

**Common Responsibilities and Co-operation
for
Common Challenges and Common Future**

Prof. Dr. - Ing. Yongxiang Lu

Chinese Academy of Sciences

6th October 2009, Kyoto

Common Challenges and Common Future

- **We are living on the common unique Earth**
- **We face the common challenges:**
 - **Financial crises and global economic shrinkage**
 - **Energy and nature resources limitation**
 - **Air, soil, water, and hazardous waste pollution**
 - **Climate change and natural or human induced disasters**
 - **New epidemic diseases and healthcare**
 - **Hunger and food as well as water security**
 - **Aging of population**
- **We have to be secure against the traditional and nontraditional dangers.....**

Common Challenges and Common Future

- No issue can be responded and solved just by one country alone
- Globalization has built a strong interdependent linkage among us anyway

We are facing **Common challenges**

It's our **common responsibilities for close cooperation towards a common bright future**



Common Challenges and Common Future

- **Recovering from financial crisis and global economic shrinkage needs:**
 - **An improved finance monitoring and warning system**
 - **Promoting global economic restructuring**
 - **A new and essential driving force through S&T innovation**

Common Challenges and Common Future

- **To deal with energy shortage, environmental pollution and climate change, emphases should be put on:**
 - **promoting energy conservation**
 - **increasing system efficiency**
 - **accelerating renewable energy technology innovation**
 - **advancing nuclear power technology and other clean alternative energies**
 - **creating environmental friendly modes of production and living**
 - **promoting transition into a clean and sustainable energy system with a new energy mix**

Common Challenges and Common Future

- **creating efficient, lower emission, and green technology, low carbon industry, and green and recycling economy**
- **using renewable energy for seawater desalination, waste recycling, reproduction, and actualizing hydrogen energy for h-economy era**
- **integrated ET, ICT, BT, NT and GT for a new sustainable era with fair access to most of the people**

Common Challenges and Common Future

- To fight against hunger and provide secure food and water for the increasing global population, we need a new circle of agricultural revolution with green, efficient, high yield and good quality, based on progress of BT, ICT, GT and improvement of agricultural infrastructure



Common Challenges and Common Future

- **Prevention from traditional and nontraditional dangers and risks requests for building and upgrading the capacities of monitoring, warning and cracking down of bio-, chemic-, and nuclear terrors, internet- hackers, and natural and human induced disasters, calling for novel innovation of ICT, NT, BT, IET.....**

Common Challenges and Common Future

- **To prevent diseases and improve healthcare for the most people, particularly in the least developed countries and regions, we should**
 - **essentially improve ecology and environment, clean air, food safety and drinking water quality**
 - **advance and disseminate knowledge of health science, and improve common health care**
 - **extend medical and pharmaceutical technology and service with affordable cost**

Common Responsibilities and Co-operations

- **Co-operation on building up global capacity to assume a common responsibility for addressing global financial crisis, improving the international financial system, and fighting against protectionism in investment and trade**
- **Co-operation on building up global capacity to take a common, fair and differential responsibility to mitigate and adapt the global climate change based on the UNFCCC, Kyoto Protocol and Bali Road Map**
- **Co-operation on building up global capacity to prevent and fight against the new epidemic diseases such as HAV, HIV, SARS, Avian Flu, Type A Flu H1N1.....**

Common Responsibilities and Co-operations

- **Co-operation on building up global capacity to take on common responsibility for forecast, warning and mitigation of natural disasters such as tsunami, earthquake, and hurricane.**
- **Co-operation on building up global capacity with the shared responsibility for fighting against terrorism, religion ultraist, and separatism, and protecting nuclear security and preventing the risk of nuclear proliferation**

Common Responsibilities and Co-operations

- **In order to shoulder those responsibilities, we should work together closely on achieving the UN Millennium Development Goals**
- **Have common responsibilities for building up innovation and development capacity of all nations and regions, specially in the least developed countries**
- **ICT, renewable energy, as well as green and recyclable technologies could and should be shared by most of the people**

Common Responsibilities and Co-operations

- **Have to respect for new ethics and morality with free, fair, harmonious, and win-win co-operations**
- **Have to make common efforts in narrowing the gap in education, ICT, food and energy share, etc, between the developed and developing, rich and poor**
- **The developed countries should actively take more responsibilities to assist the developing countries to leapfrog through technology transfer and financial support, the developing countries should choose a rational, innovative and green pathway to developing their economy and society.**

**Thank You for
Your Attention!**