

## Meeting the Challenges of the 21<sup>st</sup> Century

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During the long history of mankind, the planet of earth used to be an infinitely large place. But after the industrial revolution and especially during the twentieth century things have changed dramatically. World population increased from 1.5 billion to 6 billion and the earth has shrunk in relative terms. This sudden transition from “unlimited earth” to “limited earth” has extremely significant consequences, yet the development of human society, moving along the track of infinity for a long time, has not seemed to be able to adapt to the new reality that the earth is “limited.”

On the “limited earth,” perhaps the most important challenges for scientists are problems related to the use of energy and the impact on our living environment. The “developed” countries’ patterns of growth obviously are not the ideal models for “not yet overdeveloped” countries to emulate. We need to find a new, sustainable way of development for entire human society on earth, paying special attention to harmonizing the relationship between humankind and nature.

We should all recognize the fact that the increasingly interconnected world cannot be a safe place if a large portion of its population still suffers from poverty, diseases, illiteracy, unemployment, and other barriers to survival. Scientists can play key roles in finding the solutions to these problems. Especially, if we learn to solve problems together, learn to share knowledge, new technological options and the limited resources available, learn to respect and understand different cultural heritages, then it will be possible to realize the establishment of a genuine global village that enables sustainable development for all.

This is the first time in human history that all human beings on earth have been faced with learning to work together and live together as one family in a global village. Our future depends entirely on how effectively the entire world would function as a community. This is a necessary awakening – vital for the survival and sustainable development of mankind.