

Statement to the United Nations Conference  
on New and Renewable Sources of Energy

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Mr. President, Distinguished Delegates....

May I first congratulate you, Mr. President, on your election and your skilful and courteous guidance of our discussions at this important United Nations Conference on New and Renewable Sources of Energy. This is the first time that a major United Nations forum has taken up the topic of energy -- and its results could have far-reaching benefits for our future world.

Let me also congratulate the Secretary-General, Mr. Iglesias, on his untiring efforts in the preparatory stages of this Conference. In a really very short period of time, his work has ensured that our deliberations here in Nairobi have solid scientific underpinnings and worldwide interest and support. We are all indebted to him and his colleagues in the Secretariat.

Anyone familiar with the present energy problem recognizes that it can only be confronted realistically in the broadest political, economic and social terms. Thus our concern here with new and renewable energy sources must be seen as only a first step towards an integrated effort by the international community to tackling the global energy problem. The 14 energy sources which occupy our agenda here have little in common with each other. Most of them are now, and probably will be for the

next two decades, of marginal importance to large parts of the world where energy supplied by oil, gas, coal, and nuclear sources provoke pressing economic, political and social concerns. What this Conference could begin, however, is a badly-needed, full-scale examination across the total spectrum of energy problems and sources which relates the potential of all these resources, renewable and non-renewable, to answering the world's energy needs together.

It must be recognized that energy dilemmas have occurred at various times in history. Population pressures have forced societies into intensified food production -- which has led, in turn, to environmental depletion, mass migrations and social upheavals. Those societies that did manage to cope successfully with such crises did so by developing new production systems based on new fuel or energy sources. Animal power, fuel wood and charcoal, wind and hydropower, coal, oil and gas have variously fuelled many of these transitions.

For the first time in history, however, humanity is now moving, not from an old to a new energy source, but from reliance on a single dominant source to the use of a mixture of sources. Also for the first time, the energy transition is a global one, with most societies facing the problem simultaneously.

But they confront the problem in different ways and from different perspectives. For the industrialized world and the modern sectors of the Third World, the primary concern is with conventional sources -- oil, gas, coal, and nuclear energy. These are also major inputs to the Third World's own industrial revolution. We must ensure that the Programme of Action that emerges from this Conference does not divert resources from

these countries' development of conventional energy supplies but rather augments and provides increased access to them.

The daily lives of one half of humanity, however, are only, to a limited extent, touched by oil and other conventional energy sources. A majority of the Third World still relies on fuel wood and organic wastes for its basic household energy. Obviously, any sustainable approach to the global energy crisis must seek to relate the energy needs of these two highly dissimilar segments of the global society. While oil may have little direct impact on the daily lives of most Third World farmers and villagers, the choice of energy mix adopted by their governments or the energy consumption patterns of those in the affluent nations will ultimately affect very sharply their chances of escaping hunger, poverty and despair. Similarly, the energy well-being of the Third World can have immense and far-reaching consequences for the economic and political health of the rest of the globe. The future survival of the rich hangs very much on the World's ability to enhance the capacity for self-reliance and growth among the poor.

I would like to emphasize, however, the long-term prospects as opposed to the immediate future. In the long term, we can see emerging a dramatic convergence of the two central problems facing the poor nations, those of food and energy. The link between food and energy (the food-energy nexus) will be a consequence of rising population, of the large increases at rising costs of energy needed for intensive food production, of the severe limitations on the availability of arable land in most of the densely populated developing countries, and, finally, of the present pressure to divert part of the agricultural output for

energy production. All these factors point only to one direction: a sharp increase in the price of food in the long term. The poor countries will therefore be faced with a second dramatic resource problem which will worsen the energy one. The risk is that a large section of humanity will enter an implacable negative loop from which it will be even more difficult to escape than from the present energy dilemma. The problem is obviously not the concern of the poor nations alone. Strategies and policies have to be formulated now to prevent the development of this irreversible process.

The centrality of the food and energy nexus accordingly forces us to rethink development strategies and devise less energy-intensive, ecologically-sustainable farming methods that will suit the specific interests, needs and values of societies in the densely populated low-income countries.

We must intensify the present research efforts to improve the biological processes that control food crop productivity and improved cropping systems and to increase plant productivity through biotechnology. These research efforts are now being largely pioneered in the industrialized countries and the plan of action must ensure that countries in the Third World fully participate in, and benefit from, breakthroughs in this area.

