Opening Statement 2nd Revision

JAPANESE SCIENTIFIC ADVISORY PANEL ADDRESS

26 March 1986

Rector: Ladies and Gentlemen. It is with very great pleasure that I have the honour to bid you welcome to the United Nations University for this meeting of the Scientific Advisory Panel in Japan. I would like, feeling a little bit diffident about taking the chair, given the emminence of our guests here, to invite Professor Mukaibo to take the chair - unless I hear very strong objections, I would like him to move one chair up to that of the Chairman, Mr. Mukaibo.

Before I turn over the leadership of this meeting to him, I would like to say that there is simultaneous translation in Japanese for anyone who wants to avail themselves of this opportunity. I should also say that the Panel, which consists of 20 people who have accepted to serve on the Panel, 12 have indicated their willingness and readiness to come. But we have been told that both Dr. Okita and Professor Oshima will come a little later. I also would like to suggest that we try to conduct our discussions as informal a way as possible. It is with that in mind that I would like to invite Mr. Mukaibo to take over the management of the session.

Before making my statement I would invite you all to have a look at the draft agenda that you have before you. A large part of the morning will be devoted to explanations by the Vice-Rectors and by Dr. Michio Nagai who is Senior Adviser to me. I am sorry to have to report that Dr. Kwapong has to absent because he is on his way to Nairobi in order to attend the summit meeting of the Organization of African Unity. The main purpose of our meeting today, of course, is for us to listen to you. And therefore we have tried to keep the expository part on our side to the absolute minimum. I have asked the Vice-Rectors to speak no longer than 10 minutes and I hope they will stick to it. I have made an

exception for myself, and I hope you will forgive me for that. But I thought it would be of some use to give you an exposition of the reasons why I thought that the assistance of a Panel like this one would be of great significance to the United Nations University's further development. The way we have now have structured the programme will allow us to start our discussions - and with that I mean the interventions on your part this morning. We will have almost an hour for that purpose. We will then have lunch and we have arranged the luncheon in such a way that at each of tables there will be a Vice-Rector, as well as some staff members. There is no seating arrangement for the participants. But it is my hope that as you take your place around the various tables that you will continue the conversations with my colleagues. They will make notes and these will all be put together in our report that we will have to consider later on. The discussions, I hope, can be continued after lunch and then in the last part of the afternoon, I hope that we can have some discussion about concrete programme ideas, identification of institutions and identification of particular methods for co-operation with institutions and scholars in our work.

It is not the intention for this Panel to formally convene again. This may well be the only meeting for the two-year period for which I have asked your co-operation because I believe that the substantive work will have to be done through smaller groups or/and through individual consultations with you.

You have before you two documents. One is a background paper that has to do with the activities of the United Nations University in the past 10 years here in Japan. Some of you may not have had the time to go through them, but I will assume you will find the time, if you have not so far, to read them. Because of this I have asked the Vice-Rectors not to elaborate on the points already raised in the background papers so that we can gear our discussions towards the further evolution of the UNU programmes in Japan.

The second paper is a paper that tries to set out the kind of questions we would like to address to you. They have to do with the future direction of co-operation between the United Nations University and Japanese scholars and institutions, including university research institutions, corporate research institutions and the governmental research institutions.

Now, the question that I'm sure you would like me to address is, Why now? Why do we want a Japanese Scientific Advisory Panel now? There are three reasons for that. First is that, after having established a United Nations University Research and Training Centre in Helsinki, one dealing with development research on a world-wide scale, the institute is called by its acronym, WIDER - World Institute for Development Economics Research - we are now in the process of trying to establish an Institute for Natural Resources in Africa as our contribution to the longer-term solution of some of Africa's problems. It may interest you to know that we started this effort before the crisis in Africa became acute.

But we also feel that an absolutely essential element in the system of research and training centres that we gradually hope to establish in various parts of the world is a centre in Japan. It is extremely important for the UN University to have such a centre here. We should remind ourselves that what we now have here in Japan, the UN University Centre, is primarily an administrative and planning centre. It is not an institute that is itself engaged in any significant way in research and training, although it manages a number of research and training programmes that involve 39 associated institutions in various parts of the world and involves an even larger number of co-operating institutions.

But if in such a global network of research and training centres we do not have a centre in Japan, there is a real danger that the intellectual centre of gravity of the United Nations University will move away from Tokyo to some of these other institutions. The way in which we have perceived this institute in Japan is for it to be an $\underline{U.N.U.}$

Institute for Advanced Studies devoted primarily to problems at the interface between science and technology and society, social change, and human, social and cultural development.

