CHINA SCIENCE AND TECHNOLOGY NEWSLETTER

Department of International Cooperation
Ministry of Science and Technology(MOST), P.R.China

No.19
October 15 2016

Belt and Road Initiative and International Science & Technology Cooperation

- **Talks about Belt and Road Initiative and International Science & Technology Cooperation**

Talks about Belt and Road Initiative and International Science & Technology Cooperation

The push to build the "Silk Road Economic Belt" and the "21st-Century Maritime Silk Road" (the "Belt and Road") is of great significance to China's all-around opening-up and the world's peaceful development. As an important part of the Belt and Road Initiative, cooperation in science, technology and innovation guides broader international cooperation.In order to build consensus among the initiative's participants, organizers of the Pujiang Innovation Forum 2016 held the first symposium dedicated to S&T innovation cooperation under the Belt and Road Initiative.

Yin Hejun, Vice Minister of Science and Technology from China, and J.Batsuuri, Minister of Education, Culture, Science and Sports from Mongolia, delivered keynote speeches at the meeting. More than 80 representatives were present, and eight Chinese and foreign officials, experts from universities, research institutes, think tanks and technology transfer institutions spoke at the meeting. Attached are some excerpts of the speakers.

1. Yin Hejun, Vice Minister of Science and Technology of China

Advancing the Belt and RoadInitiative is a pivotal step for China to open to the outside world in the new century. At a recent symposium, Xi Jinping stressed the importance of policy coordination, facilities connectivity, unimpeded trade, financial integration, people-to-people bonds as well as the establishment of a sprawling network

Monthly-Editorial Board:54,Sanlihe Road Beijing 10045,china
Contact: Liu Bin E-mail:liub@cstec.org.cn nis@cstec.org.cn http://www.cistc.gov.cn

of mutual cooperation and multilateral cooperation platform in advancing the Belt and Road Initiative and giving tangible benefits to the people along the Belt and Road.

In the wake of an evident trend of global participation in S&T innovation, China is also shifting its resource-driven growth model to one that is driven more by innovation. China is now the world's second largest economy, largest exporter and third largest outbound investor. R&D spending has been on a rapid rise in recent years. China's R&D spending hit RMB 1.4 trillion in 2015, the second highest in the world, accounting for 2.1% of GDP, and 77% of the R&D expenditure came from the business sector.

S&T innovation is playing a positive role in developing the Belt and Road Initiative and has produced good results. China has established partnership with 158 countries and regions, signed 110 intergovernmental agreements and joined more than 200 intergovernmental S&T organizations. China has signed intergovernmental S&T cooperation agreements with 49 countries along the Belt and Road, and launched a series of S&T partnership programs with ASEAN, South Asia and Arab countries.

In the meantime, the advancement on the initiative requires deeper S&T innovation cooperation. China and countries along the Belt and Road share many similarities in development conditions and demands, and face common challenges in such areas as population, healthcare and security. That means we must strengthen collaborative research to jointly break bottlenecks encountered, share our S&T expertise and experience in innovation-driven development to switch to innovation-driven growth model and seek common prosperity and sustainable development.

Recently China's Ministry of Science and Technology, National Development and Reform Commission, Ministry of Foreign Affairs and Ministry of Commerce jointly released the Special Plan to Advance S&T Innovation Cooperation under the Belt and Road Initiative, and rolled out a string of favorable measures to encourage such cooperation. To dovetail with demands from the Belt and Road countries, China will strengthen policy coordination, increase mutual understanding and trust among the S&T communities, join hands with these countries to build laboratories, research centers, technology transfer centers, advanced bases for technology application and promotion, and help them upgrade their infrastructure and innovation capacity to create win-win outcomes.

2. J. Batsuuri, Minister of Education, Culture, Science and Sports, Mongolia

China has long been an important partner to Mongolia. The two countries have made joint efforts to cultivate the bilateral partnership.

In June 2016 China, Mongolia and Russia signed an MOU to build economic corridor along the three countries, and agreed to launch 32 key projects related to infrastructure inter-connectivity, industry cooperation, port modernization, energy cooperation, customs, inspection & quarantine, environmental protection, S&T and education, people-to-people exchange, agricultural cooperation, and healthcare. This is an important preliminary achievement of the Belt and RoadInitiative, and is of great significance for China and Mongolia to integrate their development strategies and deepen cooperation in various fields.

China is an important partner to Mongolia in the field of S&T innovation, and has provided a lot of assistance to help Mongolia improve its S&T strength and innovation capabilities. In 2011 the two countries signed an agreement to carry out S&T cooperation, and the agreement further strengthened their S&T partnership.

Looking ahead, a lasting and steady S&T partnership is critical to advance bilateral relations.

The two countries should further advance cooperation to industrialize S&T innovations, build joint laboratories and technology incubators to expedite S&T industrialization.

