

Ambassador's remarks at the opening ceremony of the Micro-Symposium: Role of Biotechnology in the Post-2015 Development Agenda (13 Feb., 2015)

Honourable Director General, Ms. Irina Bokova,

Distinguished ADG for Sciences, Ms. Flavia Schlegel,

Distinguished Director of Division of Science Policy and Capacity-Building, Dr. Maciej Nalecz,

Distinguished Executive Director of the Regional Centre for Biotechnology, Dr. Dinaker Salunke,

Distinguished Delegates from Overseas & India,

Ladies and Gentlemen!

I warmly welcome you to this micro-symposium.

Thank you all for gathering here.

I wish to particularly thank you, Irina and Flavia, for all your cooperation and support for making this micro-symposium possible.

It is heartening to see the interest and enthusiasm with which we are all participating today to discuss how Biotechnology can help fulfil the global desire for sustainable development in the Post-2015 era.

I see in your presence a commitment towards mutual collaboration for strengthening the Cooperation in Sciences, more specifically Biotechnology, in pursuit of our shared goals.

I must also confess my delight at being here today. I see it as an opportunity to learn something about one of the most exciting and promising fields of the future from some of the best minds in the field, who are at the forefront of some truly groundbreaking developments.

The focus on Biotechnology allows us to concentrate on a field that holds significant potential for collaboration among countries for combating poverty by facilitating access to affordable and advanced technologies. I am confident that the distinguished speakers that we have today will enrich our understanding of the links between biotechnology and Sustainable Development and illuminate for us the various ways through which Biotechnology can get us closer to our goal of a Sustainable future.

As the home to the Category 2 UNESCO Regional Centre for Biotechnology (RCB), I am further hopeful that this symposium will prove a catalyst for forging and strengthening partnerships among RCB and the various countries, institutions and private enterprises that are represented here today. The Regional Centre for Biotechnology (RCB) seeks to address global developmental issues in health and agriculture by building regional capacities and conducting innovative research at the interface of multiple disciplines. We will have the privilege of hearing from Dr. Dinaker Salunke, the Executive Director of the RCB about

RCB's contributions to education, training, and innovation and how it is working on creating a link between research and biotechnology policies in the region, so I will not dwell on it further here. Suffice to say that, like me, were you to be impressed by RCB's activities, and should you seek to work with the RCB in its quest for region-centred research that serves the global developmental agenda, you will always find a partner in the Government of India and the Permanent Delegation of India to UNESCO.

Ladies and Gentlemen,

I stress the role of international cooperation because we have in the ongoing discussion on the Sustainable Development Goals (SDGs) the international community's most ambitious and concerted effort ever to resolve the world's greatest challenges and set the course for sustainable global development. Our efforts today will craft the future that will be our legacy to future generations.

The importance given to science in the SDGs is a recognition that if we are to bequeath a better world, we will need scientific research to help us create innovative solutions to the major challenges faced by us today. Post-2015 sustainable development has the potential to usher in a new developmental chapter for the planet. Our success will depend critically on how we can engineer global partnerships in science, technology and innovation in the service of an ambitious, long-term agenda to improve people's lives for future generations.

Today, the basic food, education and healthcare requirements of many people remain unsatisfied. These human enablers are so fundamental to individual, national and global development that their inadequacy – and their absence – deny people the opportunities to fulfill their potential and the world from realizing equitable and sustainable economic and social progress.

Biotechnology can play a strategic role in adding value to the economy and addressing the challenges facing the world today. Genetic and molecular breakthroughs are redrawing the future everyday as we push the boundaries of harnessing technology to eradicate poverty. These breakthroughs are creating new possibilities for improving health and nutrition, expanding knowledge, stimulating economic growth and empowerment. The wider world looks with anticipation towards biotechnology to help meet our future needs for food in the coming decades.

While all this may sound like a lot of lip service to Biotechnology, let me cite a figure related to 'Golden Rice' quoted by Dr. Pushpam Kumar of the Institute of Economic Growth, University of Delhi, which fascinatingly illustrates the wonders of Biotechnology. According to him, agricultural biotechnology as made available through the use of golden rice, could prevent 6,000 deaths every day (globally), and could therefore have an effect equivalent to preventing a tsunami every two months!

Ladies and Gentlemen,

Biotechnology also has a crucial link to equity. Agriculture, the foundation of many a country, including India's, holds the key to delivering inclusiveness in the economy. However, this inclusiveness will only be possible by enhancing productivity through science and technology. Biotechnology has the potential for improving crop productivity and nutritional quality, and improving resistance to biotic (insect pests and diseases) and abiotic stresses (drought and salinity). Biotechnology offers scientific techniques that optimize the use of available resources without placing additional demands on land or water to boost yields – which is just what the world needs.

This is fundamental to the poorest of the poor participating in development while ensuring food security for all of us. The famed Green Revolution of the 1960s, which saw the advent of hybrids, is responsible for bringing agricultural self-sufficiency and food security to great numbers of peoples at an unprecedented scale. Biotechnology, I truly believe, can usher in a second green revolution with unprecedented opportunities to ensure food security along with the economic well-being of the farmer!

The future challenge for agricultural researchers and farmers worldwide is developing and applying technology that can increase the global cereal yields by 50-75 percent, and to do so in ways that are economically and environmentally sustainable.

For Biotechnology to deliver on its promise, we will have to bring together the end-users i.e., farmers and, the knowledge creators, i.e., crop scientists. Our success will lie in ensuring that we develop mechanisms that allow dissemination of information to farmers on new breakthroughs in agricultural science so that they harvest the greatest benefits of Biotechnology. RCB and many of the national and international research organizations represented here today will find that in the Post-2015 world they are being asked to research on making these new technologies beneficial for the poor.

Beyond agriculture, the other well-known application of Biotechnology is in providing innovative solutions for global healthcare medicine. Biotechnology supports production of antibiotics, vaccines, bio pharmaceuticals and enzymes. India is already one of the world's leading manufacturers of generic drugs and vaccines at the lowest cost. A "made in India" vaccine immunizes a third of the world's children just as one in three generic drugs is of Indian origin.

Another promising area is new-age diagnostics based on genetic, protein as well as metabolite-based bio-markers. Biometrics is another enormous opportunity where DNA techniques can far outweigh the benefits of retinal and fingerprinting technologies of today.

However, as you are aware, just like any other new technology, biotechnology is not free of challenges. In particular, agricultural biotechnology faces new issues related to biosafety regulations and consumer acceptance. It gives me great pride to say that India was one of the first Asian countries to invest in agricultural biotechnology research and to set up a biosafety system to regulate the approval of genetically modified (GM) crops.

Our experience with RCB has also underscored for us the importance of human resource development for facilitating technology transfer and adoption. We realise that there is a need to strengthen and enhance regional and subregional capacities. Publicly funded research is an important complement and balance to private sector research, providing a space for the training of new generations of scientists, both for private and public sector research institutions. We thus see the RCB as a breeding ground for regional innovation through the development of biotechnology platforms.

Ladies and Gentlemen,

I am certain that the discussions today will provide a better understanding of the various issues linked to the role of Biotechnology, lay out the various aspects in an open-minded setting and offer possible ways and means of addressing the associated challenges .

But, most of all, it is my hope that your discussions today will assist us in optimally harnessing the exciting potential of Biotechnology for the service of mankind, for generations both present and future.

Thank you.