

**SYMPOSIUM : SCOPE**

**Centro de Extensión**

**julio 23 de 1990.**

It is a pleasure to welcome you all on behalf of the University. We feel it is a privilege to host this very important meeting, and I wish you a fruitful discussion and a pleasant time.

Allow me to sketch briefly the views we have in this university on how to approach the problem of environment.

First and foremost, we recognize it to be the major challenge the world is facing today. Environmental catastrophes are no longer a remote threat. They are at hand, and we feel that places of learning such as a university should be deeply concerned about them.

But after this rather unobjectionable remark has been made, the problem remains of what to do, and how to do it. The environmental issue has at least two features that make it difficult to deal with within a university.

The first of these features is the fact that environmental problems are global challenges, with high degrees of interaction of various factors, and that they consequently require interdisciplinary approach. It is well known that teaching institutions, tend to be very conservative. And universities are organized on a disciplinary framework, which resists change, because it is rooted in the very minds of the faculty members.

In this university we are attempting to take advantage of the disciplinary capacities which are available at the different schools and departments, and to bring their members together in joint efforts on environmental issues. Along these lines, we hope to concentrate efforts and capacities of the existing academic units into a common field of interest, rather than introducing new independent units in an already overloaded organization. We hope thereby to stimulate the interest on the the subject matter of environment, rather than transforming environment into

another competitor for human resources and funding. Working along these lines, we have established a Commission for Environment, in which 15 academic units (faculties) are represented, and which has the question of sustainable development as a major focus of attention. The Commission is in charge of coordinating research and teaching projects in the field. Acting on the same principles, we have established a special program in charge of developing capacities in remote sensing and geographical information systems. The staff of the project have teaching, research and service duties. The unit has been recently created, but it is already equipped and actively functioning.

The second feature of environmental studies that is apt to be disquieting to university authorities, is that the environmental problem is likely to become unmanageable within a short time, while the delay needed to initiate deep teaching innovations and ample, interdisciplinary research projects, is comparatively long. By the time a freshman of to-day has ended his postdoctoral training period we may well be more than half way into the greenhouse. I feel that this obstacle should be dealt with by putting a very heavy emphasis on graduate training, and, speaking for latin american countries where the curricular organization is very much different from anglo-saxon nations, I think we should look for our prospective trainees in environmental problems within a wide range of careers, such as architecture and urban development, economics, administration, biology, medicine, to name only a few, (not forgetting lawyers, who often draw up the legislation that should be developed to cope with these problems). We hope that our Environment Commission will be operative in developing these projects. If succesful they should have the double effect of providing us with an interdisciplinary atmosphere among our environment students, and to reinforce the ranks of those willing and capable of coping with environmental problems within the near future.

The fact that environment is a global problem , affecting not only a country, but a region, and the world, leads us to believe that programs of graduate training, should have at least a regional character, drawing students from other countries.

Our university is very much interested in developments of this sort, that might have a quick impact on Latin America as a whole.

A meeting of such high level as the one assembled here, might also be effective in drawing attention to two obvious aspects of the environmental question which are directly endangering human future.

The first of these, is that even though scientific information is available on the causes of several of the most threatening environmental developments, not much action is seen to be taken. Bureaucracies are also the opposite of interdisciplinary approaches and the environmental menace makes us aware of a novel kind of political problem: that of translating with small delay, complex scientific approaches into complex political decisions. Some remote approach to this has sadly been tried in the organization of modern warfare, which shows that it is not a goal impossible to attain. Surely mankind might be induced to do for survival what it has been able to do for self-destruction.

The second problem for which high level intellectual authority is needed, is the question of who is to pay. Environment is a capital stock, which should not be dilapidated, and somebody must pay for its conservation. But the poor farmer who over exploits his plot of land and thereby destroys both his means of living for the future and the ecosystem of which he is a component, is at least partially the victim of unfair conditions of world-trade, and heavy agricultural subsidies in industrialized countries. And it is also true that the impending doom of the greenhouse effect or the ozone hole, are direct products of a civilization whose benefits are not shared by many of its future victims. It is urgent that international action become effective and fair. Current discussions among the industrialized nations and the third world countries, remind one much of the acid witticism of Anatole France when he remarked that legal order was undisputably fair. It has exactly the same penalty for the man who steals a loaf of bread, not caring whether he is a millionaire or a beggar.

My reason to mention these political and economic issues in this university context is that they are vital for the progress of the studies on environment which is the main interest of a university. A crash program of research and teaching should be supported, indeed in some way should be interacting with the whole set of decisions that may render it fruitful within the limited time which seems to be allowed to us in this matter. If this is not taken care of, the study of environment may become a very unattractive road to frustration.

This is to say that we place high hopes upon your discussions and studies, and that we are eager to put the very best of the institutional efforts of this university to help you in some modest way in your noble pursuit. I feel that it is true that a catastrophe is waiting at some place behind the corner. But this is a land of earthquakes. They have taught us that the remodelling of our cities, the improvement of housing and living conditions for thousands, the building and repairing of highways and sea ports, have been effectively helped by the fact that we can never feel ourselves free from the menace. The ecological problem might be strong enough to force mankind into tapping on resources of solidarity and foresight which it does not even suspect to possess. In this process, as in many others which concern the increasing awareness of our mutual interdependence, the action of the United Nations, of UNESCO and of programs such as SCOPE have been many a time pioneers. We are then glad to have you here deal with these matters of overriding importance and urgency.