

## Asia and Bioeconomy: Growing Synergies

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I am glad to address this august gathering on UNESCO's involvement in Life Sciences Programme.

In the life sciences, UNESCO's efforts will focus on the development of institutional capacity and infrastructure by providing catalytic support to international centres, national institutions and UNESCO Chairs in the life sciences and biotechnologies.

UNESCO will continue its efforts in strengthening human capacities, with special emphasis on capacities for scientific research in molecular and cell biology and biotechnology, highlighting food security, poverty alleviation and awareness building in bio-safety issues, both within the research community and in the public domain. This will be achieved through support for specialized and high-level conferences like this event.

Strengthening of networking programmes (e.g. in collaboration with the Global Network of Molecular and Cell Biology (MCBN) and MIRCENs) at national, regional and international levels, as well as the development of new interdisciplinary projects will be used to foster capacity-building and

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sustainable development. UNESCO will contribute to the development and use of technology-enhanced information dissemination tools to improve scientific information dissemination and understanding of advances in life sciences, with a concomitant emphasis on further development and use of bioinformatics.

Biotechnology is an integral part of the knowledge-based economy and thus an important means of wealth creation. It is ushering a new model of economic activity (bio-economy) whereby new types of enterprises are created and old industries are revitalized. Its potential to spur economic growth and enhance industrial productivity is unprecedented. Biotechnology offers developing countries significant opportunities to address critical social, economic as well as specific industrial development problems.

Biotechnology cannot only reduce disease and food insecurity in developing countries, but also power the creation of employment and wealth. Biotechnology has a huge potential to contribute to socio-economic development of developing countries and those with economies in transition. The global and ever increasing problems of water and food security, the toll of the HIV/AIDS pandemic, newly emerging and re-emerging diseases on fragile economies, hamper national development and threaten global peace initiatives in the developing and least developed countries especially those with an agrarian based economy.

UNESCO's programmes in the life sciences aim at promoting international scientific co-operation in these fields, and bridging the scientific and technological differences existing between developed and developing countries. The major focus is the development of endogenous national and regional research capacities in the biological sciences and biotechnologies, for especially the developing countries.

Recently concluded Global Biotechnology Forum during March 2004 at Chile urged research institutions and UN organizations to advance agricultural and other areas of research into new technologies, including

biotechnology, and concluded that the introduction of such new tried and tested technologies should be accomplished in a safe manner, within appropriate regulatory frameworks, and adapted to local conditions to help improve agricultural productivity in developing countries.

The forum examined the role of biotechnology in the developing world and especially in meeting the needs of the poor and improving their quality of life, as well as its impacts on environment, trade, and public perception. A number of key issues affecting the development of biotechnology in the developing world were identified: inadequate scientific, technical and research capabilities, the absence of entrepreneurial skills and of public investment in this field, the presence of intellectual property barriers, different biosafety regulations and difficult market access.

The meeting opened a dialogue meant to develop proposals, initiatives and solutions for action, such as the establishment of a multi-stakeholder forum for informed dialogue on biotechnology and its benefits for the developing world, the creation of a network and database on biotechnology activities in developing countries and those with economies in transition, including global market and technology information for partnership facilitation, enhancement of capacity-building activities, and the assessment of intellectual property legislation on biotechnology.

The participants of the forum also emphasized creation of an information network and data base as to what biotechnology activities are currently in progress in the countries with economies in transition and developing countries, together with market information on a global basis to assess technology and market potentials for new initiatives, including to identify and facilitate partnerships. The present conference is being organized by RIS and IUCN with supports from UNESCO and Department of Biotechnology, Government of India as a stepping-stone to begin this exercise in this part of the world.

I would like to mention to this gathering that UNESCO is just started International Basic Sciences Programme (IBSP) a new inter-governmental

initiative under basic sciences to examine and facilitate the national/Regional/International collaboration in Basic Sciences. Also we are in the process of negotiation with Government of India in developing a dedicated regional centre for education and training in Biotechnology under Department of Biotechnology.