





ASEM Session on "Cooperation between Asia & Europe in Life Sciences, Pharmaceuticals, Biotechnology & Medical Devices Sector" November 20, 2014, Delhi-NCR, India

The ASEM Session on "Cooperation between Asia & Europe in Life Sciences, Pharmaceuticals, Biotechnology & Medical Devices Sector" was organised by the Confederation of Indian Industry (CII) in partnership with the Ministry of External Affairs, Department of Science and Technology (DST) and the Global Innovation & Technology Alliance (GITA) as part of Knowledgexpo-2014 on 20 November 2014 in Greater Noida, Delhi-NCR, India.

The Session was attended by over 50 senior executives from government organizations and leading Pharmaceutical Companies from India & ASEM countries. Indian participants included renowned R&D institutions, knowledge—intensive industry, entrepreneurs and service providers from medical sector. The foreign participants included Research Council of Norway, Ministry of Trade, Industry and Fisheries of Norway, Ministry of Education, Science & Sport of Slovenia, Ministry of Education, Culture, Sports, Science and Technology (MEXT) of Japan, National Institute of Advanced Industrial Science and Technology (AIST) of Japan, Centre for Industrial Technological Development of Spain, Innovate UK and Delegates from Royal Thai Embassy, Bangladesh High Commission, Indonesian Embassy and the Delegation of the European Union to India.

1.0. Objective of ASEM Session

ASEM countries have achieved significant technological capabilities in various areas and can benefit immensely from complementarities, synergies and cooperation at the multilateral level. In view of this, the main objective of the ASEM Session was to strengthen Science, Technology and Innovation (STI) led cooperation amongst ASEM member countries and to identify the technologies that can be targeted for joint industrial R&D and pilot demonstration projects under priority areas such as Life Sciences, Pharmaceuticals, Biotechnology & Medical devices.

2.0. **Session Summary**

- 2.1 The overall programme of ASEM Session consisted of an Opening Session followed by panel discussion on industry oriented R&D in the Second Session.
 - (i) Mr Venkatesh Valluri, Chairman, CII National Committee on Technology, moderated the Opening Session. In his opening remarks, Mr Valluri mentioned that healthy population is very important for the economic growth of a country.

With rising cancer, diabetes and cardio-vascular diseases among the population of India and other ASEM countries, special focus is needed for providing affordable drugs and healthcare to people. In this endeavour, collaboration amongst ASEM countries can provide low cost pharma and healthcare to the mass populace of ASEM as well as other countries of the world.

(ii) Mr Anil Wadhwa, Secretary (East), Ministry of External Affairs, Government of India in his Welcome Address, highlighted that Research & Development and innovation can play a pivotal role in developing drugs, vaccines and diagnostic systems for vast populace and providing improved access to medical information and medical devices.

Mr Wadhwa stated that the objective of the Session was to strengthen Science, Technology and Innovation (STI) led cooperation and industrial R&D in the health care sector. He mentioned that India is amongst the top five emerging pharmaceutical markets, with its pharma industry growing at the CAGR of about 15% during last 5-6 years which is expected to reach US\$ 55 billion by 2020. Its generic active pharmaceutical ingredient merchant market is expected to be the third largest in the world by 2016 with a 7.2% global market share and US\$ 26.1 billion market value.

Mr Wadhwa opined that biotechnology, vaccines, bioremediation, bioenergy & biofuel, stem cell, transgenic breeding, affordable diagnostic devices are new potential areas for collaboration between Asia and Europe. Elaborating on the India's policy initiatives, he highlighted that the Government of India has set a goal to double India's investment in R&D to 2% of GDP from its current level of 1%. Government of India is identifying opportunities for inclusive growth and innovation under important policy initiatives like Science, Technology and Innovation (STI) Policy 2013, the National Manufacturing Policy (NMP) 2011 and "Make in India".

(iii) Dr Kisimoto Yasuo, Senior Deputy Director-General, Ministry of Education, Culture, Sports, Science and Technology (MEXT), Japan, stated that "Japan looks forward to seeing a higher degree, closer and richer relationship with India." This is manifested by the Tokyo Declaration 2014 for India — Japan Special Strategic and Global Partnership where the two Prime Ministers decided to increase cooperation, in particular, in the cutting-edge fields such as life sciences including stem cell research, material science, cognitive science, applied mathematics, computing and information science, ocean technology and ocean observations, clean and renewable energy, water technology, climate change science and outer space. He reiterated that Japan aims to expand its reach and collaboration with Asia under its Vision 2020 through various programs including Research in/with Japan and Japan-Asia Youth Exchange Program in Science, etc.