This is one reason why an Advisory Panel which would advise us on how to develop programmes and activities here in Japan, would help us move in the direction of the establishment of an Institute for Advanced Studies in Japan becomes an obvious need.

There is a second reason why we would like to have this Scientific Panel now. This year we have begun our effort to formulate our activities and our plans for the next six-year period starting in 1988 to 1993. That is what we call the Second Medium Perspective. We are not trying to develop a six-year plan. We have deliberately refrained from any rigid form of planning for our activities because of the very rapid changes that are taking place in the world. We all know from our own work and observation how many research projects become obsolete within a few years, even before their completion, simply because the nature of the problem, or because the intellectual perception of these problems has changed. In order to avoid the kind of rigidities that comes with five or six year plans, we are simply speaking about a six-year perspective.

We hope that our discussions now and in the future will contribute to our ability to articulate our ideas as to the directions in which the activities of the UN University should take for that six-year period.

There is a third reason why now we would like to have an expanded activity in Japan. When the United Nations and Japan concluded what is called the Host Country Agreement, inviting the United Nations University headquarters to Tokyo, the Japanese Government, apart from expressing its intention to donate the sum of US\$100 million dollars to the endowment fund of the United Nations University, also stipulated that after the United Nations University had established an institution abroad, the Japanese Government would be willing to consider to bear all the capital

costs and half of the running costs of a research and training centre in Japan.

In light of that, now that we have established an institute in Helsinki and are hopeful that we will have an institute in Africa, we feel that the time has come now for us to expand our activities in Japan, to enlarge the range of our interaction with the Japanese scientific community, both as a type of activity that would have value in and by itself, but also as part of the overall United Nations University activities, in particular as a way of laying the foundations for a future Institute for Advanced Studies.

We have had two consultations here in Tokyo in this process of exploring the most desirable features for such an Institute for Advanced Studies. We had a consultative meeting in 1983 with Japanese scholars and scientists. Mr. Hiroshi Kida and Dr. Saburo Okita were present at that meeting. They are also members of this Scientific Advisory Panel.

The second consultative meeting was of an international character and it was held in May 1984. Again, Mr. Hiroshi Kida and Mr. Mukaibo were members of that meeting. There were also seven other Japanese scholars who participated in it.

Now out of these consultations a number of conclusions emerged. They have to do with how to build a facility that would be attractive to outstanding scholars both from Japan and other parts of the world. It also became clear that it was at the interface between science and technology and social change that it was expected that such an institution could make its greatest contribution and would be the most attractive both to the Japanese scientific community and to the scientific community outside Japan, and especially in the third world.

We also spent a great deal of time discussing the critical mass that would be necessary to ensure the effectiveness and the creativity of such an Institute for Advanced STudies. And we spent some time discussing the balance that would have to be kept in mind between the

quality of the people involved as well as the critical number of scholars.

It also became very clear that the Institute for Advanced Studies here would have to be an integral part of the United Nations University system.

In the long term, of course, in the decentralized UNU system of institutions and programmes, the importance of having a strong institution in Japan becomes paramount. The Institute for Advanced STudies in Japan should be the first among equals in the system. It would be the intellectual fulcrum of the UNU network of research and training centres and programmes, it would be the place where integrated thinking would have to take place - that spans all the fields in which the UNU is active. That should be its first order of business. The Institute here in Japan would also, of course, be the point of contact with the UNU for many individual scholars and intellectuals from around the world, as well as the forum for lectures, seminars and workshops, through which the UNU could interact more fully with the Japanese scholarly community and public. You may remember, or you may be aware, though some of you may not, that one of the constraints that have limited our capacity to interact with Japanese scientist has been the necessity for the UN University in its collaborative efforts to maintain a so-called regional balance. This automatically limited the number of Japanese scholars who could participate in any particular venture of the United Nations University.

Finally, in July 1984, the Council very strongly endorsed the concept of an Institute for Advanced Studies and urged me to begin the preparations for an early establishment of such an institute, and to integrate the various activities that we already have in Japan, into this general effort to prepare for the establishment of an Institute for Advanced Studies. With that in view we have established a Standing Committee here at the UN University, chaired by Vice-Rector Ploman who is sitting there at that table, and consisting of all the Vice-Rectors and the Senior Adviser to the Rector, Mr. Nagai. This committee is the

focal point for the consideration of all matters concerning the permanent headquarters building of the United Nations University, the UNU activities in Japan as well as the provision of facilities for the proposed Institute for Advanced Studies in Japan.

