In preserving the environment, there are countless ways to go wrong, but only a few ways to do right

PROGRESS ON A SMALL PLANET

by Sudhir Sen

"The environment today is threatened not primarily by lack of knowledge about our problems and what to do about them, but by a massive failure of will." So said Maurice F. Strong, chairman of the International Convocation for World Environmental Regeneration held in New York City this past February. Mr. Strong, it may be recalled, had served as the secretary-general of the United Nations Conference on the Human Environment held in Stockholm in 1972, and later as the first executive director of the United Nations Environment Program when this agency was established to give effect to the many-sided resolution adopted at Stockholm.

When seen in its totality, the progress made since 1972 is quite impressive. Concern for the environment has spread rapidly, and significant results have been achieved in several areas: Rivers and lakes have been cleaned up in the United States and other industrial nations; many degraded areas used as dumping grounds for toxic and other waste materials have been fully restored, some even with flourishing ecosystems; air pollution has been brought under control in many industrial cities; new parks have been established in desolate areas; some endangered species of plants and animals have been saved from extinction; programs for reforestation have been launched and are being expanded; cooperation among nations to protect the marine environment has increased.

The progress, though heartening, is by no means adequate. Mr. Strong is quite candid on this point: Despite the positive achievements, "the environment of our 'Only One Earth' has on the whole deteriorated in the past decade. And most of the risks which were identified at Stockholm have deepened." The primary purpose of the convocation was to take stock of the present situation, give fresh impetus to the environmental movement, and chart a course to help realize the goals proclaimed at Stockholm a decade ago.

In the preparatory stage of the Stockholm conference, Mr. Strong had enlisted the services of two eminent personalities—Barbara Ward and René Dubos—to draw up a suitable agenda with adequate scientific and ecological underpinnings. This was a stroke of genius. The result was the now-famous book *Only One Earth*, jointly written by them in consultation with some hundred leading thinkers from different parts of the world. The 1983 convocation honored the memory of the late Barbara Ward and Dr. Dubos.

WAYS TO DO RIGHT

When one applies cold logic to the excitement of the two-day convocation, it is hard to feel elation. The forum brought together what Mr. Strong called "a veritable galaxy of environmental stars." Indeed, it was a dazzling show that impressed and enlightened; yet in the end it left one puzzled as to just what steps to take next.

This paradoxical result, it seems to me, stems directly from a conceptual flaw evident in the invitation to the convocation itself. "Human beings inevitably alter the course of events," it declared. "In human affairs, the *logical* future, determined by past and present conditions, is less important than the *willed* future, which is largely brought about by deliberate choices—made by the human free will." This undoubtedly is true, and no serious student of history will cavil at it. In fact, the proposition is only an elaboration of an oft-repeated aphorism of René Dubos: "Trend is not destiny."

"The most distressing aspect of our society," the letter went on to say, "is not the gravity of the problems—there have been graver problems in the past—but the dampening of the human spirit that causes many people...to doubt their ability to deal with the future." To my mind the remark seems to overdo the prevailing degree of pessimism. People are certainly more concerned about environmental problems today than they were only a decade ago, and that consciousness is spreading irresistibly, even in many developing countries.

Unfortunately, just when the movement was gaining momentum, it suffered two severe setbacks. First, a worldwide recession, the deepest in a generation, set nations—both rich and poor—scrambling for resources to make ends meet. Funds for protecting or improving the environment were among the first to dry up. Second, the United States, which is looked upon as the logical leader in such a cause, has been headed by an administration that is complacent about environmental problems and would be glad to leave them to the "market forces," generally more indifferent to

Sudhir Sen, author of United Nations in Economic Development, A Richer Harvest, Reaping the Green Revolution, *and* Obligations of Affluence, *is U.S. correspondent of the* Economic Times of Bombay.

them than the public at large. A poll taken last November, for example, showed that a majority of Americans, *including business executives,* believe that environmental protection should not be weakened for the sake of economic growth. Other readings of public opinion have confirmed this conclusion.

This brings us to the weakest link in the convocation's logic. "Since there are countless ways to go wrong but only a few ways to do right, our best chance to deal successfully with our contemporary problems and those of the future is to learn from the success stories of our times." The first part of the remark undoubtedly is correct, but the second part is troublesome and begs several questions.

