including 17 with over 10 million, and the total population will be 805 million. In some areas eco-disasters of major proportions are shaping up as cities are faced with the prospects of being overwhelmed by the virtually unmanageable problems of meeting the basic needs of their exploding populations.

Some countries, notably China, have succeeded in limiting the growth of their cities and in achieving a workable balance between rural and urban growth patterns. This is a balance that all countries must ultimately achieve, because present rates of urban growth are simply not sustainable in the long term.

Urban growth, which depends on a high degree of concentration and centralization, must give way to the development of networks of sustainable urban "ecosystems," which are in harmony with the resource base on which they depend. The sharp distinctions between rural and urban life will have to disappear as rural life acquires many of the advantages and attributes now found in urban areas and as the advantages of rural life become more accessible to inhabitants of urban areas. These new developments will entail a wholly new and

(Continued on next page.)



Wide World

Life on the Commune—*"Youth with new, simpler, more human life-styles."*

Life in the City—*"Consumers must modify demands for variety in products."*

Annan



integrated approach to the planning and management of human settlements.

ORGANIZATION AND REORIENTATION OF SCIENCE AND TECHNOLOGY. Just as man's mastery of science and technology has helped to produce many of his present difficulties, the power of science and technology must now be consciously evoked if he is to deal effectively with these difficulties. A large-scale redirection of research and development expenditures and a reorientation of the priorities of science and technology is essential. That will involve a reshaping of policies and incentives to harness the resources of industrial corporations, which are the leading repositories and practitioners of the world's technology, and to assure that they are directed to the achievement of the social goals of society.

There must also be a much more effective relationship between scientists and technologists on the one hand and political decision-makers on the other. Specifically, better means must be provided for advising and guiding scientists and technologists concerning decisions that shape our environmental future. Scientists and technologists must play a major part in reshaping the societal decision-making processes to which I have already referred.

A shift of some of the very large expenditures now being made on resource and development for military purposes to a budget favoring technologies for environmental control and betterment would improve, not diminish, our basic security. For the pursuit of narrow concepts of military security at the expense of the environmental security on which the future of all depends is surely illusory.

A NEW APPROACH TO GROWTH. New concepts of growth must be elaborated that give primacy to man's social goals and aspirations and assure that economic development is clearly designed to achieve these goals. This means that new models for economic and social progress must be designed. In the industrialized world this will involve alternative lifestyles and patterns of consumption oriented more to quality and non-material satisfactions and less to sheer quantity.

Economic incentives and penalties must be reoriented to make it more attractive to engage in those activities that are socially desirable, and less attractive to undertake those that impinge on or

contradict social goals. The highly industrialized societies should generally forgo the temptation for ever greater growth measured in traditional material terms. Most new industrial development should take place in underdeveloped regions, not in the already heavily industrialized areas.

New directions for growth in the developing nations should be designed to bypass the errors and excesses of societies that were industrialized earlier. The need for diversity in patterns of development should be recognized and respected as well as each nation's right to self-reliance in choosing its own development goals and means of achieving them.

MANAGEMENT AND CARE OF THE OCEANS. One of the greatest challenges of all time and certainly one of the greatest facing this generation is the task of bringing the 70 percent of the globe represented by the oceans out of national jurisdiction and under the rule of law and management. And the way in which we meet this challenge will do much to determine the future prospects for world peace and order. Within the foreseeable future many of the activities of man that have traditionally been carried out on land will be capable of being carried out on the oceans—some of them amounting in effect to the creation of man-made territory.

This great new source of wealth must not become the object of a new round of fierce competition among the wealthy countries with the technologies to exploit them, nor the basis of a new form of exploitation in which the wealthy extract a disproportionate share of the benefits at the expense of the poor. Resources of the oceans, and particularly of those that lie beyond national jurisdictions, must be subjected to effective international management and control so as to assure that the majority living in the developing world are the principal beneficiaries of these resources.

CREATION OF A NEW INTERNATIONAL ECONOMIC ORDER. The technological civilization is characterized by a network of interdependencies that is global in scale. The cooperation of the poor is clearly necessary for the effective functioning of this society. At the same time, the rich are most acutely vulnerable to the kinds of disruption of the technological society that can now be effected by relatively

small groups of desperate people. Thus enlightened self-interest reinforces basic moral and ethical considerations in dictating that the benefits of the technological society be more widely and equitably shared.

