

culture in steeplands, cosponsors the 'International Conference on Headwater Control' in Czechoslovakia. This meeting concerns the problems of integrated land management in highlands and headwater regions. The WASWC shares its sponsorship with the International Union of Forest Research Organizations (IUFRO), the Czechoslovakian Scientific and Technical Society, and the Agricultural University of Prague.

More lastingly, the WASWC is involved in an aggressive campaign to increase soil conservation awareness. However, it still has a long way to go to become a world movement in more than name. In this respect, Europe holds a key position. At present, the movement is dominated by its supporters in the Americas. If it is truly to become a world movement, then it must also have major strength in Europe and elsewhere. Indeed, the success of the World Association of Soil and Water Conservation depends heavily on Europe.

A strong soil and water conservation movement would also be of major benefit to Europe, and the cause of integrated landscape management. Linguistic and nationalistic barriers have kept European soil and water conservation research in the shadows. Few individual nations, let alone the EEC and CMEA (Comecon) supranational structures,

sponsor effective arrangements for soil and water conservation. Few nations in Europe really know much about the achievements of the research workers and practitioners among their neighbours. The result is that much good work is being wasted, much time is being lost in unnecessary duplication, and many good projects are lost through lack of personnel and public support. An international organization committed to work in Europe and also committed to conservation, education, and the creation of policy, is just what is needed. The WASWC (Europe) could be that organization.

WASWC membership details can be obtained from: W.C. Moldenhauer, Executive Secretary, WASWC, 317 Marvin Avenue, Volga, South Dakota, USA, or from the Soil and Water Conservation Society, N.E. Ankeny Road, Ankeny, Iowa, USA. Activities in the European area are currently being coordinated by the undersigned.

MARTIN J. HAIGH  
WASWC Vice-president (Europe)  
Geography Unit  
Oxford Polytechnic  
Headington, Oxford  
England, UK.

### Goals and Objectives for World Conservation\*

#### A. BIOLOGICAL DIVERSITY

##### 1. *The Conservation of the Biological Riches of the World*

*40-years' goal:*—To slow the rate of species extinction to less than twice that to be expected under natural conditions.

*10-years' objective:*—Adoption by a majority of nations of an effective International Convention on the Conservation of Biological Diversity.

##### 2. *Tropical Forests*

*40-years' goal:*—To ensure that 50% of existing tropical forests are conserved through a careful balance of protection and sustainable exploitation.

*10-years' objective:*—Establishment of a comprehensive network of effectively managed sites appropriately distributed in all 57 rain-forest countries, so as to include populations of at least 80% of all rain-forest vertebrates.

##### 3. *Coastal Areas*

*40-years' goal:*—To ensure legal and effective protection of coastal areas and landscapes on at least one-third of the coastline of each maritime country.

*10-years' objective:* Establishment of a global system of coastal-marine reserves in which all coastal States participate.

##### 4. *Islands*

*40-years' goal:*—To implement practical measures in all biogeographic regions for the conservation of the unique biological diversity of islands, especially those with significant and essentially natural floras and faunas.

*10-years' objective:*—Identification and effective protection of at least 50 major centres of island biological diversity.

#### B. CONSERVATION AND DEVELOPMENT

##### 5. *Restoration Ecology*

*40-years' goal:*—To apply the scientific knowledge now available to the restoration of at least 30% of the degraded lands in all regions.

*10-years' objective:*—Provision and demonstration of practical methods that can lead to the restoration to sustainable, productive use of degraded habitats representative of all major types of ecosystems—especially those affected by aridity, desertification, deforestation, or erosion.

##### 6. *Population*

*40-years' goal:*—To reduce the current growth-rate of human populations to levels which the environment can support under conditions that provide for a sufficient dignity and quality of life.

*10-years' objective:*—Ensuring that national conservation and resource management strategies take full account of the limited capacity of the land to support people under conditions of human dignity, and promotion within such strategies of educational, social, economic, and health care, policies which achieve such a balance.

##### 7. *Education and Information*

*40-years' goal:*—To have all key sectors of the world community understand and accept the concepts and practices of conservation and sustainable development.

*10-years' objective:*—Development of education and public information programmes in all countries, so that the general public and those who take decisions on their behalf are aware of the status and trends of their national living resources and the imperatives for their sustainable, long-term management.

##### 8. *Economics*

*40-years' goal:*—To develop and adopt new economic methodologies that will secure the proper evaluation of environmental resources, and reduce the risk of their destructive exploitation for short-term gain.

*10-years' objective:*—Ensuring that national accounting systems incorporate measures of biological wealth, and that they treat the depletion of resources such as forests and biological diversity as a *loss rather than income*.

\* Received from IUCN Secretariat as a document 'which we drew up in conjunction with the IUCN 40th anniversary celebrations.'—Ed.