The Mongolian Ministry of Education, Culture, Science and Sports will also strengthen communication with the Chinese Ministry of Science and Technology and deepen S&T exchange and cooperation.

3. Dr. Jay Narayan Shah, Former President of Patan Academy of Health Sciences, Nepal

In delivering the Belt and Road Initiative, the Chinese government has displayed its respect for other countries in their pursuit of international cooperation to promote their own development. China will neither try to interfere

in other countries' internal affairs nor seek to bolster its influence or control, and that's a valuable principle in international cooperation.

Survival and development is a permanent goal for every country. We have different national conditions from the U.S. and European countries, so we cannot blindly follow their development path. Iran, Afghanistan and Syria have been ravaged by many years of instability, and that's the last thing I want to see in my country. The Belt and RoadInitiative has a clear plan, i.e., connecting West Asia, Central Asia, the Middle East and Europe and integrating their resources to seek peaceful development.

China and Nepal have carried out successful collaboration in building infrastructure facilities. As the Belt and Road Initiative moves forward, Nepal, an inland nation, stands to become a big beneficiary from the inter-connectivity of infrastructure and unimpeded trade. Nepal boasts abundant natural resources. We welcome Chinese companies to explore the resources and bring benefits to our country and our people.

We should push to implement the S&T collaboration and do something in the field of education. I hope cooperation in S&T and education can be expanded and materialized under the Belt and Road Initiative framework to achieve common prosperity and development.

4. Reinforce global innovation governance

Chen Baoming, Director of Institute of Comprehensive Development, Chinese Academy of Science and Technology for Development

Innovation governance has become an important part of global governance. On the one hand, innovation elements are moving quickly across the world, innovation ecosystems are increasingly interconnected and interrelated, and human resources, intellectual property and technology transfer have gradually become key topics of economic globalization. On the other hand, innovation has been increasingly polarized. Innovation governance encompasses not only S&T cooperation and innovation in the field of trade, investment and financial service, but also innovation resources, movement of innovation elements as well as S&T assistance to developing countries.

China should take the Belt and RoadInitiative as a starting point of its push to build a new framework of global innovation governance. In the near future China should focus its efforts on intensifying people-to-people exchange and increasing mutual trust in S&T cooperation. In the medium term it ought to strive to improve innovation environment and develop a network of cooperative innovation. In the long term it is positioned to develop a reciprocal, regional framework of collaborative innovation and build an "innovative community" along the Belt and Road.

5. Maximilian Mayer, Research Professor, German Studies Center, Tongji University

Spanning across a vast region of five billion people, the Belt and Road Initiative involves wide-ranging cooperation in science & technology, people-to-people exchange and inter-governmental dialogue rather than just in one specific field.

On a macro perspective, the Belt and Road Initiative conceives a new outlook and vision, maximizing the spirit of open collaboration to include multi-level development.

Countries in the Asia Pacific region can connect and share with each other's transport, energy and healthcare systems, and figure out new cooperation mechanisms and policies to seek sustainable development. For instance, they can work together to deal with climate change, achieve visions and objectives, bring sustainable benefits to the offspring and leverage innovation and technology to make a better life for their peoples.

In the recent decades European and Asian nations have made tremendous efforts to explore different economic and business models. However, there has been a lack of a unanimously acceptable discourse system and integration system. Different countries are adopting different cultures and different ideas to address their problems, and that could be a big hurdle to regional integration and interconnection. The Belt and RoadInitiative aims to bring different stakeholders into the same platform. It tolerates diversity and difference, strives to increase mutual trust, seeks coexistence and common prosperity, and gets the participating countries to accept and support each other.

In addition, Maximilian Mayer called for governments to set up research funds and promote universities to engage in interdisciplinary collaboration to push for

economic transformation.

6. Liu Weidong, Director of Belt and Road Research Center, Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences

The Belt and Road initiative has got off to a good start with three latest developments. China, Mongolia and Russia signed an agreement to build an economic corridor, the largest transport infrastructure under the China-Pakistan economic corridor has been launched, and China-Thailand railway project is about to kick off at the end of the year.

It is necessary to build international consensus about the Belt and Road initiative. Firstly, the initiative is not trying to rebuild existing international trade routes. Rather, it aims to build a platform for inclusive development. Secondly, it is not a project sponsored by the Chinese government; it is proposed by China and welcomes engagement of worldwide businesses, investors and other non-governmental sectors. Thirdly, it is an open roadmap and a great vision that aims to share the benefits of economic development with countries along the Belt and Road.

Inclusive globalization should be a core concept under the Belt and Road initiative. The Silk Road is more than a story about China or a spatial fixed route; it is a historical and cultural heritage shared by all countries along the road and it has implications of peace, friendship, communication and prosperity.

