DG/2006/113
Original: English

UNITED NATIONS EDUCATIONAL,
SCIENTIFIC AND CULTURAL ORGANIZATION

Address by
Mr Koïchiro Matsuura

Director-General
of the United Nations Educational,
Scientific and Cultural Organization
(UNESCO)

on the occasion of UNESCO/UNU Conference on globalization
and science and technology

Yakohama, Japan, 23 August 2006

Your Royal Highness,
Honourable Ministers,
Excellencies,
Mr Rector,
Distinguished Participants,
Ladies and Gentlemen,

It is my great pleasure to welcome you here today to the UNU/UNESCO International Conference on Globalization. This year's event will focus on "Challenges and Opportunities for Science and Technology", a subject of crucial importance, but one that has not always received the attention it deserves.

I wish to begin by thanking the distinguished speakers and participants who have come from near and far to be with us here in Yokohama. Such widespread participation reflects both the prominence of globalization on the international agenda, and the felt need to gain a better understanding of its nature and impact.

I would also like to thank those who have helped organize today's Conference. First of all our host, the UNU, and in particular its Rector, Professor Hans van Ginkel. It is thanks to his commitment and vision that the UNU/UNESCO Conference has become a well-established annual event, attracting international experts to analyze and debate the various dimensions of globalization. I wish furthermore to thank the Government of Japan, as well as the National and City Universities of Yokohama, for their generous support, which is deeply appreciated.

Ladies and Gentlemen,

The complex phenomenon of "globalization" is – and for the foreseeable future will continue to be – a major trend, affecting all spheres and levels of society. The early, often passionate, debates about the relative desirability of globalization, have now given way to the growing recognition that this process is not just irreversible, but also probably unstoppable. However, while globalization may now appear inevitable, the direction and form it takes is something we can – and must – work to shape. It is our responsibility to ensure that globalization serves human interests and is of benefit to all.

So far, the impact of globalization has been unequal. For certain sections of the world community it has been a force for equality and economic growth, opening up new opportunities for participation and communication. For too many others, however, globalization has led to deeper marginalization and impoverishment, widening disparities both within and between countries. Those who suffer from globalization are invariably those already struggling with exclusion: the poor, women, ethnic minorities and youth.

Much of UNESCO's work in recent years has been focused on bridging these inequities. The commitment to "globalization with a human face" is a strategic priority for the Organization, and directs all our major programmes. Our prime concern is to render globalization more just by empowering people to escape exclusion and discrimination, and by empowering countries to become equal actors in the global arena.

Science and technology are key to such empowerment. They are, to begin with, central to enhancing access to knowledge, an essential commodity in today's world. Information and communication technologies (ICTs) have revolutionalized the role of knowledge in our societies, making the availability of information – and the ability to employ such information effectively – an increasingly critical determinant of economic growth and sustainable development. UNESCO is committed to promoting equal access to these new technologies and to providing information for all. The Organization also works to ensure that individuals and societies can make use of such information to preserve and improve their way of life. Policies to provide universal quality education, to promote respect for cultural and linguistic diversity, and to secure freedom of expression are all crucial in helping to bridge the digital and knowledge divides.

Science and technology also have a central role to play in overcoming many of the other social and economic inequities that act as barriers to empowerment. Our success in achieving the Millennium Development Goals (MDGs) to eradicate extreme poverty, reduce child mortality, improve maternal health, ensure environmental sustainability and combat HIV and AIDS, malaria and other major diseases – our success in all these areas will require focused science and technology policies. It will also require concerted efforts to strengthen developing country capacity to lead and manage scientific research and development.

Ladies and Gentlemen,

A well-functioning and inclusive education system that delivers high quality education for all is a basic precondition for any effective science and technology policy. Quality education creates the human capital required for research and development and for finding innovative solutions to fundamental global challenges. Of equal importance is the need to strengthen linkages between education institutions and government, industry and private research institutions. The formation of such a holistic national innovation network will be instrumental in the transfer and commercialization of scientific research for economic and social development.

UNESCO is closely engaged in capacity-building, both at the individual and institutional levels. For example, the Organization is working closely with the New Partnership for Africa's Development (NEPAD) of the African Union, and with

individual countries like Nigeria, to develop effective and replicable capacity-building strategies. UNESCO is also assisting African universities in developing scientific and technological capacity specifically targeted to addressing regional challenges. In this regard, we are privileged to have present here today the Commissioner of the African Union for Human Resources, Science and Technology, and the Honorable Minister of Science and Technology of Nigeria – I look forward to learning of your experience and vision for the future.