## C. THE GLOBAL COMMONS

## 9. Oceans

*40-years' goal:*—To ensure, as an indicator of the health of the oceans and of the wise management of global resources, that the populations of whales and dolphins are restored to at least half the levels at which they stood before the human onslaught.

*10-years' objective:*—Implementation of global conservation measures leading to significant recovery of whale and dolphin species now severely depleted by human activity.

## 10. Atmosphere

*40 years' goal:*—To end the threat posed by increasing levels of atmospheric pollution to the health of people and ecosystems and the stability of the Earth's climate.

*10-years' objective:*—The ending of all non-medical uses of chlorofluorocarbons, the development of national energy strategies to slow the rate of increase in carbon dioxide from fossil-fuel combustion, and the adoption of agreements that will substantially reduce emissions of sulphur dioxide, nitrogen oxide, and the hydrocarbons incriminated in the production of oxidants.

## 11. Antarctica

*40-years' goal:*—To ensure that Antarctica remains a continent unsullied by pollution and misuse, and open to people of all nations for purposes of peaceful scientific exploration and the enjoyment of the immense natural beauty of the region.

*10-years' objective:*—Adoption by the world community of an Antarctic Conservation Strategy as a foundation for the wise management of the world's last great wilderness for the benefit of the entire global community.

## D. POLITICAL COMMITMENT

## 12. Political commitment

*40-years' goal:*—To unite the world against the common threat of global environmental degradation by providing strong, coordinate action at the regional, national, and local, levels.

*10-years' objective:*—Adoption of National Conservation Strategies or equivalent plans in all countries, backed by the development of infrastructure, community action, and due training, to put them into effect.

IUCN SECRETARIAT  
Avenue du Mont-Blanc  
CH-1196 Gland  
Switzerland.

### Increasing the Flow of Scientific Literature to the Third World

Scientists cannot function without a steady supply of books, journals, and other forms of information 'exchange'. It is of fundamental importance in the application of science and technology to social, economic, and cultural, development, and to the well-being of the Earth, that every country have at least one open library that receives current books and journals in science and technology. While it may seem rather obvious to research workers, this simple message is not necessarily accepted by funding agencies, and needs to be emphasized time and again. Such a statement was reaffirmed at an international meeting on scientific literature for the Third World, held during 31 October–2 November 1988, in Trieste, Italy, at the International Centre for Theoretical Physics (ICTP), and organized by ICTP, the Third World Academy of Sciences (TWAS), and ICSU Press.

The sixty participants, who represented a wide range of publishers, scientific societies, book and journal donation programmes, and funding agencies, agreed to increase efforts to supply key Third World institutions with important scientific literature, both current and archival. One way to do this is to follow the excellent example of the ICTP's own donation programme, recently expanded beyond the field of physics in cooperation with TWAS.

Other programmes reviewed at Trieste are being run now by the American Association for the Advancement of Science for sub-Saharan Africa, the Association of Geoscientists for International Development, the International

Union of Geological Sciences, the Society of Economic Paleontologists and Mineralogists, the American Chemical Society, the European Physical Society, and many others. However, these activities take place without coordination and without a regular way to exchange ideas and experiences, for example on sources of materials and funds, and on the best ways to identify recipients and evaluate the results. To this end the participants agreed to form an Information Network on Scientific and Technological Literature for Developing Countries (ST-LITNET), which will link interested groups.

In his opening remarks to the Workshop, Professor Abdus Salam, ICTP Director and President of TWAS, proposed a new programme to provide a limited number of active Third World institutions with subscriptions to key scientific journals, with the costs to be covered by various granting agencies.

To encourage such a programme, TWAS has announced the annual allocation of US \$ 250,000 to book and journals programmes. There is a possibility that the same amount will also be provided by the ICTP for this purpose. For further information please contact:

H.R. DALAFI, Professor  
International Centre for Theoretical Physics  
P.O. Box 586  
34100 Trieste  
Italy.

### Lanzarote—a Note on Its Conservation

Lanzarote (795 km<sup>2</sup>, population 42,000), the most easterly of the Canary Islands, is administratively part of Las Palmas Province of Spain, although it lies some 137 km off the north-west coast of Africa (at 29° 00' N; 13° 40' W). A major portion of the island consists of a national park of jagged volcanic peaks, extensive lava beds, and volcanic springs, surrounding Montañas del Fuego (Fire Mountain), the last major eruption of which took place in 1730—

followed by lesser volcanic eruptions lasting until 1825. Today, there is still sufficient thermal heat for cooking at the park restaurant. This can be reached by motor car or, for those who prefer, by camel!

Drives along the road that circles through the national park are controlled: visitors must either leave their vehicles in the car park by the restaurant, and be taken on by coach, or else they have to drive in convoy, accompanied