Whatever solutions we develop -- in attempting to cope with energy demand, food, or the host of other problems that afflict the poor -- we must recognize that the ultimate answers are not going to come from the experts and the technocrats alone. They will arise from our ability to relate their recommendations to the real interests, hopes and aspirations

of the marginalized and the powerless.

Thus, a comprehensive look at the energy problem inevitably forces us to see with new eyes the problems of the poor and ways to safeguard their interests. Innovative social energy systems must be more than those required for mere sustenance -- they must be enough to ensure development and growth and hold out the hope for a more humane and dignified existence.

New patterns of energy allocation will, in the long run, be fashioned out of countless millions of decisions by individuals around the globe -- decisions made on the basis of their own needs and interests, within the perspectives of their own cultural values, customs and moral guidelines. Neat and tidy packages prepared by experts to describe the appropriate future energy "mix" will avail us little unless they are economically significant, and socially and culturally acceptable to the people being asked to use them. The options of what kinds of energy to use must be seen as essentially a political and cultural one, not merely, or only, a technological one. The role of the expert is to ensure that as many proven and viable options as possible are available when the time for choice arrives.

The United Nations University, I believe, is well positioned to play a helpful role in the search for solutions to the present energy crisis -- and precisely because of some of the things that it is not. It is not devoted to only one area of the development problematique -- its Charter gives it the broad canvas of "pressing global problems of human survival, development and welfare." Energy is but one component of our activities along with the interlinked concerns of hunger, the

environment, and general human development. It does not engage in specific country projects -- its goal rather is to study and evaluate how global needs can best be met, and we can only hope to come to terms with the energy crisis globally. It is not an intergovernmental agency -- its agenda of work is set in a spirit of collegiality by leading scientists and scholars.

What the United Nations University is, therefore, is a place where its own research and that conducted by its fellow UN agencies, along with knowledge generated by other actors on the international scene, might be weighed and tested in the crucible of interparadigmatic dialogue -- thereby helping to ensure that the knowledge we have provides answers that are meaningful and applicable to all societies. Its Charter grants it autonomy and academic freedom -- precious attributes in an international dialogue which, we all recognize, has too often been stalemated by competing political interests. It is, in sum, a university of the United Nations, created by its Members States -- a place to which the global community can turn when it is time to consider the controversial, encourage the unconventional, and ponder together the many tangled threads of human existence.

Energy, quite naturally, has been one of our concerns during the University's early years. The University has been among the first to recognize the importance of integrated rural energy systems. In the next phase of our work energy will inevitably play an increasing role. The results of this Conference will greatly help guide us in this area.

A massive research effort will have to be made to ensure that the technologies employed in bringing energy to the rural poor are the

appropriate ones. We believe it would be very useful to establish an energy research assessment consultative group, which would commission state-of-the-art reports, monitor, review and evaluate on-going research, and, most importantly, regularly update the research agenda. The University also recognizes the importance of improving the capacity of Third World countries to undertake their own energy planning. The University intends to engage in research and training in this area.

One of our main programmes will deal with the food-energy nexus along the lines I have already indicated. This will include research and training on biomass where present knowledge is inadequate.

We believe the research and training in all these areas will help in the effective transfer, transformation and creation of energy technologies for the development of Third World countries.

Another facet of the energy problem which needs increased attention is in the area of improved information flow. Information is now badly fragmented and dispersed. Instruments and processes need to be devised for gathering this information, sifting it, evaluating it, and directing it to those who can make the best use of it. The UN University journal ASSET, which is the core product of an information network we have developed (and is the official newsletter of this Conference), demonstrates what a modest effort in this area can do. We are also exploring the use of video tapes and films to promote village-to-village learning. I would urge you to see the film, "The Xinbu Energy Story," an account of the development of a rural integrated energy system in China, told by the villagers who developed it. We hope this film, which we are showing for the first time here at the Conference, can be the beginning of a UNU

worldwide village exchange network.

Of course these are only small steps. Clearly we must all do much more to develop the concepts, expertise and infrastructures for the integrated energy systems that will sustain our future societies. Such an immense effort must be approached in a new spirit of mutual collaboration and benefit. The United Nations University, founded by Member States and entrusted with the mandate to help identify and find solutions to the pressing global problems of human survival, development and welfare is ready to do its share.