HAS THE TIME COME FOR THE INTERNATIONAL UNIVERSITY FOR THE BIO-ENVIRONMENT?

Georges Martin

Engineer Agronomist-Consultant France

Introduction

At the conclusion of forty years of progress in the course of which an entire series of phenomena has demonstrated that the world ecosystem is an indissoluble whole, the moment has come to create a university for the environment and to outline a general educational curriculum for the bio-environment. In the form of a nework coordinated by an advanced Bio-environmental council, the International University of the Bio-Environment (I.U.B.E.) would be capable of providing humanity with a remarkable tool which politicians and decision-makers would have at their disposal so that life and the future of humanity will be respected in the expanding evolution of our time.

This university obviously encompasses a field of activity so vast that it absolutely cannot be monolithic. But it can, without difficulty, be incorporated in the form of a network, grouping many universities under one central authority, each university situated in one of the continental regions of the world Europe, North and South America, Asia, Africa and specializing in one or more of the bio-environmental scientific disciplines, relating itself to the problems and difficulties most often encountered in their areas. Each of these universities will be responsible for one program from the curriculum plus specialist research programs. One, for example, could be dedicated to air pollution, another to industrial pollution and another to marine pollution.

These specialist universities, each one staffed by both local and foreign researchers, will be given the means to work on themes relevant to their jurisdictions. They will group graduate students and famous experts and will periodically organize conferences and seminars on their own spheres of interest.

The central and coordinating structure will be made up of a Council of Administration presided over by experts from different scientific councils and commissions where their influence can lead to the introduction of recommendations and proposals to international authorities who are able to implement them. This structure will also have the mission of encouraging all of the actions which nations can undertake to guide primary and secondary school education.

The necessity for the International University for the Bio-Environment

Fifty years ago at the most, Man did not think it was possible for him to thoroughly modify his planet. In his opinion, it was beyond measure, compared to his own small size and to the size of his enterprises. In his opinion earth absorbed everything, water diluted everything, air was inexhaustible.

Then, suddenly, at the end of the last world war, the use of atomic energy produced a clash. Men's attention was roughly woken up by the discovery of the dangers to which they could be exposed, as a result of badly-controlled phenomena which they themselves had started up. This event, in itself, has played a vital role and from it the fears, as well as the first big questions have evolved.

All over the world, researchers occupied with the studies of air, water and soils have observed and very gradually discovered the effects of human enterprise. Thanks to improving resources, interpretation has become more and more accurate. Begun in the aftermath of catastrophic accidents whose causes were to be determined and consequences evaluated, many opuses have shed light upon the fact that man's actions could no longer be neglected. To the first fears of nuclear risks were added those of pollution of water and the atmosphere as well as those linked to the effect of increased carbonic acid, the reduction of the protective ozone shield resulting from organic waste, fertilizers and other chemical products, in addition to the disappearance of animal and vegetal species.

During the last twenty years, this "coming to life" of consciousness is unquestionable. The whole world knows that something important is happening, something serious and imminent, within the measurable human scale of a century. A considerable number of scientists, specialists and researchers of all nationalities started studying, publishing, intervening and putting the decision-makers on their guard. Unfortunately, the balance of ecosystems being quite complex, coherence and scientific coordination is a delicate matter as causes and consequences of phenomena concern a wide range of specialities at badly defined and very diversified interactive degrees.

These complexities have many contributing factors. Economic factors come to mind and can be used to advantage and/or detriment.

Moreover, environment is not bound by frontiers, a line or a map or a fence across a field, and the obstacles involved are of major importance.

Nowadays, the greenhouse effect, ozone, climate, carbonic acid, industrial pollution, nitrates, phosphates are household words. As far as politicians are concerned, they are aware that the safety of our environment lies in their hands and that vague or even definite commitments at "sometime in the future" are not sufficient anymore. They know that commitments must be taken at an international level. Furthermore, they know what kind of measures need to be taken, at which level they should intervene, in which context, with whom and in reference to what.

Of course, a considerable number of national and international organizations dealing with the environment exist in the world, as well as an increasing number of specialized non-governmental structures. A United Nations program exists, a World Agreement on climate signed in The Hague. The Brundland Report set up by the World Commission of the United Nations for the Environment and Development published in 1987 is an authority on the matter. The World Watch Institute of Washington publishes the Planet Health Statement on a yearly basis. Every country, more or less, has created, promoted or participated in creating observatories, foundations and institutesömainly in France leaving one field that has been omitted globally: man's training, and especially the high-level, post-university training concerning future decision-makers and worldwide personalities destined for responsibilities in highly risky fields.

A structure in which research would be conducted to promote exchange of information and combine great principles linked to bios and as a reference for every nation of the world is needed. In effect, the time has come to create an International University for the Bio-Environment and to start a general teaching on bio-environment. At the beginning of the third millennium as we face the problems we have identified, this concern should be addressed without any further delay. Of course, this university covers such a wide field that it cannot be monolithic. It can only be conceived as a network of several existing universities or universities yet to be created, each of them situated in major centres throughout the world. Each branch of the network would specialize in one or several scientific fields of the bio-environment in relation to the problems or difficulties most frequently encountered in their own area.

Each branch of the university would be composed of researchers from the host-country and of interested foreign researchers. Each would have important financial resources in relation to individual areas of competence, accepting graduates or personalities for a year or longer who would study the problems at hand. Individual branches of the I.U.B.E. would organize symposia and workshops on their works and would have teaching and research programs. For example, one could specialize on air problems greenhouse effect and carbon dioxide as a result of deforestation and mismanagement of development another could specialize in industrial pollution, and another on sea pollution.

The body of these universities would be coordinated by a Central Structure, a kind of High Council for the Environment, topped by heading personalities, helped by scientific counselors and commissions whose reports could end up as recommendations and proposals to international authorities who are authorized to change legislation. This kind of network, not a new idea and already used successfully in several fields would, in this instance, appear as the best solution.

Faced with a complexity of problems, scientific uncertainties, but mainly the increasing adulteration of the environment due to man's actions, it is imperative to avoid a hasty decisionöwhich could be worse than the damage itself or inertia and hesitancy, which could lead to a point of no return. Everybody can understand that humankind has come to a point in its development where it is able to make a choice about its future in the short or long term. Put bluntly, it has the choice of life or self-destruction. As time is of the essence, in order to make this choice quickly we must:

- Understand and assess through coordinated research.
- Organize and foresee through international legislation.
- Choose and implement through farsighted politics and united policy.

An International University for the Bio-Environment would play an integral part in this matter so let us hope that this initiative will become a reality. Perhaps it could be the moment to forge a new alliance between humankind and our planet.

Georges Martin is a leading expert in the area of arid zone agricultural projects in developing countries, now residing in Paris. His scientific training as an Ingenieur IAN is in agronomic engineering He is also a consultant in international co-operation in agriculture, and has worked as director of agricultural missions and agronomic research, publishing numerous articles on the exploitation of agrarian systems. In recognition of his work, he has been appointed Chevalier de l' Ordre National du Merite. He is also a founding member of the Biopolitics International Organisation International University for the Bio-Environment (I.U.B.E.).