7. Rungroge Kamondetdacha, Division Chief of Industry 4.0, National Science, Technology and Innovation Policy Office, Thailand

Thailand's "Industry 4.0" blueprint and economic innovation is the best basis to carry out cooperation with China under the Belt and Road framework. Industry 4.0 is indispensable for Thailand's sustainable development. Industry 1.0 largely focused on the agricultural sector; Industry 2.0 aimed to bolster light industrial sectors and imports based on cheap labor; Industry 3.0 put much emphasis on heavy industries, exports and direct investment. We hope Industry 4.0 will play a big role in advancing our country's comprehensive development. We set three objectives for Industry 4.0 – to further strengthen Thailand's technological innovation, expedite economic inclusiveness, and realize sustainable development.

Thailand's Industry 4.0 is themed on science, technology, innovation and industrialization. We believe that business growth, technological advances and industrialization will enable new technologies like biotechnology, embedded technology and smart and innovative technology to drive economic growth.

The eastern innovation corridor of Thailand is well-developed industrially. The government has been fully aware of the region's enormous development potential. In order to attract investment into infrastructure facilities and advance the industrialization process, the Thai government worked out a development plan for the eastern innovation corridor. The government hopes to leverage collaborative innovation to introduce existing technologies to the eastern region and inject fresh momentum to fuel regional economic growth.

Thailand hopes to transform the eastern region into an innovation hub and build an ecosystem to expedite close cooperation among research institutions, governments and universities, and makes due contribution to the Belt and Road initiative.

8. Encourage countries to jointly innovate

Somsy Gnophanxay, Acting President of National University of Laos

During the past decades, new technologies have come a long way at a fast rate. Technology advances in such areas as cloud computing, big data, robots and new materials has brought a lot of benefits to the human society, and all of this could not have happened without global cooperation.

Laos is a developing country with its R&D spending accounting for only 1% of its GDP. As a result, its innovation capacity and technological strength lag far behind its neighbors. Nevertheless, the government and the National University of Laos are stepping up R&D efforts and encouraging innovation and entrepreneurship.

Not long ago the Lao government set up the Ministry of Science and Technology to draw up S&T development plans, rules and regulations and founded a separate department to deal with intellectual property issues. Every ministry has established research units, such

as the Asia Research Center and the China Research Center. At the National University of Laos, academic research is its second most important obligation. In addition to research in specific fields, the university also launches interdisciplinary research programs to promote technological innovation. The National Chamber of Commerce provides grants to some entrepreneurs every year. The University of Laos will hold the first ASEAN Innovation Conference to facilitate communication between scientists, researchers and entrepreneurs.

Generally speaking, Laos has made substantial progress in building S&T infrastructure and improving the innovation environment. Government officials, researchers and business people have become more aware of the importance of R&D and innovation. Now the country hopes to organize more fora and seminars to deepen innovation cooperation with other countries.

9. Promote technology transfer between China and South Asia

Ma Minxiang, General Director of China-South Asia Technology Transfer Center Technology transfer is an important part of the S&T innovation cooperation under the Belt and Road initiative. In June 2014 China-South Asia Technology Transfer Center was inaugurated in Kunming, marking a milestone for China-South Asia cooperation. The center was sponsored by China's Ministry of Science and Technology and the Yunnan Provincial Government and jointly built by relevant countries. In September 2014 the Center built a collaborative network and platform to facilitate technology transfer.

The Center has set up branches in six countries, including Pakistan, Bangladesh and Nepal. The Center organized a series of activities like technology fairs, science park visits and technology transfer training sessions, released the latest technology transfer information and provided policy consultation. These activities and services have been welcomed by South Asian countries.

The Center has fully utilized China's abundant S&T resources to promote technology transfer with South Asian countries and establish demonstration bases and technology parks to drive their economic growth, as well as social and cultural development.

10. Make joint commitment to drive innovation at international high-tech parks

Wang Delu, Director of Beijing Great Wall Enterprise Institute for Strategic Studies For China and some developing countries, innovation is driven more by entrepreneurship than by R&D. S&T resources are congregated at high-tech parks to create a sound ecosystem for entrepreneurship and innovation - that's a piece of valuable experience behind the success of China's high-tech parks.

Many high-tech parks in China started from zero to technology hubs worth hundreds of billions of or even trillions of RMB yuan. Innovation and entrepreneurship prove to be the most powerful driving force behind such successes. We can share the experience of running high-tech parks through international cooperation and explore innovative growth models. Mongolia and Indonesia have set ambitious goals to build 100 high-tech parks, while India hopes to develop a number of smart cities. Developing high-tech parks is a focus of various countries' attention.

During the development of their own high-tech parks, countries along the Belt and Road can learn from China's experience and work together with China's science parks to make their own success stories.

(Source: Science and Technology Daily,
September 26th, 2016)