BioSpectrum the business of Bio & Health Sciences

India is the Silicon Valley of the East: Dr Kiran Mazumdar

03 February 2016 | News | By BioSpectrum Bureau

India is the Silicon Valley of the East: Dr Kiran Mazumdar

Bangalore hosted its first-day of the most anticipated three-day investors' event, Invest Karnataka 2016, a global meeting platform aimed at bringing biggest business minds and investors together to accelerate development through technology, innovation, inclusivity and sustainability.

In one of the parallel sessions on Biotechnology sector, Dr Kiran Mazumdar, CMD, Biocon, delivered a presentation talking about India as a global innovation hub for the Biotech industry.

She spoke about the exclusivity of Karnataka in the Biotech sector. "When I started Biocon, there were very few people who backed it up. It is not only Karnataka's rich human capital, but it has also created a very unique model - for every other State and other parts of the world - a close partnership between the industry, academia and the Government."

She pointed that Biotech is an innovative sector which needs risk-takers.

"Bangalore can boast itself as the Science and start-up capital because the city is full of first-generation entrepreneurs, which means you have plenty of risk-takers and this is enabling Bangalore to be the start-up capital of the country, not just in the IT sector, but also in Biotech. Innovation in Biotech starts with risk-taking. We need to ensure that innovation is unique, differentiating and path-breaking. This is what we expect start-ups to do, and we have large number of start-ups licensing their proprietary technologies to MNCs at premium values," she said.

In India, 50% of all the Biotech companies are located in Karnataka, which has 19,000+ highly-qualified professionals, with 1000-plus R&D centers, and the State's Biotech sector contributing 30% of the national revenues.

She took the audience through various eras of Indian Biotech in the last 4 decades.

"The 80's was an era of enzymes followed by the vintage era of vaccines in the 90's. We produce largest number of vaccines in the world making India the 'Vaccine Capital' of the world. The year 2000 was the age of Internet belonging to genomics. The 2010's was the birth of biologics and biotech drugs, transforming the way diseases are treated. Low-cost and rich talent pool enabled India to develop world-class biologics addressing affordability and accessibility," she noted.

Dr Kiran also laid emphasis on skill development, expertise and excellence.

"When it comes to leadership, it's about building skills, expertise and excellence. You have to invest in building skills and scale. Companies started investing very heavily in building expertise. Many companies are setting up or outsourcing research

services. This is a bigger investment opportunity," she stated.

She voiced that Biotech is the new growth engine for the Indian economy. "Indian Biotech has recorded 20% CAGR in the last 10 years. The country has an ambition to realize Biotech revenues of $100 billion by 2025, which I think is achievable by enabling policies and regulations which will help build skills whether it is Biopharma, BioIT or enzymes," she commented.

India is ranked 12th in the Biotech sector globally, and 3rd in APAC after China and Korea.

She justified what makes India an innovation hub. "Low-cost of development, large network of academic institutions, availability of scientific and engineering talent, large pool of drug-naÃ¯ve patients, genetic diversity of patient population enable different opportunities and have different strategies around clinical development," she said.

She also said that India can serve as an attractive manufacturing destination.

The Indian Government aims to spend $3.7 billion on Biotech between 2012-17, and the country has the 4th largest area under GM crops. India is also credited with having the 2nd highest number of USFDA-approved plants after the US, with manpower costs and the cost of manufacturing less than half compared to the West.

Dr Kiran added that India's start-up ecosystem will depend on innovations coming out academic labs. "Institutions will rely on licensing incomes and royalties. Entrepreneurs should do their proof-of-concept and pre-clinical commercialization phase and add value to the innovation. The industry later should come up and commercialize products, enabling funding of the academic institutes and entrepreneurs by paying royalties," she observed.

Karnataka was the first State in the country to introduce the Biotech Policy in 2001.

"We have sound infrastructure and largest Biotech clusters in India, and sector-specific SEZs focusing on Biotech. We also have a comprehensive Biotech Policy and the Biotech Vision Group, with representations from the Government, industry and the academia," she remarked.

She said that Bangalore is the Silicon Valley of the East. "In Biopharma there are huge opportunities for India, investors and organizations. We believe biosimilars market will touch $10 billion by 2020. Developing new drugs in India in Biotech is a $50 billion market, and the CRAMS a $40 billion market in the next four years. India has the potential to be the innovation hub for biosimilars and biologics. Global life sciences companies are looking at India as a CMO destination for many biologics, since India is a large and growing market for biologics," she concluded, quoting a Nobel Prize winner.

'Innovation consists of seeing what everybody has seen and thinking what nobody has thought.' - Dr Albert Szent-Gyorgyi