

KEYNOTE ADDRESS

by

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(18th Meeting of COMSATS Coordinating Council
Colombo, Sri Lanka, 12-13 May 2015)

Honorable Minister for Higher Education & Research, Government of Sri Lanka, H. E. Dr. Sarath Amunugama,
Honorable Deputy Minister for Higher Education & Research, Government of Sri Lanka, H. E. Dr. Sudarshini Fernandopulle,
Mr. P. Ranepura, Secretary, Ministry of Higher Education & Research, Government of Sri Lanka,
Ms. Chitranganee Wagiswara, Secretary, Ministry of Foreign Affairs, Government of Sri Lanka,
Mr. Niroskana Perera, Chairman, Industrial Technology Institute,
Dr. Imtihan Elahi Qureshi, Executive Director COMSATS,
Ladies and gentlemen,

In my condition of Chairperson of COMSATS Coordinating Council, I want, first, to express my sincere gratitude to ITI, and the government of Sri Lanka for their support in the organization of the 18th Meeting of COMSATS Coordinating Council and for the wonderful hospitality of this beautiful country.

I also want to thank IROST, and the government of Iran for hosting of the 17th Meeting of COMSATS Coordinating Council held in Tehran in May 2014. The hospitality and the great work done by IROST were the key factors for its success.

Our world faces today challenges that 20 years ago were not even taken into account: Global warming, desertification, destruction of the biodiversity, were just apocalyptic visions that only a few considered a real possibility. Today, most of our countries confront a situation that can cause catastrophic effects for our survival unless very drastic measurements are implemented in a very short term.

Even if this situation is mainly due to the uncontrolled emission of greenhouse gases by the economic activity of industrialized countries, we all share apart of responsibility, and must participate in the search of solutions. The first voices of alert came years ago from science, based on the accurate measurements of CO₂ and methane concentrations in the atmosphere and of the average temperature of the oceans.

Many different alternatives are already available which can bring medium term reduction of the rate of growth of the temperature, if they are applied with the necessary political support. However, the situation has become so serious that, according to the international panel on climatic change, IPCC, we can already be very close to a non-return point. As usual, this will affect in a more dramatic way developing countries

which, due to the weakness of their infrastructure and the flaws of their political and educational systems, are not easily prepared to confront successfully critical situations. In particular, for Latin America, which has still one of the richest biodiversities of the world, the future looks quite dark. The indiscriminated destruction of the Amazonian forest, which is one of the main sources of oxygen for the planet, involves the risk of a quick process of desertification, unthinkable 30 years ago. In my own country, Colombia, very rich in water sources, these processes will also produce in a few years an important increase of the average temperature, accompanied with drought and the elevation of the sea level. This at can even cause the destruction of some coastal cities, among which Cartagena, the pearl of the Caribbean, inspiration of the dreams of our Nobel García Marquez.

A global problem like this requires global solutions and needs a very coordinated international effort, led by the industrialized countries. Reduction of greenhouse gases, increased use of alternate energies, massive reforestation programs financed directly by responsible countries, (not through carbon bonds) in the most critical regions and use of imaginative techniques for carbon and methane storage, are only some of the strategies that could be proposed where science has a central role to play. Close cooperation between natural and social sciences is a powerful tool for understanding the evolution of society and establishing the appropriate lines of action.

COMSATS Network of Centers of Excellence that includes members from three continents, established several years ago a thematic research group on Climate Change and Environmental Protection, that has a strategic role in this matter, not only from the scientific point of view but also by undertaking political actions with the governments of the member countries.

Solutions may also come from unexpected directions related to the technological revolution that the world is living. We must be aware that Internet is transforming society in a deeper way than any previous technological development. Thanks to his cell phone, a peasant in Colombia has today more information that the president of the United States twenty years ago. The manufacturing and transportation industries are undertaking a drastic transformation related to high scale automation and the introduction of 3D printers that will allow us to produce at home most of the goods that we require. Electric automatic cars and drones are already changing the way products are distributed and people are transported. This new industrial revolution is a unique opportunity for developing countries if we are able to develop the wright models of development. I sincerely hope that we won't miss this train as many others in the past.

The recent economic crisis related to the fall of oil prices, has affected in a substantial way producer countries like Venezuela or to a minor extent, Colombia, and is showing once again that a country cannot rely on the export of raw materials for its survival. The real treasure is the talent of the people and its capacity to produce creative and innovative ideas.

In this respect, any development programmes for our countries must be based on two pillars:

- Improvement of the quality and coverage of education at all levels with emphasis in science and mathematics teaching
- Development of science and technology including basic sciences at the highest level, and applied science oriented to the solution of our problems and to the creation of a strong and innovative industrial sector.

South-south cooperation is essential in the generation of solutions adapted to our particular needs. Our institutions are producing science and technology of a very high level that, only in very few cases, are transferred to the productive sector. Traditionally our governments and our industry buy most of the soft and hard technology, ignoring locally generated ideas, which would be much better adapted to our particular needs.

Thanks to its international composition and to the quality of member centres, COMSATS can be a great instrument for generating change in the developing world. We must direct all our efforts to strengthen our institution and improving its visibility and influence on the decision makers in our countries.

Finally, I would like to congratulate our Executive Director of COMSATS, Dr. I. E. Qureshi, and his coworkers for the excellent preparations made for the 18th Coordinating Council meeting, and for their contribution to the consolidation of COMSATS. My deepest thanks also to the local organizing team for the wonderful work that they have done in the organization of a meeting which, I am sure in advance, will be a great success.