Statement by Mr. Soedjatmoko,

Rector of the United Nations University,

before the Programme and External Relations Commission

of the Executive Board of UNESCO,

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Mr. Chairman:

It is a pleasure and honor to be able, once more, to address the Commission of the Executive Board of UNESCO on progress in the United Nations University during the past year. As a way of introducing the Annual Report of the Council of the United Nations University for 1983-1984, which has been submitted to the General Assembly, ECOSOC and UNESCO as required by the Charter of the University, I would like to focus in my presentation on a sampling of our activities to show how we have moved in trying to achieve the objectives of our Medium Term Perspective — the MTP — which began in 1982 and ends in 1987.

In reviewing the activities under the MTP we should remind ourselves of the main tasks assigned to the University by its Charter. Article 1, section 2 of the Charter states that "the University shall devote its work to research into the pressing global problems of human survival, development and welfare that are the concern of the United Nations and its agencies, with due attention to the social sciences and the humanities as well as natural sciences, pure and applied." Article 1, section 3 elaborates on these tasks by suggesting the specific

subjects to be included in the University's research programmes:
"coexistence between peoples having different cultures, languages and social systems; peaceful relations between States and the maintenance of peace and security; human rights; economic and social change and development; the environment and the proper use of resources; basic scientific research and the application of the results of science and technology in the interests of development; and universal human values related to the improvement of the quality of life."

Although this is a wide range of work by any standard, these are, nevertheless, the tasks assigned to the University by its Charter. And being a University, it is not unusual to be engaged in such a universal range of activities. Indeed, if a university is to devote its work to researching the broad spectrum of pressing global problems of human survival, development and welfare, a comparable spectrum of activities is necessary. The narrow, single discipline approach would not be adequate to deal with questions of this kind.

As a university we are first and foremost an international community of scholars. We are at the same time an organ of the United Nations working to uphold and promote the purposes and principles of the Charter of the United Nations. And while this dual role gives the University its distinctiveness, it has not made it easy for the University to project the exact nature of its activities. When the University began operations its work concentrated on three aspects of major world problems: world hunger, human and social development and the use and management of natural resources. After this initial 5-year period the

University developed the MTP that would, over a 6-year period from 1982 to 1987, help it broaden its programme base and bring its profile closer to that of other universities. We are now at the midway point of the MTP and we appear to be more or less on course.

The Report of the Council of the University describes achievements of the past three years in showing how the University has progressed in trying to fulfill the MTP objectives. These objectives involve, essentially, (a) developing the University programme focussed on its five themes, (b) pursuing a new phase of institutional development, with emphasis on the exploration and establishment of the University's own research and training centres, and (c) obtaining supplementary programme support in addition to the University's Endowment Fund. Rather than go through all the material already covered in the Report, I would like to highlight a selection of our activities to show how they link our research concerns in development theory to some its practical and policy implications. This linkage can be seen in some of our published research results as well as our training activities and other dissemination activities. Both the practical and the policy implications of development ultimately involve the cultures which they affect. University has, therefore, in keeping with the directives of its Charter, striven to involve scholars from as many regions and cultural areas as possible in all of its work. This, of course, has been an ongoing process, and while not all regions can, or even should, be represented in each project, the representation has been broad and is increasing, particularly as we expand ongoing work and move into new areas of concern.

A significant proportion of the University's activities are concentrated under theme III on Hunger, Poverty, Resources and the Environment. This reflects, in part, a continuation of earlier work in hunger and natural resources. The Programme Area on Energy Systems and Policy, for example, includes the ASSET network and journal that got its start under the former Natural Resources Programme. During this past year ASSET published its 50th issue and is now set to bring out an edition in Spanish thanks to support from the Spanish Government. In another project in this programme area, activities of the Integrated Rural Energy Systems Association, INRESA, led in the past year to the development of three types of low-cost meteorological instrument packages in co-operation with Hollis Geosystems Corporation in the U.S. and Brace Research Institute in Canada for use by association members in solar and wind energy projects in remote areas. 15 UNU Fellows completed training in this programme area during the year and 10 more began training. These clearly have a practical orientation whereas the one major publication in this programme area, Energy and Agriculture: Their Interacting Futures, has policy implications.

Policy was, of course, the primary concern of work in the Programme Area on Resource Policy and Management. Dissemination of research results through publications figured very prominently here and featured such titles as: Fuelwood and Rural Energy Production and Supply in the Humid Tropics; Renewable Natural Resources and the Environment: Pressing Problems in the Developing World; Long-Distance Water Transfer: A Chinese Case Study and International Experiences; Renewable Natural Resources and the Environment; and Urban Geomorphology

<u>in Drylands</u>. In the training side of work in this area with its emphasis on applications, 13 UNU Fellows completed training in the past year and 3 new Fellows started.

