Conservation and Sustainable Land Use*

Editorial Note:

With so much ongoing activity surrounding the environment and sustainable development, one is prone to exaggerate the progress made in this area in recent years.

However, with the World Summit on Sustainable Development before us this year, it is sobering to acknowledge that the following statement, made almost forty years ago by the then US Secretary of the Interior, Stewart Udall, could be delivered again today, with few changes.

"The International Union for Conservation of Nature and Natural Resources has done much to widen the influence of the conservation ethic by creating a marketplace where men of all nations may share knowledge gained in dealing with resource problems.

The success of IUCN is illustrative of a trend which one must hope will increasingly pervade world relations in broad fields of endeavour; namely, that all nations can profit from an exchange of knowledge and the insights of experts who have been at work on all of the continents on problems that embrace the whole resource spectrum. Yours is an organization that gives new hope to the human enterprise – and all men of good will should wish it well.

A year ago the quality of the discussions and resolutions of the First World Conference on National Parks in Seattle in my own country set a standard for global conservation seminars. At that conference it was decided that the idea of conservation was twofold: first, to develop resources to improve the material lot of man, and simultaneously, to be cognizant of the value of the natural assets which add to the quality of life itself. It was encouraging to note that the leaders of many of the new nations – nations now in the process of making resource decisions which will determine the course of husbandry in their countries – recognized and articulated the necessity of pursuing both of these goals simultaneously.

The people of my own country have much to learn from other nations who have already confronted the conservation problems inherent in situations where the land-to-people ratio poses grave problems of management and planning. For example, American resource managers are looking to the high standards of natural areas research set by the International Union for the Conservation of Nature and Natural Resources (IUCN) scientists as an example for improving our own land knowledge and practices of wild-land husbandry.

I am gratified that so many conservation leaders have recently come to the United States to study many of our conservation programmes. There are achievements of which we are proud: our national parks system, our wildlife refuges, our soil and water conservation programmes, our forestry practices and some of our river development and land reform programmes. However, these achieve-

ments are the product of a long history of trial and error – for some periods in the past our mistakes predominated over our successes. In the nineteenth century and part of the twentieth, the United States experienced an era of wanton destruction and debilitating waste, which marked a savage and short-sighted hour in our history. Future generations of Americans will continue to pay many times over for the shortsighted and greedy errors of their predecessors.

Slightly over a century ago, thousands of miles of shoulder-high grass blanketed the Great Plains of the American West. Tens of millions of buffalo and antelope occupied a vast range of productive land, and were the wildlife wonder of the American continent. They existed in harmony with the myriad species of waterfowl and other wildlife who instinctively found the perfect habitat for breeding. These creatures were part of nature's great scheme, and they flourished until man arrived and began his 'conquests'.

In the early years of our republic, the surge of settlers to the West began. The land rush accelerated after our Civil War a hundred years ago, vast acreages of virgin land were transformed first into a huge cattle range, and later into farms for the production of grain.

In what was perhaps the greatest slaughter in history, the buffalo were brought to the edge of extermination. Droves of longhorn steers, which graze too close to the grass roots, replaced the buffalo. The result of overgrazing and poor farming practices produced the most tragic land calamity in the history of the North American continent: the drought of the 1930s saw precious topsoil from 25 million acres of rich land blow away from this 'Dust Bowl' in a sad land pageant that marked the low point of American conservation.

Eventually millions of dollars were poured into the rehabilitation of the ravaged land. Yet even now, 30 years later, only 20 per cent of the usable public rangeland is being restored to full fertility; 80 per cent of these lands still lie wounded as a result of the mistakes of the past. The cost of repairing the damage we did, where it is possible to repair, may be as much as a billion dollars.

I need not to go into detail concerning other wild species which we diminished so heedlessly: the complete extermination of the passenger pigeon, which once made up a third of our entire bird population, the extinction of 48 species of bird life in the Hawaiian Islands alone in the course of the last 150 years, the near elimination of the Whooping Cranes, and the Eskimo curlew, the key deer and the manatee.

In recent decades we have been taking vigorous steps to reverse the trend of the past. A desire to act exists in the United States, but the task of restoration is a difficult one. The land 'raiders' have left their indelible mark. In the wildlife field our Congress is doing what it can to preserve the natural habitat of various species whose existence is dependent on a precise set of breeding conditions. A bird and wildlife refuge system of over 28 mil-

^{*} Address by Secretary of the Interior Stewart L. Udall at the Eighth General Assembly of the International Union for Conservation of Nature and Natural Resources. Nairobi, Kenya, Africa, 16 September 1963.

lion acres exists in the United States, and in the last three years alone another 250,000 acres of prime habitat have been added to this system.

I have unveiled these sorry episodes in our conservation history in order to make a plea today to the emerging nations to study our mistakes as well as our achievements. We can show you the pitfalls as well as some of the more fruitful paths to the wise use of nature's bounty. Many countries represented at this conference have fine opportunities to preserve their treasures of natural bounty and habitat where superb species of wildlife can thrive while simultaneously exploiting the natural resources that can produce material abundance.

