## Development, Technology and Ethics

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Notes for Remarks prepared for Ivan L. Head President, International Development Research Centre

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## DEVELOPMENT, TECHNOLOGY AND ETHICS

In a world of rapid change, we face challenges of unimaginable dimensions. The impact of the decisions that we make today will last for years to come and shape the future development of our planet. The fierce pace of progress engendered by the genius of humanity is radically transforming the way in which humans relate to their social and natural environments and nations interact among themselves.

The insatiable need to advance our understanding of the world has unravelled the forces of knowledge and the power of technologies to an extent not yet fully understood. Humanity holds in its hands the capacity and the means to explore the deepest frontiers of the universe and to radically alter the genetic makeup of nature. We have the tools to prolong life and We have the power to to reduce drastically human suffering. create conditions that can ensure the future survival Together with this ability for almost unlimited humankind. creation, nations also retain technological forces that can ultimately lead to their annihilation. More than ever before, scientific advancement has put at our command the power to bring human development to a halt.

This threat does not arise from the power of knowledge per se. Nor can it be attributed purely to the uncontrolled or

hazardous use of technological means of destruction. Rather, it is the result of our baffling inability to place the pursuit of human dignity at the centre of the goals for development and progress: to see development as a fundamental human process. In the realms of an increasingly interdependent world, sometimes overwhelmed by the miracles of science, we still fail to comprehend that development is the chase of common options and the fulfilment of common responsibilities.

A dogmatic dichotomy between developed nations and the Third World can no longer imprint our views of the future. This is not a call to negate the responsibility of the North from the deprivation which exists blatantly in most of the developing It is rather a plea to fully recognize the tremendous impact of this deprivation on everybody's future development and quality of life. Our persistence in placing the North as a dominant actor in the international sphere disregards the implacable world consequences of continuous paucity in the South. The chronic poverty in the world, the misuse of valuable human and natural resources, the continual violation of fundamental rights, the slow realization of our interdependence with the surrounding environment, and the abysmal gaps that still exist over the control of viable options for development are all hard facts with which we must come to terms.

We cannot afford the luxury of maintaining a position in the international scenario whereby we witness the course of underdevelopment marking the fate of over two-thirds of the

world population. The price of such passiveness is far too high, and its social cost too extravagant. The pursuit of sustainable growth is no longer an aim only of nations that have yet to benefit from the wonders of modern technology. It must also be the goal of those societies which control such technologies.

The acknowledgement of this view raises complex moral and ethical dilemmas in development that we have an obligation to revisit. Where to begin, and how to do so, from the perspective of what we are today as a society, and what we aspire the world to be in the future, are just a few of the fundamental questions confronting us now.

The new ethical considerations underlining the relationship between technological advancement and development that we must address are significant and multi-faceted. They force us to review, critically, assumptions engrained in our culture, entrenched in our paradigms of science, inlaid in the political cognizance of our place in the world scenario, and deeply rooted in the principles and values that govern our actions. This task ahead is not an easy one. It is indeed not one that we can expect to fulfil within the confines of this Conference. However, we can, and must, begin making a judicious rating of our arrogations in order to steer our future actions.

This may demand from us a careful reassessment of the fundamental ethical principles that have guided the conduct of our development as individuals and as a society throughout history. It may call peremptorily for us to go beyond the

limits of moral relativism and the weight of conservative humanism in examining the potential that technological advancement offers today in terms of social change. The critical developmental question with which we must deal in this forum then is twofold: are the values that we apply to comprehend the role of technology and our responsibilities in the context of an interdependent world based on the pursuit of human dignity? and are the norms by which we believe the theory and practice of development must be regulated responsive to the ethical challenges the world confronts today?

Allow me to further elaborate on these points.

It is worthwhile to remind ourselves once more that at the foundations of development in societal, economic and political terms in the world today, tangible options for human advancement and the betterment of people's quality of life must be present. Development is in essence a human process in pursuit of human dignity. It involves the creation, utilization and management of attainable options that can lead to the sustainable advancement of humankind, based on fundamental principles of equity, equality, well-being, and participation. However, in a world where the thirst for profit prevails over social equity, where dogmas of efficiency justify the costs of human suffering, and where fears of change sacrifice participation, it will be wise to re-examine the power of our ethics.