Training played an important role in the project on traditional food technologies in the Programme Area on the Food-Energy Nexus. Seven former UNU Fellows and 2 current UNU Fellows participated in a workshop co-sponsored by the University in July 1983 in Mysore, India, along with other scientists and scholars from 20 countries and 4 UN agencies, to discuss the state-of-the-art of traditional food technologies that could be used in improving food supplies.

Research and related activities in the Programme Area on Food Nutrition, Biotechnology and Poverty produced, among others, several publications, new approaches to the study of iron deficiency, a food data systems network, and a series of educational programmes for radio and television. Two of the publications were Nutrition Policy Implementation: Issues and Experience and Diarrhea and Malnutrition: Interactions, Mechanisms and Interventions. Research on the functional consequences of iron deficiency was initiated by the University in 1982, in recognition of an urgent need for more detailed understanding of this topic. As indicated in the Council Report, a major publication is expected to present the results of this research. The International Food Data Systems project, INFOODS, has received wide spread support and recognition and promises to contribute greatly to improving the collection, storage, interchange and use of food composition data on an international scale. In the area of the nutritional component of

primary health care, some of the education programmes that we helped prepare in co-operation with the Colombian Government for television and radio are already in use. Here again, in all of these the practical and the policy components are apparent. The total number of UNU Fellows trained in this area during the year was 33, with 20 others starting.

The programme areas on Human and Social Development and Regional Perspectives are two other areas that emerged out of earlier work in Human and Social Development. Several projects under these two areas have produced, or are about to produce, results. Research in a Regional Perspectives project entitled "Arab Alternative Futures", for example, resulted not only in a publication in Arabic, Images of the Arab Future, published in 1982 but also in an English translation published in 1983. Another title in Arabic, The State and Capitalist Development in Iraq, 1968-1978 was published in Cairo earlier this year. The results of a successful international conference on the Meiji Restoration in Japan will soon be published in book form. This is the first of a series of comparative studies of major processes of social transformation in modern non-Western societies. A second volume will report on the conference to be held in Mexico next year on the Mexican Revolution.

Both of these projects are attempts to understand the macrosociological processes of change which in turn could contribute to increasing our understanding of the concept of development. At the same time, we are also trying to broaden our knowledge at the micro level. Here we are concentrating on the project on Household, Gender and Age in the Programme Area on Human and Social Development.

To assess the impact that new technological developments and the complex issues and phenomena that accompany them will have on the development process we are engaged in work in the Programme Area on Science, Technology and the Information Society. We have started work on mastering of microprocessors, which we hope will break some new theoretical ground while making, at the same time, a practical contribution to the capability of developing countries to use microprocessors for development. We also have a project on the management of complexity, which I will touch on later in my presentation.

In the training on microprocessor technology, we collaborated with the International Centre for Theoretical Physics in Trieste in setting up in Colombo in June this year the Asian Regional College on Microprocessors concerned specifically with Technology and Applications. The College, which was attended by 60 young scientists from the region, was the third UNU-supported training college set up by the Centre, following those in 1981 and 1983 in Trieste.

We are also doing work on new modes for sharing knowledge and new learning materials which involves a village network that is trying to promote the use of video as a development tool. It aims to set up an international village network and undertake training workshops. So far it has participating members in Antigua, Egypt, India, Indonesia, Jamaica and Mali.

One interesting development in work in this area is an experimental video tape produced by the University using a new computer-assisted

animation technique to help explain difficult concepts graphically. This seven-minute videotape was made to explain the organization and concept of the University. We have titled it "Sharing for Survival." We are looking into possible applications of this technique in creating learning materials for development.

I would also like to mention that the University has responded to a request made at the joint meeting of the Brandt Commission and the Palme Commission in January this year to undertake a study of the possible linkages between security and development. This study is now under way.

In another area of our work that concerns peace we have a project on outer space which we hope will provide independent and authoritative input for related United Nations activities. The University-sponsored international symposium in the Hague earlier this year discussed possible means of strengthening international law to safeguard outer space for peaceful uses. The symposium, which was organized with the cooperation of the Hague Academy of International Law and the International Institute of Space Law and with the support of the Hague Carnegie Foundation and the Outer Space Affairs Division of the United Nations, has produced a publication which we hope to publish by the end of the year.

Most of the publications that I have mentioned and others emerging from our activities are being co-published with well-known commercial publishers. This will insure that the dissemination of our scientific

results will reach broader audiences, particularly policy makers and, to some extent, the public at large.

