

"The Global Information Infrastructure - What is at stake for The Developing World?" address to the Infodev Symposium

9 November 1999

Chairperson
Distinguished participants
Ladies and Gentlemen.

It gives me great pleasure to address you this afternoon, your morning. I'm sorry that I cannot be with you in person but I'm happy that this satellite technology has allowed us to connect with you from Johannesburg.

Let me take this opportunity to thank the President of the World Bank Jim Wolfensohn and the World Bank for initiating and hosting this important symposium - the infoDev Symposium - to explore and elaborate strategies that will harness the processes of globalisation, and digitisation for human development. It is my sincere hope that the symposium takes forward Mr Wolfensohn's vision of the World Bank as a Knowledge Bank.

The digital revolution, developments in telecommunications and the Internet are having a profound effect on society. Societies, economies and communities are being globalised and networked in an unprecedented manner, thus leading to increasing levels of interdependence among world's peoples.

The emerging networked society and economy are opening many opportunities for millions of people around the world. Increased trade, new technologies, foreign investments, expanding media and Internet connections are fuelling economic growth and human advance.

As we are all aware all of these developments offer great potential to accelerate development and to eradicate the scourge of poverty that continues to afflict huge numbers of the world's population, especially in the developing countries. These same developments however have the potential to become the greatest force for widening the gap between the rich and the poor, the developed and the developing countries. It can become a force for social and economic marginalisation and, even exclusion.

As we know the driving force behind the networked society and economy is the astonishing development of the last decade or so is the information and communications technologies. The information and communications revolution offers ever more powerful and enhanced capabilities, affecting and transforming patterns of work, education and health delivery, entertainment, public opinion and so on.

These developments have also brought to the fore, more than ever before, the importance of knowledge as the most critical input in the development process, in the creation of wealth and economic progress.

Although the agricultural and industrial revolutions involved new knowledge, in both instances different inputs were critical. Land was for the agrarian revolution more important than the new knowledge on the use of seeds. For the industrial revolution capital in the form of machines encompassing the use of energy through the steam engine and the internal combustion engine became the most important input of production.

Similarly the current revolution is driven by the discovery of electronic means of processing, organising, sorting and communicating information which is leading to a knowledge revolution. If we were to reduce the importance of knowledge to the level of production we would say that knowledge is the ability to choose wisely what to produce, and how to produce it. But knowledge unlike land or capital resides mostly in human brains rather than physical entities.

Information and communication technologies provide the medium through which humanity both generates and communicates knowledge. These technologies fuel the knowledge sectors. They enable the human brain to expand its limits in the production, organisation and communication of knowledge.

The importance of knowledge as the primary input into production has a major impact on the institutions and incentives societies provide for the economic actors. Discussing the distinguishing factor between knowledge and land and capital, one writer says:

"Knowledge is a public good not because it is produced by governments but because it has no rival in consumption. This means that we can share knowledge without losing it. The same knowledge can be used by me and by others simultaneously. This is the physical property of knowledge, not an economic property, and, as such, it is quite independent from the organisation of society. Nevertheless, it is clear that the economic rules governing the use of knowledge - for example, whether patents can be used to restrict its use - can have a major impact on human welfare and organisation."

Given these characteristics of knowledge, it is clear that if the networked economy and society is to benefit all humanity, it is the medium, the information and communication technologies, as well as the economic rules that we need to pay attention to. For it is the use of the economic rules and the institutions governing socio-political and economic interaction among nations and peoples that pose the greatest danger to engender social and economic exclusion of the weak and underdeveloped world.

The development of the information and communication infrastructure in the developing world must, therefore, rank first in our attempt to spread the benefits of a networked society. We welcome the InfoDev development. The very idea of establishing a venture fund for ideas that brings together public and private donors to promote innovative application of information and communications technologies for development, is in itself innovative and bold.

We urge the World Bank and its partners to pay special attention to the needs of the developing world, in particular, the continent of Africa. Africa remains the biggest development challenge facing humanity. Indeed in terms of its mandate the World Bank cannot but be concerned about the African development challenge. New York has more Internet hosts than the rest of Africa and Manhattan has more telephone lines than the rest of Sub-Saharan Africa.

We all agree that the development of information and communications infrastructure in the developing world has the potential to 'leapfrog' these countries into the networked age. Such developments will enable us to deliver education and health using distance learning and telemedicine without to invest in costly physical facilities, thus significantly reducing the cost providing these essential services.

Recognising the importance of information and communications technology in the development of our nations in this country we have embarked on a major drive to rollout telephony and Internet access. Telkom South Africa, our national telephone company has been doing 500,000 telephone connections every year since mid-1997. Government through the Department of Communications has set aside USD3M to connect 2,000 schools to the Internet. Telkom SA will supplement this with another 1,000 connections. A significant number of all these programmes are for the benefit of the poor and the underdeveloped sections of our society. It is a deliberate intervention to ensure that the knowledge revolution does not widen the gap between the rich and the poor in our own society.

We are also in the final stages of developing a Public Information Terminal System. This is a system of establishing community information centres in public access places, enabling ordinary citizens to have access to government and other public information.

We have also deregulated the mobile telecommunications industry, which has spawned a vibrant sector within our economy. Today the industry has more than 5 million subscribers and, the rate of connections is still growing at an impressive rate. We will be licensing a third mobile operator in the near future.

Let me conclude by emphasising that the evolution of a networked economy and society required a determined effort by all players to ensure that its benefits flow to all humanity and does not contribute to the existing inequalities and poverty. Indeed it must be a catalyst for human development and poverty eradication.

For this to happen we need to be innovative about evolving processes, rules and institutions that ensure widespread diffusion of the technologies which are the fuel for knowledge generation, organisation and dissemination. At times this will require reforming existing institutions and incentive structures and at other times establishing new ones. the InfoDev venture fund, as we have said, is a start in the right direction.

Once again thank you very much for inviting us to participate in the symposium. We wish you good deliberations and we look forward to the conclusions with much anticipation.

I thank you!