

WELCOME ADDRESS

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Honourable Chief Guest, Mr. Parvez Butt, Chairman
Pakistan Atomic Energy Commission,
H.E. Mr. A.D. Idris Waziri, High Commissioner of the
Federal Republic of Nigeria to Pakistan,
Respected Mr. Song Deheng, Political Counsellor for
Embassy of the People's Republic of China,
Excellencies, Ladies and Gentlemen.

Welcome to this Meeting on Science & Technology
Capacity-Building for Sustainable Development, which
is an event directed towards addressing popular and
pressing issues of the modern times. I especially
welcome our Chief Guest, Mr. Parvez Butt, who has
been kind enough to grace this occasion with his
honourable presence today. H.E Mr. A.D. Idris Waziri
and respected Mr. Song Deheng, we at COMSATS
are grateful for your time and the consideration that
you have spared for this event. My heartiest and
deepest thanks to the participants of this meeting,
especially those who have travelled, long and far, to
be part of this important event. I once again warmly
welcome you all to this inaugural ceremony of the
*Meeting on Science & Technology Capacity-Building
for Sustainable Development*.

Distinguished Guests, there has been much talk,
across various international platforms, endorsing the
importance and significance of sustainable
development, which, in a world increasingly
challenged by economic, social and environmental
problems, is perhaps the most sought- after concept
and envisaged to be the true remedy for global
predicaments. Ladies and Gentleman, sustainable
development today is a concept, analyzed in great
depth, that not only includes prevention of
environmental degradation and pollution, as perceived
earlier, but also lowering and diminishing poverty,
illiteracy, disease, war, corruption, gender inequality;
in short, addressing of all those concerns that are
environmentally, socially and economically
disadvantageous.

Capacity Building, ladies and gentlemen, on the other
hand, is a process through which individuals, groups,

institutions, organizations and societies enhance their
abilities to identify and meet developmental challenges
in a sustainable manner. It is the ability of individuals,
organizations and societies to perform functions, solve
problems and set and achieve their own objectives. In
this sense, it is about the self-organization of a society
and the will, the vision, the cohesion and the values
to make progress over time and achieve sustainable
development.

Honourable guests, as you are aware, the gulf between
the developed and the developing countries is
increasing. A steady expansion in this gap has
produced a serious division of *have's* and *have not's*
among these nations. The *industrial revolution*, which
was the launch-pad for development for many
countries, proved to be a stiff hurdle for the
achievement of true sustainable development, but time
has taught mankind a difficult lesson. An industrial
base for development might prove worthy for
development, but long-term sustainability cannot be
achieved in this manner. Science and technology,
distinguished guests, provide the ultimate solutions
to the sustainability challenges created by the
industrial revolution. S&T comes as saviour of
developing countries at a time when they cannot
determine their direction for progress and likewise the
means to achieve it.

To develop an S&T base, strong enough to support a
nation's launch towards sustainable development,
requires building new capacities and expansion of
existing ones. Today, developing countries might have
some idea of what to achieve, but are constrained
because they lack the necessary capacity to perform.
As Archimedes said, and I quote:

*"Give me a lever long enough, strong enough; I'll
move the world"*

This great scientist knew what to achieve and how to,
but expressed in a simple statement the deficiency
of infrastructural capacity to realize his endeavour. In
a world challenged by complex issues and

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complicated working, I believe that the need to develop S&T infrastructure is more urgent than ever before.

Distinguished Guests, the *Commission on Science and Technology for Sustainable Development in the South* upholds the mission of facilitating sustainable development within its member countries, through S&T capacity-building. We are of the view that sustainability is an issue that must be addressed through the implementable application of science and technology. COMSATS has quite a few capacity-building programs to its credit, which it has initiated in its member countries. A few initiatives of COMSATS to develop Human Resource capacities in its member countries include:

- The COMSATS Institute of Information Technology at Islamabad, Lahore, Abbotabad, Wah Cantt and Karachi;
- The COMSATS IT Centre at Damascus, Syria, and;
- The COMSATS Distance-Learning program for Pakistan.