Our collaboration with commercial publishers goes beyond the dissemination of research results. In a sense, a publisher performs the function of informal evaluator of the material to be published. If a commercial publisher does not see "merit" in a proposed co-publication the publisher will reject it. We are, of course, concerned with evaluation of our activities on all levels. It is only in this way that we can continually assess our performance in accordance with the Charter and in accomplishing the objectives of the MTP. Evaluation is, therefore, a continuing activity within the University, with each division and each section assessing its own performance. On a University-wide level, we have also carried out several evaluations, the major one being on training and institutional relations. The next major evaluation will cover two of the University completed projects.

The past three years have seen an increasing broadening of the University's training activities. This is because we now have training components included in programme areas where no training had previously been done. As indicated in the Council Report for the past year, by 1 June this year a total of 402 UNU Fellows had completed training and there was ongoing training in six of our nine programme areas. A very encouraging aspect of our training activities was the high rate of return of UNU Fellows to their institutions of origin on completion of training; about 95 percent. We feel that this may be due, in part, to our system of site visits to a prospective candidate's institution which

leads to careful selection of trainees and a tailored training programme that suit their needs and those of their institution. It may be of interest to you that a vast majority of all UNU Fellows have been trained at institutions in the Third World, the majority of which were associated institutions of the University. They have come from more than 241 institutions in more than 69 countries in the Third World. All of the Fellows funded by University resources also came from the Third World. The second edition of our "Directory of UNU Fellows", which was completed in June, provides other statistics on the training programme.

As we gain experience in our training activities, more and more former Fellows, and some current Fellows, are being brought into the ongoing research projects of their areas of interest, and increasingly the results of their work are being incorporated into this research. Former UNU Fellows have by now participated in planning activities of the University, in the development of one of our research and training centres, in research projects, particularly through meetings, workshops symposia or seminars, and in the publications of the University. The involvement of UNU Fellows in a Food-Energy Nexus project workshop which I mentioned earlier is only one example of their increasing involvement in all aspects of the work of the University.

Now let me share with you some recent developments concerning our institutional development. In addition to our six new associated institutions in northern of Asia, South Asia, Africa, North America and South America, we have progressed considerably with preparatory work on the World Institute for Development Economics, known as WIDER, on the

Institute for Natural Resources in Africa, known as INRA, and the research and training centre planned for Japan. Further to the information given in the Report, I am pleased to tell you that the WIDER Board is now complete with the recent appointment of its remaining two members. We now look forward to the appointment of a Director within the next few months so that activities can get under way. The WIDER Liaison Office in Helsinki has been in operation since the end of July. The continuing support that the Government of Finland has given WIDER is outstanding and heartening. We at the University would like to reiterate our gratitude for this.

After having received the generous pledge of the Government of the Ivory Coast of US\$5 million to the Endowment Fund for INRA, together with the offer of excellent readily available facilities, including housing, in the country's new capital Yamoussoukro, we are now making progress in securing the bulk of the financial resources for the Institute from major donor countries. A number of governments and international organizations have shown much interest in supporting INRA.

Regarding the proposed research and training centre in Japan, the Council agreed at its 24th session that this could be an institute of advanced studies. The Council also recognized that activities of the institute need not await its establishment before getting under way and therefore encouraged the University to initiate programme activities in Japan, even if this meant using temporary facilities. Since the 24th session, efforts have been stepped up in Japan by local supporters of the University to build up the financial base for the proposed institute

and elicit broader support for the University and its work. Last month the Japan Foundation for the United Nations University, headed by one of Japan's leading industrialists, was established. Its membership also includes leading figures from the academic, business and political sectors of Japan.

Preparatory work for the headquarters has progressed with the allocation of a budgetary provision by the Japanese Government for fiscal year 1984-1985. This will cover planning activities, including the framework design which is an overall study of architectural needs and accumulation of information to be use in the basic design. The budget for the basic design is now being considered by the Government of Japan. We would like to thank the Government of Japan for its continuing interest in and support of the University and for its efforts to complete the permanent headquarters.

I have given you a cursory look at some of the results we have achieved in our work. I am sure certain, however, that this is not sufficient to clarify how the University operates within the range of areas covered in its programme work in such a limited period of time. Following the wise dictum of Edmund Burke, who said that "example is the school of mankind", I would like, therefore, in the time remaining, to concentrate on one example of our work. This is in one of our newer sub-projects in a rapidly growing area of concern, namely, the sub-project on the Management of Complexity. This sub-project looks at ways of understanding and dealing with complex natural and social systems.

New levels of complexity are brought about by interdependence, which exists among countries as well as among issues.