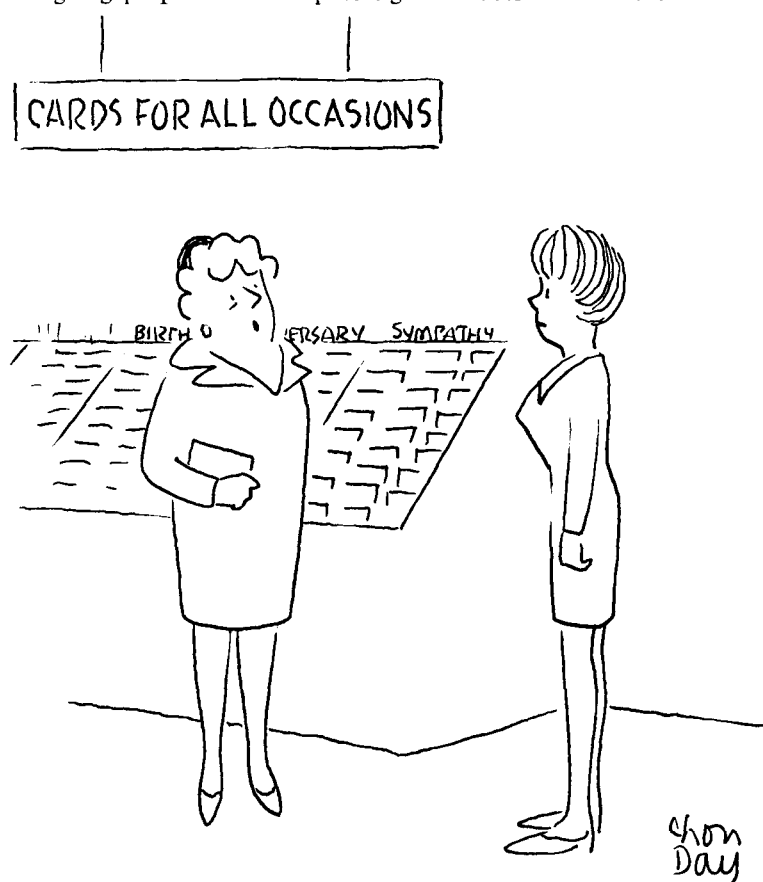
In effect, we must extend into international life the principles of distributive justice and minimum opportunities for all that are accepted as the basis for relations between rich and poor in most national societies today. This means a vast increase in the flow of resources between rich and poor countries, not merely on the basis of charity, but as a precondition to the kind of basic economic security which is essential to the health and stability of a functioning world system. And it will mean replacement of traditional development aid programs with more automatic and impersonal methods of transferring resources, such as use of special drawing rights and levies, tolls, or user charges on the use of the global commons of oceans and atmosphere and possibly on the utilization of non-renewable resources.

REVOLUTION IN VALUES AND BEHAVIOR. It must be evident that all the foregoing proposals will require significant

changes in our present system of values and patterns of behavior. The principal changes must be made in the industrial world, which today commands such a disproportionate share of the wealth and power that this technological society has made possible. The Western world needs its own form of "cultural revolution"—and it needs it urgently.

I am well aware that most of the proposals I have just advanced seem incompatible with present political realities. But let us be reminded that political realities are not immutable; there are times when practical needs must be shaped to match political realities, but on occasion these needs are such as to compel existing political realities to give way to new and larger realities.

We must believe that it is possible to build a new foundation of political will based on the combination of man's higher moral precepts and enlightened awareness of his larger self-interest. If the task is monumental, the stakes are even more so. At risk is the human future. I believe we still have the capacity to shape that future. But I am equally convinced that it will be determined largely by what we decide or fail to decide in the next decade. □



"Do you have a card for somebody whose analyst is on vacation?"



Marc & Evelyne Bernheim for The Rockefeller Foundation

I HAVE A PLAN

A former Secretary of Agriculture introduces an innovative scheme for averting the threat of famine until we can achieve zero growth and zero waste.

by Orville Freeman

Martin Luther King had a dream that still echoes in the conscience of America. I have a plan that will, I hope, reverberate as insistently in our minds. It concerns feeding—reasonably—the people of the world, poor and affluent alike.

The Problem

We know what the problem is: *In the short term*, it is the threat of famine on a sickening scale. Despite earlier optimism about the 1974 harvest in all the