In his book *The Wooing of the Earth,* Dr. Dubos had already served an impressive array of success stories to show how extensive damages caused by natural or man-made disasters can be repaired with surprising rapidity due to the innate resiliency of nature. Barbara Ward too presented many success stories in her last book, *Progress for a Small Planet,* along with a litany of major environmental problems that are now pressing for solution. Did the convocation really need more success stories? Besides, where ecosystems are being damaged through willful depredation, as is the case with indiscriminate dumping of toxic wastes, urban sewage, and radioactive material, do we *still* need success stories to galvanize the public to undertake preventive measures? And even when success stories *are* pooled, what guarantee is there that they will coalesce into a meaningful strategy for practical application?

Finally, there are many nonsuccess stories that also deserved the attention of the "environmental stars" but automatically fell outside the orbit of a success-oriented approach. The nuclear arms race that threatens the fate of the planet and therefore deserves the pride of place among all environmental issues was conspicuous by its absence from the agenda.

Yes, there are countless ways to go wrong, but only a very few ways to do right. Sadly, the convocation itself went the wrong way and was therefore unable to nail down the few ways to do right. What are these few right ways?

IN THE DEVELOPED NATIONS

First, the cleaning up of toxic dump sites and polluted air and water, including acid rain, must continue until they are brought well within the scientifically permissible limits of tolerance. All the tools needed for the purpose, including technology and methodology, are available. What is needed is to apply them aggressively. Second, since prevention is better and *much cheaper* than cure, a new dimension must be added to new industrial, town-planning, and other projects to forestall any serious impact on the environment.

Third, at a time when efforts are being made to rescue endangered species of plants and animals, there is one endangered species in the U.S. that merits urgent attention, namely, family farmers. The family farmer has long been a pillar of America's economic health and prosperity, but today the march of agribusiness threatens his existence. Experience has clearly shown that only an army of family farmers, with the aid of well-designed fiscal incentives and essential technical services provided by government, can at once protect the land-and-water resources now suffering from the dual affliction of increasing erosion and excessive use of chemical fertilizers—and maintain them at a high level of productivity.

Incidentally, there is a spectacular success story in environmental regeneration that never was mentioned: the Tennessee Valley Authority in its early stages, say through 1953. In those years TVA provided an exhilarating example of integrated development of physical resources – soils, waters, minerals, forests—on a sustained-yield basis. Control of soil erosion; the shift from cultivation of row crops (cotton and tobacco) on steep slopes to matted crops like clover with emphasis on a livestock industry; rebuilding soil fertility with superphosphates produced at a chemical installation near the Wilson Dam; reforestation with careful management of forests and full utilization of forest products; pollution control on the Tennessee River and the newly built lakes; planned location of new industries to maintain a proper balance between rural and urban growth these are some of the fascinating facets of the early TVA story.

True, the ecological degradation that marked the 1950s and '60s in America and other industrial nations also affected the TVA in its later years. But the essentials of the TVA approach, as developed in the '30s and '40s, are as valid today as they were then. With the march of science and technology, problems have multiplied, but so also have the means to tackle them. The early achievements of TVA are therefore worth digging out of their present limbo. TVA's fiftieth anniversary, which falls on the 18th of May, provides an ideal occasion.

IN THE DEVELOPING NATIONS

Obviously Third World nations must do all they can to minimize industrial and urban pollution. Many are increasingly conscious of this fact and are ready to act accordingly, but they are thwarted by the merciless financial squeeze caused by the oil shocks, huge external debt, high interest costs, and global recession.

However, by far the greatest cause of pollution in the Third World is not industry but *poverty*. The pressure of population on land, denuding of forests, unabated soil erosion, desertification, frequent floods, migration from the countryside, suffocation of cities—these are common phenomena today and, together, they play havoc with the environment.

But where should they begin in dealing with this awesome accumulation of problems? And whence the needed finance? By now the answers should be clear: The regeneration of the developing countries and their environment must begin with the regeneration of their soils. Their best hope lies in intensive, science-based tropical agriculture and its vast, untapped potential. This potential can be adequately tapped only with a large army of landowning family farmers. How crucial it is, then, to liquidate the still-lingering strongholds of feudalism, to liberate the tenants-at-will and sharecroppers-at-will and turn them into genuine owner-cultivators. Here is the master key to solving all the major problems that plague the developing countries—food, jobs, population growth and migration, deteriorating environment, even energy supply.

These, then, are the inescapable fundamentals—the categorical imperatives—that must receive concerted and concentrated attention in the developed and developing nations if we are to protect, enrich, embellish, and enjoy our Only One Earth. WV