Harnessing the full potential of science and technology for sustainable development implies a strong focus on global knowledge exchange, networking, and advocacy. UNESCO – in its role as an intellectual clearinghouse and knowledge broker – has unique capacity in these areas, in particular with respect to facilitating cooperation at the international level.

Indeed, the impressive growth in technical skills and institutional capacity in almost all developing countries has opened up promising perspectives for international collaboration. The Academy of Sciences for the Developing World (TWAS) already offers a key forum for promoting scientific dialogue, and serves to focus joint scientific research on specific regional development problems.

UNESCO's International Basic Sciences Programme (IBSP) likewise aims to strengthen regional and international cooperation. Working through a network of national, regional and international centres of excellence, the Programme focuses on enhancing scientific capacity in development-oriented areas of national priority. It seeks to promote both South-South collaboration and triangular North-South-South collaboration, along the lines laid out in the Doha Declaration and Plan of Action.

While working to enhance international cooperation, it is important not to neglect those who are usually left out of knowledge and science networks – in particular women and youth. Specific action is needed to enable female researchers and scientists to compete and succeed on a fair and equal basis. The under-representation of women in science marks a great loss of human potential. It is also strategically important to engage and motivate young scientists, at all levels of the education system. Only by inspiring and training young minds will we maintain the momentum of scientific progress in the future.

Ladies and Gentlemen,

Let me now turn to the role of science and technology in promoting sustainable development. Growing environmental pressures, and increased threats to natural resource bases, biodiversity and ecosystems, have made the need for carefully targeted science and technology policies ever more critical. Here, I would like to

briefly outline UNESCO's policies in two key areas of development: freshwater and oceans; and natural energy resources.

Freshwater and oceans now stand at the top of the international agenda and, within the UN system, UNESCO is taking a lead role in both fields. The challenges here are vast and urgent. Water pollution and the destruction of related ecosystems have assumed alarming proportions, and climate change has led to an increase in natural disasters which place the lives of whole communities at risk. Many countries are still not on track to reach the water-related targets of the MDGs, and millions of people die each year from treatable water-borne diseases. Around 40 per cent of the world's population have no access to basic sanitary facilities.

In its science programme, UNESCO focuses on tackling these problems through a three-pronged approach aimed at: first, enhancing scientific, technical and human capacity to improve water management; second, strengthening our knowledge base through the provision of comprehensive water education and training; and third, assessing the state of the world's oceans and freshwater resources. Furthermore, through its Intergovernmental Oceanographic Commission (IOC), UNESCO is working to reduce scientific uncertainties about the health of the marine environment, and to enable the prediction of climate change and its effects on ocean resources.

The question of providing access to sustainable energy resources is another pressing challenge. UNESCO's efforts focus on human resource development, and on promoting increased energy efficiency and diversification, notably through the large-scale use of renewable – in particular solar – energy forms. The dramatic increase in global demand for mineral and energy resources also requires action in the earth sciences. UNESCO, as the only UN agency engaged in research and training in geology and geophysics, is leading efforts to develop research and capacity-building in these areas.

Global vulnerability to natural and manmade disasters is increasing, for many populations disproportionately. In the face of such hazards – and drawing on its capacity to assist in prediction, early detection, and building preparedness – UNESCO has focused its efforts on developing a culture of prevention. This involves not only the effective use of scientific and technical advances to inform preventive action, as in the case of creating an effective Tsunami warning system for example. It also extends to education, knowledge management and raising public awareness.

One final issue to which I wish to draw attention is that of regulation. With the growth of scientific knowledge and technological innovations, the need for ethical principles to regulate their implementation has become increasingly important. This is especially the case in fast-developing scientific fields like genetics. Efforts here are needed to ensure that science and technology are oriented towards human welfare and

are respectful of individual rights. As UNESCO has long advocated, the ethics and responsibility of science should be an integral part of the education and training of all scientists.

Ladies and Gentlemen,

Today's conference provides us with an excellent opportunity to discuss all of these questions. It enables experts from different countries and backgrounds to explore together the transformative potential of science and technology. Above all, it encourages us to focus on how this potential can be mobilized to successfully shape globalization to the benefit of all.

Thank you.