## The Role of Science, Technology & Innovation (STI) in Solving Global Problems

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New cutting-edge science and technologies promise to have extraordinary impact on global problems, including climate change and its adverse impact on energy, food and water shortages; biodiversity and environmental degradation:

• Wireless information & communica tion technologies provide instant access to information anywhere at any time and are improving the well-being of communities in remote areas;

• Biotechnologies are having strong impact on agriculture, public health and the environment, transforming each of these in new and unexpected ways;

• Nanotechnologies (the most advancing technologies in the world today) are revolutionalizing material science by introducing new generation of materials with broad-ranging applications to critical problems.

• Space science and technology help us monitor environmental changes and devise effective responses to ecological problems, including assessing rates of deforestation and desertification.

My lecture will focus on the role of the above-mentioned frontier science and technologies in addressing some of the most critical problems facing humanity today; and in promoting science-based development for social and economic well-being, especially in the developing world.