Now, in addition we have the support and assistance of a new venture, the Japan Foundation for the United Nations University, a private foundation fathered by Dr. Nagai and chaired by Mr. Kobayashi of NEC, with the purpose of raising funds for the research and training centre in Japan and co-operation with research and training activities in Japan that will lay the groundwork for the Institute for Advanced Studies.

The University, of course, remains responsible for decisions about the research and training activities for which it will seek the support of the Foundation. The ideas that may originate with the Foundation for research and training in Japan are brought to the Standing Committee for discussion and agreement. In other words, the Foundation does not initiate research and training activities independently.

Now, having said this I would like to say a few words about the modes of co-operation between the Japanese scientific community and the United Nations University. I do hope that our discussions will bring out that the benefits of such co-operation will be mutual rather than one-sided. Much of the discussion, I hope, will turn around the question of what the Japanese scientific community could do as a contribution to developing the work of the United Nations University. That — I'm confident — will be of considerable importance to us. On the other hand, I hope it will also be possible to consider the manner in which the United Nations University could make a contribution to Japanese scholarship. I strongly believe that there is, potentially, a complimentarity and a partnership relationship, that is both possible and desirable, between the Japanese scientific community and the United Nations University, small as it is.

For instance, I believe that the United Nations University could be of some help in expanding the comparative studies field. My understanding is that much of the social science research that is taking place in Japan is in the international field, is of a bilateral character rather than multilateral. I also believe that by participation in the collaborative international networks of the United Nations University, effective feedback to Japanese scholars having done the research in various countries in the third world could be assured. Some of the, if I use the word resentment it may be a bit too strong, but some of the feelings of dissatisfaction that exists in parts of the third world about co-operating with Japanese scholars is the inaccessibility to them of the products of the research by Japanese scholars. I'm sure it's not new to you, but there is a feeling among third world scholars, why should we work with Japanese scholars, we never know what their findings are, and why should be waste time working with them. In many ways, it is a matter of language, of the need for translation. At the same time, however, the active collaboration of Japanese scholars in our networks with third world countries would undoubtedly contribute to a lessening of this sort of tension and would contribute to the mutuality of the benefits accruing from collaboration between Japanese and third world scholars.

One important element that makes the manner in which Japanese scientific endeavours have evolved that has made it attractive to many third world countries is the fact that research in Japan is much less dominated by military considerations than is the case in other industrial countries. There are very important lessons to be drawn from the Japanese experience in this direction which are of special significance to third world countries.

The fourth area in which I believe the United Nations University might be of some interest to the Japanese scientific establishment is the experience that we have developed in interdisciplinary research. I believe that, especially in the areas at the interface between the natural sciences and the social sciences, the networks and activities of

the United Nations University might be of some use to the Japanese scientific establishment.

As I was trying to prepare for this meeting I learned that in Japan itself, this particular preoccupation is beginning to emerge very strongly, and I am referring to the report by the Japan Science and Technology Council to the Prime Minister which, at least in the English translation, has been entitled, the Human Frontier Research Programme. At this stage, I don't know enough about the programme and I hope that those of you who are familiar with at least some elements of it, may want to make some reference to them. I do feel that this particular research direction, if it becomes government policy, could be of great significance to the UN University and to the evolution and development of our collaborative programmes.

So it is in the areas of interdisciplinarity, cross-cultural exchange, collaborative research and comparative studies that I think the United Nations University could play some useful role in our activities here in Japan together with the Japanese scientific community.

Now, finally, what do I and what do my colleagues here at the UN University expect from this meeting. We have posed a number of questions, and the questions are laid out in the discussion paper. We are soliciting views. We hope to get answers to some of these questions. We are not looking for consensus. The more ideas that are put to us, the better it will give us a basis for further reflection that we will need as we begin to articulate our plans for the future. We will have to do a great deal of reflection after our discussions and then we will come back to some of you, either in groups or as individuals, to pursue some of these lines of thought further.