The study of complexity has implications for the development of new techniques of global management in today's rapidly changing world. Complexity confronts us at every level of the natural world and of human society - from the global to the national to the local and, indeed, down to the turmoil and fragmentation that so frequently now occupy the individual human spirit. Our essential task at the University is to try to understand better how humankind might survive in a world that is becoming increasingly interdependent while at the same time honouring indigenous values in the myriad cultures that together make up this world. By bringing together evolving views on complexity, we are hoping to develop deeper insight into the problems of the management of a world that is both interdependent and pluralistic.

The problems of science and technology are related to the very roots of scientific and technological creativity. Epistemologists, philosophers of science, and those concerned with finding methodologies for more humane research applications are now in research of new visions of and new perspectives on the global crisis — and the concomitant crisis of science. We are, therefore, interested in complexity for two main reasons: for the insights to be gained that have an important potential for practical application; and for the inherent significance of the study of complexity as a major step forward in the evolution of science.

Despite an almost bewildering array of approaches, paradigms and insights, even a cursory view of current work shows that the study of complex systems and phenomena figures prominently in many fields of pure and applied science. Relevant findings and new ideas can be found in physics, chemistry, biology, neurophysiology, economics and mathematics, as well as in branches of knowledge such as general systems theory, information science, telecommunications theory, ecology and environmental sciences, and in the development of new approaches in geography, urban studies and cognitive sciences.

It is the process of global transformation combined with the tremendous extension of human power including destructive power, amounts to a veritable mutation of the human condition — and we are going to have to learn how to live with it, cope with it, and manage it on a global scale if we are to survive. The complexities inherent in this task pose a great challenge, to scholars as well as policy-makers.

It has become quite clear, in particular, that the complexities connected with very rapid and profound social and cultural change which are part of the development process, pose new challenges to governance. One important dimension of the development process, both locally and globally, is how to reconcile the need for self-management and freedom, on the one hand, with the need for the most rational allocation of resources at the national and international level, on the other.

Therefore, we must learn to understand and manage complex, often unstable, systems while respecting the autonomy of distinct, though

interdependent, processes and elements within these systems. We will have to rethink our attitudes toward order and disorder, and consider the levels of disorder we can accommodate in a humane manner, without recourse to oppression and violence. For this, we need to draw upon the insights of all cultures, analyzing approaches to complexity in traditions other than those of the Western, classical, scientific universe of discourse.

The first venture of the University into this new domain was designed to provide at least a partial mapping of actual states-of-the-arts in thinking and research with regard to complexity, the behaviour of complex dynamic systems as they have emerged in different disciplines and areas of research. Thus, a University sponsored symposium on the management of complexity was held at Montpellier from 9 to 11 May this year. It may interest you to know that the media in France devoted considerable coverage to this event, including Le Monde, which gave it a full page, Le Nouvel Observateur, and Radio France-Culture.

Complexity, of course, is the kind of problem that the Global Learning Division of the University is intended to study. The Charter enjoins the University to be concerned with "pressing global problems of human survival." It would, therefore; be unthinkable to approach such an agenda without conceding first how very complex and interwoven such problems are.

Mr. Chairman, given the enormous task of studying global problems and their complex aspects, the Charter wisely mandated the University to

organize it own research and training centres, to associate itself with existing institutions, and to organize co-ordinated research with appropriate institutions and individuals in various parts of the world. In this way the University shares its approaches and findings with other institutions and organizations and, can in turn, benefit from their expertise. In fact, we have been fortunate in being able to co-operate with and have the co-operation of a number of academic and research institutions as well as international organizations, including those within the UN system. Our collaboration with UNESCO in the past three years, for example, has extended through a number of our programme activities. It has included the joint organization of seminars and meetings, the co-sponsoring of symposiums and workshops, and collaboration in and support for various projects. A few notables among these are a seminar on the Approaches to Human Rights in Asia, a seminar on Socio-economic Indicators, collaboration on the Food-Energy Nexus project, a symposium on the Promotion and the Teaching of Fundamental Human Rights of Refugees, a workshop on Effective Communication for Nutrition in Primary Health Care, a workshop on basic research for assessment of minerals and hydrocarbons in the South Pacific, collaboration on the project on Information Overload and Information Underuse, and support for the UNU journal ASSET to establish a Clearing House facility to disseminate energy information produced in the Third World.

We are basically still a young institution as I have said in the past but we have achieved some results and are moving toward achieving more as we pursue our Charter objectives. We are vigorously continuing our efforts to mobilize needed resources. Nevertheless, we are fully

aware of the difficulties we face in this time of worldwide economic problems. Still, we find some indications of our prospects changing as we develop new activities and the new research and training centres to attract potential supporters and donors. The Report of the Council before you indicates where we are. Our primary objective now is to complete the work set out in the remaining period of the MTP.

Thank you.