- (iv) Mr. Peter Macek, State Secretary, Ministry of Education, Science and Sports, Slovenia shared that the Government of Slovenia is promoting 'Green Slovenia' with an open, inclusive, innovative ecosystem. He stated that Slovenia is looking out for opportunities to collaborate and strengthen relations with India in the field of green technology and innovation.
- (v) Mr Fridtjof Fossum Unander, Executive Director, Research Council of Norway, stated that India and Norway have signed over 185 projects for collaboration in various fields of science and technology. India is among the key countries, with which Norway looks forward to collaboration in S&T. Key areas highlighted by Mr Unander in which Norway and India can collaborate include Biotechnology, Energy, Food, Climate Change, Marine and Freshwater biology, Nanotechnology and Fisheries.
- (vi) Mr. Sabyasachi Dasmohapatra, CEO of Global Innovation & Technology Alliance (GITA) made a presentation on the role of GITA and proposed mechanism for collaboration between Asia and Europe in industrial R&D.

Mr Dasmohapatra explained the modalities of the DST-assigned bilateral industrial R&D programmes implemented by GITA. Under such programmes, an innovator or industry needs to invest merely 25% of the total project cost. For example, out of the 50% Indian component of the project cost, Indian industry could invest 25% and balance 25% (with a cap of Rs. 1.5 crores per project) can be funded by DST/GITA. Similarly, 50% cost of the partner country is borne by industry (25%) and the Government (25%) of the partner country. Mr Dasmohapatra highlighted that GITA welcomes proposals which are innovative in sectors like health care, energy, ICT, Nano-technology and Biotechnology.

- (vii) Mr P Somrajan, Executive Consultant, Business Development, Foundation for Innovation & Technology Transfer (FITT) and Dr Arun Maseeh, Vice President Medical Services, Cadila Pharmaceuticals, also highlighted the potential of collaboration between India and other ASEM countries in the above areas.
- 2.2 In his opening remarks at the Second Session, Mr S K Varshney from the Department of Science & Technology stressed that amongst many societal challenges, access to health & food is a key challenge and to overcome this, DST is supporting research in this area.
 - (i) Ms Nalini Vemuri, Vice President R & D, Life Care Innovations (P) Ltd gave a presentation on the DST/GITA funded project 'Fungisone' under the India-UK Collaborative Industrial Research & Development Programme.
 - (ii) During the panel discussion, moderated by Dr Renu Swarup, Advisor, Department of Biotechnology & Managing Director, Biotechnology Industry Research Assistance Council (BIRAC), Government of India, it was stressed

that the end result of cooperation among ASEM countries should be affordable drugs and medical facilities for all. India is well positioned in the field of pharmaceuticals; however, India could leverage the strengths and complementarities with International partners for mutual benefit. New vaccine development, stem cell research and enhancing capabilities are some of the areas in which further collaboration will be useful from the Indian point of view.

- (iii) In his remarks Dr Chander Shekhar, Head, Innovation and Translational Research Division Indian Council of Medical Research (ICMR) said that ICMR is one of the oldest research organisations and the focus of ICMR is moving from the creation of knowledge to the application of knowledge. He invited the industry to come forward as ICMR's partner in making healthcare affordable.
- (iv) Mr Matjaz Peterka, CEO, Centre of Excellence for Biosensors, Instrument & Process Control, Slovenia appreciated that the training programme organised by their Centre in India in collaboration with the Vellore Institute of Technology was well received. He also stressed that training is a very important area by which capabilities can be built and leveraged to the advantage of ASEM countries.
- (v) Dr Noboru Yumoto, Vice President, National Institute of Advanced Industrial Science and Technology (AIST), Japan, in his presentation, explained about the Department of Biotechnology (DBT)-AIST International Laboratory for Advanced Biomedicine (DAILAB), India-Japan collaboration which promotes multidisciplinary research among a host of other things. The role of AIST is to create knowledge to solve the 21st century issues by developing innovative technologies. He also stressed on the need for more collaboration in this area.

3.0. Conclusion

The Session concluded with the remarks from the panel that the participation of distinguished delegates from various ASEM countries in such a Session is a testimony that scientists and organisations in ASEM countries are interested to strengthen the cooperation. The coming years are the years of collaboration. This sector holds tremendous scope and promise. The panelists also highlighted that the industry in ASEM countries is keen to pursue R&D collaboration which will open new vistas of opportunities for cooperation between Asia & Europe in Life Sciences, Pharmaceuticals, Biotechnology & Medical Devices Sector.