We have to do this, of course, without raising too many expectations about our capacity to do something massively here in Japan. Our activities will be constrained by financial limitations. We do hope that we will be able to mobilize funds from the private sector here in Japan. And we also hope that we will be able to count on significant

support from the Ministry of Education here. Still it is very clear that we will have to start in a modest fashion. But the main thing is that we become much clearer about the direction in which we have to go and then move forward step by step.

These are the points that I would like to make at the outset. I've taken considerably longer than I thought I would. But, I surely am not going to take it out on my colleagues. And I hope that the Chairman will allow them the 10 minutes that we have agreed upon for each of them.

Thank you.

JAPANESE SCIENTIFIC ADVISORY PANEL

26 March 1986

Rector: Mr. Chairman. In response to the question about IIASA, we are in touch with IIASA. We make it a point to know what they are doing they know what we are doing. I think there are some basic differences between IIASA and us. IIASA was established as an instrument for scientific East-West co-operation and has remained, very much, an American-European-USSR operation. There have been some studies on third world issues, but their primary orientation is towards problems of the industrial world.

We should also remember that IIASA reflects a very specific methodology, i.e., the systems approach. It is a product, in a way, of the intellectual climate in the 1960s. I have had something to do with IIASA in an earlier incarnation. I was a Board Member of the Ford Foundation which was instrumental in establishing and initial funding of IIASA.

At some point, I'm quite sure, when we have established a research and training centre here, there is bound to be more concrete co-operation.

If I may, Mr. Chairman, now that I have the floor, move into the next topic which is very much related to this point. In the discussion paper on page 2, paragraph 6, point A, where we are speaking about our efforts to increase interaction between Japanese scholars and institutions, we mention a number of areas in which we would like investigate to what extent there is an interest on the part of Japanese scientist to play a role in what we are doing. For instance, we have a very small programme of training in plasma and laser research in a third world institution. I think it would be wrong on our part to shift that location from the third world to the first world, because there are

several other places in the first world where we could develop such training if we wanted to do so. The importance of our effort, I think, is, that it is taking place in a third world institution. The question is, would there be any interest on the part of Japanese scientists to help reinforce what we are doing in this regard. For instance, would there be any interest in Japanese scientists visiting our fellows those who have gone through that training, in order to top up their knowledge, to keep them up to date about the most recent developments, to invite them to Japanese institutions, and for Japanese scientists to see how third world trainees in these rather advanced areas are doing in their own countries? Similarly, we have training programmes in information technology and microprocessors. Is there an additional role that Japanese scientists and Japanese scientific institutions, be they private or national, see themselves play to reinforce the efforts that we are making in this area.

There is a very interesting and very important shift in thinking in the third world about the importance of developing a basic science research capability in their countries. If you think back to the 1950s, the prevailing advice from industrial countries to third world countries was, stick to applied research - that you can learn quickly and that's what you need. It has become very clear now that by continuing to emphasize applied research the third world is doomed to remain consumers of the advances of technology in the North. And so one sees now a reversal. There is now, I believe, a general realization that the heart of the development process lies in the capacity for scientific and technical innovation within the country. Therefore there is the need to develop a scientific infrastructure and a capacity to do basic research. This is reflected, for instance, in the recent establishment-in which the UNU did play a part - of the Third World Academy of Sciences, and of an African Academy of Sciences. It has led, especially through the efforts of Professor Abdus-Salam, to Third World countries joining CERN in Geneva, in order to familiarize themselves with the most advanced research in physics.

Is there a role in this area for the Japanese scientific community working through, or in co-operation with the United Nations University? These are some of the questions I have eventually the UN University will have to decide whether to include or not to include such a role in its next six-year perspective.

During lunch, I had a very useful conversation with Professor Oda about developing outer space research and training capabilities for third world countries. There are some European countries that are interested in hosting such an institute, but at the same time, it is very clear that Japan too has such capabilities. How do we work on that together in a way that would enhance the access of third world country scientists in this area of research, both in regard to the basic research and in regard to the policy questions in this field.

The United Nations University then is in the process of reviewing its training programme in light of the shift that is now taking place from applied research to basic science research. I strongly believe that the United Nations University in its training programme, as well as in its research programme, will have to reflect this new awareness on the part of third world countries. That is one dimension.