Here in Africa there is encouraging evidence that the value of wise land policies is appreciated. Great national parks and reserves, famous the world over, have already been established in most African countries. They preserve a wilderness environment vital to the perpetuation of a rich variety of wildlife species. Our experience would seem to indicate that such reserves or parks could be a more versatile economic asset than anyone ever envisioned a few years ago. The educational potential of these parks is being demonstrated in student trips within some of Tanganyika [Tanzania]'s park units, and scientifically, you should take pride that some of the world's leading ecological research is underway here in the wild reserves of

But applying conservation principles to parks and special reserves is not enough. Equal care must be given [to] every acre of land on the continent. Healthy national development will depend upon leaders who read the land record of other continents, who listen to the requirements of their own earth, and then classify all their land for its wisest uses.

Those tribal groups who live closest to the soil stand to benefit most from the insights of informed husbandry. Measures such as better water distribution, improvement of quality of cattle, rotational grazing, and a more varied human diet can enhance the livelihood of people on the plains, while still maintaining the cultural traditions that give meaning to their lives.

The evident success of game ranching in Southern Rhodesia [now Zimbabwe] suggests that management of certain game species on established ranches for meat and commodity production, with concomitant development of markets, would assist in gaining recognition by native peoples of the value of wildlife, and at the same time ensure perpetuation of wild species outside the national parks and reserves. It would also reduce overgrazing of the ranges.

We are all encouraged by [the] establishment of the Pioneer College of African Wildlife Management, at Moshi, Tanganyika [Tanzania], through the efforts of the African Wildlife Leadership Foundation, the Agency for International Development and the Government of Tanganyika [Tanzania]. It is one of the most encouraging developments of recent years. Here rising technicians and administrators can learn the basic principles of their business and how to translate them into effective land programmes. More schools of this kind are needed not only in Africa but throughout the world.

Today we are in need of a world conservation ethic. It is time that leaders worked together to formulate answers to the great conservation questions that confront us. What is the ideal 'ecology of man', the ideal relationship of the human population to environment? Is man subject to the laws of nature, which hold that every species in all environments has an optimum population? How much living space do human beings need in order to function with maximum efficiency and to enjoy maximum happiness? Answers to these questions are prerequisites to sound land development.

It is not an easy task to conserve wisely. Pitfalls will always line the road of resource development. Man has



proved his adept capability to pollute and litter and contaminate once attractive landscapes. In many cases the reduction of short-range benefits has shielded the eyes and hardened the hearts of man and of governments to the distant implications of their destructive activities.

This is not the only danger. The burgeoning of populations jeopardizes the conservation idea, and furthers the obsession of over-exploitation. This is simply a 'plunder now, pay later' policy. Courtesy: World Resources 2000-2001 The expansion of populations everywhere makes a

wise policy of conservation all the more necessary. Conservation is not a luxury; it is a necessity.

I am confident that all of us here today recognize the importance of keeping the possibilities for a full and valuable life abreast with the possibilities for a materially comfortable life. But is this sufficiently established in the public conscience of your country or of our world as a whole? We must not let resource conservation be pushed into the secondary list of priorities, or allow it to be overshadowed by those who are preoccupied by shortsighted material considerations.

Those engaged in the development of natural resources bear a solemn responsibility to future generations. History will not be kind to those who destroy the delicate and irreplaceable treasures of nature. It has not been so to the raiders of the nineteenth century in the Western United States.

We have come to a point in international relations when new forms of conservation cooperation are called for. The growing economic interdependence of countries presents us with both opportunities and problems. Specialization, due to a broader worldwide trade outlook, presents a new and unanticipated hope for conservation possibilities.

Above all, we must work more closely together to plan the management and use of these resources that all men share – the poles, the oceans, the atmosphere, and outer space. The treaty that made the Antarctic a scientific preserve, and the worldwide cooperation evinced by the International Geophysical year, are a beginning.

In the years ahead, nations can either compete ruthlessly for resources, in a context of scarcity, or cooperate, respect the laws of nature, and share its abundance. Resource interdependence and the careful management of those resources owned in common will enlarge the area of unified action and do much to encourage world order. The growth of a worldwide conservation movement might be a gyroscopic force in world politics. The influential countries of the future surely will be those that bring desalted water to arid lands and use their scientific discoveries to advance the welfare of all mankind.

President Kennedy said [in 1962]: '(Conservation) ... is the highest form of national thrift – the prevention of waste and despoilment while preserving, improving and

renewing the quality and usefulness of all our resources.'

Philosophers have never ceased to stress that the human spirit and the human heart are the faculties that set man apart from animals. It is, however, the environment that greatly determines the quality of that heart and spirit, and its overall value.

In this modern age, man has been entrusted with the power over this environment and thereby considerable power over the future quality of human life. This unprecedented responsibility calls for unprecedented effort of care and vision. We must rise to this call by uniting behind a single ideal of conservation. Only in this way can we hope to dispel the spectres of ignorance and selfishness which haunt unborn generations."