REPORT AND DECLARATION OF THE PRESIDENTS CONFERENCE (1990)

Twenty-two presidents, rectors, and vice chancellors of universities from all over the world convened at the Tufts European Center in Talloires, France from October 4-7, 1990 to discuss the role of universities and, in particular, the role of university presidents in environmental management and sustainable development.

Assisted by internationally respected environmental leaders, the presidents explored the state of the natural environment, the impact of human population growth and economic activity on the environment, and strategies for the future.

The presidents discussed the role of education, research, policy formation, and information exchange in managing human impact on the environment. Since the majority of the presidents were from developing countries, concerns about resource depletion, poverty, and the need for substantial assistance from developed countries received equal attention with local, regional, and global pollution problems.

The conference was organized and hosted by Tufts University President Jean Mayer and sponsored by grants from the Rockefeller Foundation, the U.S. Environmental Protection Agency, and the John D. and Catherine T. MacArthur Foundation. After a keynote address by Maurice Strong, secretary general of the United Nations Conference on Environment and Development (to be held in Brazil in June 1992), the presidents developed a series of recommendations which are summarized in this report. The conference ended with a declaration of actions to be taken by the participants.

The presidents believe this conference is an important first step in engaging the considerable resources of universities to work toward an environmentally sustainable future. They pledge mutual support as they take actions at their own universities to implement the recommendations. They hope their deliberations will encourage other university leaders to initiate programs to prepare their graduates for the challenges of the twenty-first century. They invite their colleagues to sign the declaration and join them in these efforts.

FINDINGS

State of the World
For the first time in world history the human species is drastically altering the face of the earth and the composition of its atmosphere. Global air and water pollution, accumulation of toxic wastes, destruction of forests, and depletion of the ozone layer threaten the survival of humans and thousands of other
living species. The integrity of the earth, its biodiversity, and the security of nations are at risk. These environmental changes are caused by inequitable and unsustainable production and consumption patterns which also aggravate poverty in many regions of the world. Moreover, these trends are likely to worsen in the absence of societal intervention. The U.N. World Commission on Environment and Development predicts world population will double and economic output will increase four- to fivefold in the next forty to fifty years.

Urgent actions by all sectors of society - government, business and industry, private foundations, educational institutions, citizen groups, and the general public are needed to address these fundamental problems and reverse the trends. Stabilization of human population, adoption of environmentally sound industrial and agricultural technologies, reforestation, and ecological restoration are crucial to create an equitable and sustainable future for all humankind in harmony with nature.

**Role of Universities**
Universities educate most of the people who develop and manage society's institutions. For this reason, universities bear profound responsibilities to increase the awareness, knowledge, technologies, and tools to create an environmentally sustainable future. Universities have all the expertise necessary to develop the intellectual and conceptual framework to achieve this goal. Universities must play a strong role in the education, research, policy development, information exchange, and community outreach to help create an equitable and sustainable future.

**Education and Training**
There is a critical shortage of specialists in environmental management and related fields. Universities must produce environmentally literate specialists in demography, engineering, science, economics, social sciences, health, and management, particularly for developing countries.

A huge gap exists in the comprehension by professionals in all fields of how their actions affect the environment and public health. These professionals and other university graduates must be educated to be environmentally literate and responsible citizens. Primary and secondary school teachers must also spread environmental awareness, literacy, and responsibility among their students.

Practicing professionals, decision-makers at major institutions, and the general public must be given the training, expertise, and tools to encourage environmentally sustainable actions.

**Research and Policy Formation**
Research on the complex interaction of human activities and the environment - examining strategies, technologies, policies, and institutional behavior - must be greatly expanded. Universities must lead the effort in the rapid
development of environmentally sound technologies and the establishment of a new ethos to stabilize population, promote the efficient and sustainable use of energy, water, and other natural resources, repair damage, and prevent pollution and wastes. Universities must increase anticipatory research to identify future threats to a sustainable society, and develop solutions to circumvent these threats.

Research on how the different types and levels of economic development among the nations of the world impact the environment is critical to government and industry policy formation. International cooperation between developed and developing countries is necessary for environmentally sustainable development strategies.