The underlying ethical axiom upon which the theory and

practice of technology for sustained development rests is the responsible right to self-determination. This elemental development principle permits societies that are unique in their culture, different in their socio-political and economic composition, and diverse in their objectives for progress, to make responsible developmental choices.

In the myriad of options that societies have encountered in their development in the past, technology has always been one of the greatest agents of change. Throughout history, the creation, adaptation and application of technology have been in some form or another at the centre of choices involving the use of natural, financial and human resources. Nowhere has this been more evident than in the developing world. We are, however, witnessing a slow shift. The options of development available to the Third World are arising not only from processes of technology diffusion and transfer from the North, but also out of indigenous processes of technology creation in the South.

In this context, and given the development options that we face today in building the world of tomorrow, the relevance of technology is awesome. It permeates areas of human and social endeavour as diverse as the utilization of means for instant communication across the globe, and the establishment of avenues for self-determination and full political and economic participation. It facilitates the institutionalization of means for the protection of basic rights, and the monitoring and

preservation of the ecosystem. It opens unknown windows to explore the mysteries of life, and conditions the possibilities of egalitarian access to and use of our scientific accumulated wealth for the satisfaction of human needs.

Unfortunately, history also teaches us that after centuries of technological progress, the world still struggles to overcome the disparities that have resulted from the unequal sharing of the marvels of technology. All the wisdom accumulated over decades of technological breakthrough is still not sufficient to breakdown the conditions of injustice that we witness around the world, or to control the factors that can make technological innovations dysfunctional or even damaging.

While billions of dollars are spent on more sophisticated weapons by developed and developing countries alike, basic health technology is still unavailable to millions of women and children in Asia, Africa and Latin America. While the concentration of wealth continues to increase within and among industrialized nations, the poorest countries in the world are becoming net exporters of capital to the North -their indebtness thus diminishing their own options for building more self-sufficient national technological capacities. Whereas technology is more and more frequently put at the service of an insatiable market for consumer goods, our cities and those in the developing world face growing problems in satisfying the demands for basic services by the urban poor, in terms of food, housing, and a clean environment. While technological innovations, that

twenty or thirty years ago were the product of fertile minds and are now taken for granted at our homes and at our places of work, children around the world continue to drop out of school as a result of antiquated or insufficient means to learn -paper, pencils and textbooks.

There is strong evidence to support our belief that there may be something fundamentally wrong in the accepted wisdom within which we frame the understanding and responsibilities of our shared future. If this bears to be the case, we have encountered a crucial ethical challenge. We have become so accustomed to assuming that there is a safe causal link between our technological advancement and development in the world, that we seldom wonder about the principles that govern the conduct of humans in the creation, sharing and utilization of knowledge.

I would like to urge you all to reflect on what is central to the future survival of our civilization: the bond between development and the power of the scientific and technical knowledge the world holds today. A junction underpinning the capacity of people to fulfil their human potential. This bond is constructed on a net of inter-related principles that are moral in their nature and ethical in their application.

The urgency of my plead for such reflection is the result of a growing sense that the overwhelming impact of scientific discovery, and the yet unknown boundaries of the technological power available to us, seem to be crippling societies' capacities to monitor and control the forces that have

been unravelled. Humanity has relied for centuries in the value of Hippocrates' words "never do harm to anyone". We have the obligation to ask if this fundamental principle is a sufficient ethical shield to confront the complexity of the world we live today. We must inquire whether this principle can continue serving as the platform from which we address the ethical dilemmas being possed to us by the survival of humankind.

In this interdependent world, as developed and developing societies advance towards the achievement of their goals, new ethical challenges will pave the way towards progress. The future is thus not free from new and ever more complex ethical dilemmas. Our realization of this fact and its implication is already a step towards ensuring our global survival.