The science and technology capacity-building endeavours of COMSATS include:

- The COMSATS' project of Internet Services operative in 7 cities of Pakistan;
- The COMSATS-CERN-NCP Project for Data-Grid Applications and Physics Data-Analysis;
- The COMSATS Biotechnology Cell;
- The TWAS/TWNSO Coordinating Office, set up at COMSATS Headquarters, and
- The ICTP-Pakistan Chapter for Pakistani Scientists.

In the health sector, COMSATS initiated the *Tele-Health* project, the first Centre of which was established at Islamabad. On the other side, the *Industrial Information Network* project, initiated in collaboration with UNIDO, is a step forward in developing the SME sector of Pakistan's economy.

Ladies and Gentlemen, at this juncture, I feel I must say something about the misunderstanding that many people have developed about the activities and achievements of COMSATS. I am sure many of you are already aware of the organization's accomplishments; however, for the knowledge of those who are unclear, I would like to recount a few

achievements of COMSATS that it has attained in a short span of 8 years.

To date, COMSATS has independently organized and successfully conducted 20 international and national-level workshops, seminars, conferences and symposia. In addition, 19 international and national-level conferences and symposia have been co-organized or co-sponsored.

COMSATS is now accredited as an intergovernmental organization by the United Nations' system. Recognizing the organization's contribution towards sustainable development in the South, COMSATS was invited to attend the World Summit on Sustainable Development at Johannesburg and the General Conference of the International Atomic Energy Agency during the year 2002.

COMSATS regularly awards postgraduate scholarships to deserving students at HEJ & CIIT Pakistan; ICCES, China; and Damascus University, Syria. COMSATS has provided computers to several public schools in Pakistan.

COMSATS regularly supports research activities, by generously awarding fellowships and research grants. Kudos to COMSATS, which has achieved all this and much more in a short span of time, with the same funds and contributions that it was receiving 8 years ago. Ladies and gentlemen, I do not want to go into much detail, for as I already said, each and every member country of COMSATS shall readily verify the contributions of this organization for facilitating sustainable development in this region.

Needless to say, dear guests, the sky is the limit for COMSATS. We intend to improve ourselves and are always open to positive criticism. Our upcoming events include five scheduled symposia, meetings and conferences. Of the latest developments, I must mention the project on Tele-health and Distance-Learning, which is to be a joint collaboration between IDRC, COMSATS, the Karakorum Area Development Organization (KADO) and the Baltistan Health and Education Foundation (BHEF), for the socio-economic development of the northern areas of Pakistan.

Distinguished guests, I realize that the honourable chief guest shall shed light on the detailed

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achievements of Pakistan Atomic Energy Commission (PAEC) later on, but with his kind permission, I myself would like to share with you some of my 35 years of cherished experiences at that organization. The Pakistan Atomic Energy Commission has undoubtedly played a central role in the capacity-building of not only Pakistan, but also the developing world. I sincerely feel that PAEC has great potential to achieve Pakistan's objectives of sustainable development. History proves that Pakistan has developed most of its capacity in times of severe constraints, pressures and isolation. This nation endeavours to build its capacities when challenged. In the mid seventies, the international pipeline of nuclear fuel to Pakistan was throttled. PINSTECH, an Institute of Pakistan Atomic Energy Commission, was given the challenge of indigenously developing this nuclear fuel. I am proud to say that PAEC developed this fuel in a few years and this is not all; strategic expertise and technology was also created alongside

Honourable guests, it was indeed a pleasure for me to work with Pakistan Atomic Energy Commission. I am grateful to this prestigious organization for giving me a chance to work in such a challenging environment. I dedicated 35 good years of my life to the organization's well being and received much honour and appreciation in return: 40 - 50% of all the international publications appearing during the last 35 years at PINSTECH include my contribution, in one way or the other, and I sincerely cherish this honour that my career-developing organization has allowed me to own. My seniors, particularly Dr. Ishfaq Ahmad, (Late) Mr. Munir Ahmad Khan, Dr. A. Q. Khan, Dr. Naeem A. Khan, Dr. Inam ur Rehman, Mr. Parvez Butt, the present Chairman PAEC, Dr. Samar Mubarakmand, Dr. Abdul Ghani, Prof. Dr. Atta-ur-Rahman, Dr. N.M. Butt and Dr. I.H. Qureshi not only encouraged me but also guided and advised me in building R&D capacities at PINSTECH. My contribution in building R&D capacities is humble but useful. It enabled me to win many unique honours for Pakistan Atomic Energy Commission, which include:

First "*Best Young Scientist's Gold Medal*" (1973)
First "*Sitara-I-Imtiaz*" (1984)
First "*Scientist of the Year Award*" (1987)
First "*International Khawarzmi Award*" (Iran-1993)
First "*International TWNSO Award*" (Italy-1988)

Last but not the least, I was the first scientist at PINSTECH to do a hat-trick by winning the Pakistan 1st Prize in Physics for three consecutive years (1991, 1992, 1993).

Further to my scientific contribution in R&D capacity-building, I also helped to build capacities at PINSTECH in the positions of Science Director/Manager for about 6 years. I served initially as Associate Director and then as Director General PINSTECH, the premier research institute of Pakistan.

This is not a singular success-example of necessary capacity-building in science and technology. There are many, even more successful examples, not only in PAEC, but also in KRL, NESCOM, other S&T institutes and universities (particularly Quaid-e-Azam University) both at the individual and organizational levels, within Pakistan, and in other developing countries. However, the overall impact is not 'effective enough'. Our efforts seem to be somehow "sub critical" and we seem to be far away from the critical levels of capacity build-up, necessary for creating S&T infrastructure to be effectively helpful in the sustainable development of our countries. Unfortunately, most of the 'Capacity Build-ups' are themselves not sustainable. We certainly have some excellent individuals and centres of excellence, but it has been felt that we need to expand horizontally, simultaneous with the vertical progress. We need a comprehensive approach and, it is expected that, the present conference will help us in arriving at recommendations which will be effective and implementable. We must carefully choose our developmental needs and objectives. We must also plan detailed joint-ventures. Particularly, we have to carefully identify 'major problems' and 'key objectives'.

A few words about the foreign-aid and assistance; our experience shows that foreign-capital inflow is not always positive for capacity-building. One has to be careful before going for such an option. Moreover, these financial resources are not dependable. They go on changing with time, political scenario and geography (atmospheric conditions). We have to carefully study its positive and negative impacts. Our action-plan may be based upon (a) selection of strategic areas for immediate action, and (b) medium and long-term programmes.

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In the end, I would like to thank our distinguished Chief Guest, Mr. Parvez Butt, for taking out time to join us in this important event. I thank His Excellency Mr. A.D. Idris Waziri and respected Mr. Song Deheng for their presence at the inaugural session of this meeting. I thank you, ladies and gentlemen, for being part of the proceedings. I hope our learned speakers will discuss the topic of Science and Technology Capacity-Building for Sustainable Development in depth, and all of us will gain from their experience. I wish you an enlightening experience. I would also like to invite our member countries to actively participate in COMSATS' programs and benefit from this facilitating platform. Last but not the least, I take this opportunity to thank the team-members of COMSATS, Mr. Parvez Butt, the founding Executive Director of COMSATS, Dr. Junaid Zaidi, Dr. Hanif Zauq, Mr.

Tajammul Hussain, Mr. Bashir A. Chaudhry, Mr. Bashir A. Bhatti, Mr. Ahmad Munir Kabir and all the Senior Assistant and Assistant Directors, who I must say are the best collection of colleagues, a team leader could have. They have worked tirelessly for the betterment of this organization, and have nurtured it to the status that it enjoys today. I say this, for I may not be able to address in the same capacity in future; I say this with much appreciation. We have a competent team that has never let me down and have always rendered COMSATS and myself very proud. With particular reference to this Meeting, I would like to thank Assistant Director, Ms. Zainab Hussain Siddiqui, for her tireless efforts and extreme dedication in organizing this particular event.

Ladies and gentlemen, I sincerely wish COMSATS a hurdle-less journey towards prosperity from here onwards. Thank you once again.