An open flow of information among all universities around the world and, in particular, in developing countries, is crucial to the development of new knowledge, technology, tools, and skills for a sustainable future.

The University as a Role Model
The university is a microcosm of the larger community, and the manner in which it carries out its daily activities is an important demonstration of ways to achieve environmentally responsible living. By practicing what it preaches, the university can both engage the students in understanding the institutional metabolism of materials and activities, and have them actively participate to minimize pollution and waste.

The Role of University Presidents
Understanding the relationship between population, human activities, and the environment, and developing strategies for an environmentally sustainable future are among the most complex issues with which society must deal. Because universities are organized into specialized areas of knowledge and traditional disciplines, it is often difficult to convene the necessary talent for teaching and research on these issues. For example, earth science is approached as if the world is a collection of separate biological and physical systems instead of treating the biosphere as a fully integrated functioning life system. Tenure, curriculum, and degree requirements are largely controlled by faculty in individual schools of study. Quality scholarship is often synonymous with originality in a single discipline, and individual contribution is generally encouraged over team efforts. University presidents often have a broad perspective on global problems, but have limited say in academic direction.

However, university presidents are the only academic leaders capable of converging all the academic disciplines and professional schools on large, complex issues. University presidents must focus their schools' attention on the critical issues by speaking out, acquiring new and mobilizing existing resources, creating incentives and programs for faculty development, and fostering interest in these issues.
RECOMMENDATIONS

University presidents must take action to focus university attention on environment, population, and development issues. They should:

1. Use every opportunity to raise public, government, foundation, and university awareness by publicly speaking out on the importance of environmental concerns.

2. Seek large increases in the funding of interdisciplinary, environmental research. Research funds are often earmarked for traditional disciplines, resulting in the continuing compartmentalization of problems and solutions. The funding available for research on population, environment, and sustainable development is a tiny fraction of that available for basic science, defense, and aerospace.

3. Encourage outstanding scholars who engage in research and teaching on environmental topics, and help them lead other scholars in this direction.

4. Establish programs in all major disciplines to teach about environment, population, and sustainable development in the context of these disciplines.

5. Work with faculty to change tenure and promotion requirements to reward interdisciplinary work on environment, population, and sustainable development issues.

6. Set aside funding and create positions for interdepartmental and interschool faculty who will research and teach population, environment, and sustainable development topics.

7. Appoint a special adviser, an environmental programs dean, or faculty group to promote environmental programs within the university.

8. Encourage multidisciplinary thinking with the use of internships, capstone and integrating seminars, work study, and case studies.

9. Establish a university environmental policy to engage faculty, staff, administration, and students in activities such as energy and water conservation, and recycling. Encourage vendors who supply schools with products and services to act in an environmentally responsible manner when manufacturing their products and delivering their services.

10. Develop cooperative programs with universities in other countries to promote faculty and student exchanges, collaborative research, and education programs that develop international understanding.
11. Establish multidisciplinary and interdisciplinary structures, such as "centers of excellence" for research, education, and policy development within the university.

12. Establish partnerships with primary and secondary schools to enhance the capability of their faculty in teaching about population, environment, and sustainable development issues.

CONTINUING MOMENTUM

The presidents decided that these first steps must be expanded to other universities if the world is to move down a more environmentally sustainable path. Furthermore, they wished to establish a mechanism to inform and support each other’s efforts in these new directions. Accordingly, they agreed to form a steering committee of university presidents representing all regions of the world to continue and expand these efforts. The secretariat for the group will be established at Tufts University. The steering committee and its secretariat will carry out the following activities:

1. Convene school deans and environmental practitioners to advance university research, education, and policy development.

2. Explore opportunities for joint education and research projects.

3. Exchange information on programs and strategies to have more active university involvement in population, environment, and development research and education.

4. Work on expanding the involvement of government, industry, and foundations in supporting university efforts in these areas.

5. Work with the U.N. Conference on Environment and Development to promote a worldwide university effort toward a sustainable future.

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