There is another dimension and that is the dimension of the interface between the social sciences and the natural sciences. I think all of us, are beginning to realize that the crucial problems that have prevented humankind to deal effectively with many of the global problems of the environment, of population, of energy and so forth, lie at the interface between the social sciences and the natural sciences. There are problems that stand at the confluence of the biophysical with the economic, the political and the cultural spheres, and we don't have the conceptual tools to come to grips with these problems. Now, I think, one of the roles the UN University could play is to develop this particular frontier. And it is this area where I feel that a research and training center in Japan, an Institute for Advanced Studies, would really be on the frontier of a new generation of scientific problems, the answers to which may well, in a very fundamental way, enhance our

capacity to manage the global life-support systems in a more effective way. For all the knowledge that we now have about ecology, for instance, the global environment has continued to deteriorate. I would very much like to know who in Japan is interested in problems of this kind. To whom should we speak, which institutions, or which individuals in institutions, who would help us to develop such new approaches to these problems. Already we have some projects that lie at this intersection between the biophysical and the political and economic that is, a project in Nigeria where we are looking into the impact of human and biotic interaction in tropical forests on climate. I think it is a pioneering study, it is the kind of study that may make a fundamental contribution to knowledge and to management capacity. there are many more such areas, for instance, at the interface between population, environment and development, or energy, environment and development. New conceptual work could be done and would be very significant.

Speaking about our future work then, I don't expect any answer now, the time is too short. But if any of you on the Panel could help us to identify individuals or institutions who have an interest in working either on the basic science side for the sake of developing country institutions, or on the interface between the natural and the social sciences, any information that any of you could give us would be of great help.

Now, Dr. Amagi made some remarks about the difference between universities as we generally know them, and the UNU. I agree with many of the remarks that he has made, but I think there is one important point to bear in mind. When we speak about universities as we generally know them, we should realize that we are speaking about a concept that is only 100 years old. It was Von Humboldt who developed the concept of a university, not only as the vehicle for the transfer of received knowledge to the next generation — but who saw the university as a means to create new knowledge through research. He was also the first one to identify the need for autonomy and independence of the university, guaranteed through an endowment fund. He never sold this idea in its

entirety to the government of his own country. But the first institution in the world to adopt that concept was one of the universities in the United States, i.e., Johns Hopkins, followed by Bryn Mawr. Then Harvard followed. We should not forget, therefore, that historically the concept of "university" has gone through a number of stages. It started off, in many cases, as a school of divinity. The early medieval universities were universities in which the pursuit of knowledge was motivated by the desire to know the laws of God. With the Renaissance there came a separation between science and theology and what developed was the college system for the general education of the gentlemen of the elite of a particular nation. Then Von Humboldt came with his conception of the university as the creator of knowledge. Now we have reached the point where there is a need for a new generation, a new kind of universities.

Many of the universities who were against the creation of the United Nations University said; what is the need of an international university; we are already international - it was the Harvards, the Cambridges, the Oxfords who said that. What has now become clear is that even though they are in many ways international in their outlook and composition of staff and faculty, the linkage between national perspectives and interests, on the one hand, and and the work that they are doing, the easy movement in and out of government by faculty members, the close links between universities and government, in this interdependent world, has brought out the need for a new type of research and training center that is not based on any particular national perspective, or the national interest of any particular country. There is then a need for a type of university that looks at problems of the globe as a single system and in terms of humankind as a diverse but single unit transcending national interests. University is the first of such a type of institution. I think that there will be more institutions of this kind. And if in its initial 10 years the United Nations University has trouble being recognized as a university, as gradually there will be more institutions like the UN University simply, because the need is there, it is, I believe, only a temporary condition. There are already several experiments in that

direction, none, so far as I know, as grandiose in concept as the UN University, but it is inevitable. I myself draw a great deal of pride in the awareness that we are a pathbreaker, that we are moving in unchartered waters. There is no model for the UN University, and therefore these are all the risks and uncertainties that accompany such a role. So, while I fully agree that the UN University will have to undertake a major public relations effort in Japan in order to maintain a sufficiently strong constituency, there are limits to what PR can do for a type of institution for which there is no model and which deviates from the established norms of what a university is and should be. It is in this spirit that I hope that you will, even if unasked, write to us, call us, invite us to come and talk - if you have any ideas that might help us in these two big areas, that is, the role of the United Nations University in basic research and the role of the UN University on the intersection between the natural sciences and the social sciences, and between science and ethics.

The agenda says "Future Work of the Panel." I have no assignments to give you. I'd be grateful if you, knowing the kind of questions we have, feel encouraged to write to us, to talk to us on the phone, or to invite us for a conversation on problems of this kind. That is all I have to say at the moment, Mr. Chairman.