

{No.6 Vol. 141}

**Shanghai Center for Pujiang Innovation Forum**

**June.16 2021**

---

**2021 Pujiang Innovation Forum Bulletin VI**

**BRI Innovation Cooperation on Green Development, Health  
Innovation and Digital Development Issues**

**Editor’s Note:** In 2021 Pujiang Innovation Forum – The “Belt and Road” Seminar for Innovation Journey Construction, with the theme of “Green Development, Health Innovation and Digital Development”, the participating guests had discussions on topics including the innovative practices, common challenges, and the development path regarding the cooperation on science and technology innovation under the “Belt and Road” Initiative (BRI), and proposed a lot of important ideas as well as forward-looking and constructive suggestions. This bulletin is a summary based on the reports from the participating guests<sup>1</sup>, and is intended for reference.

---

<sup>1</sup> LIU Dongmei, Vice President of Chinese Academy of Science and Technology for Development; RUAN Xiangping, Inspector of Department of International Cooperation, MOST made a speech, and Mohammed AlHashmi, Chief Technology Officer, Expo 2020 Dubai; HUANG Renwei, Vice Dean of Institute of BRI and Global Governance, Fudan University; Branislav Djordjevic, President of Institute of International Politics and Economics, Belgrade, Serbia; TANG Zhimin, President of China-ASEAN Studies (Chinese Academy of Sciences); WEI Min, Professor at Chongqing University of Posts and Telecommunications and Director of National-level International S&T Cooperation Base for Industry IoT; Manzoor Hussain Soomro, President of ECO Science Foundation, Pakistan; QIN Wenbo, President of Shanghai Academy of Science & Technology; Kanchana Wanichkorn, Deputy Director of Office of National Higher Education, Science, Research and Innovation Policy Council; XU Qinhua, Vice President of Institute of National Development, Renmin University; Marcin Piatkowski, Senior Economist, World Bank Representative Office in China; and Bojan Lalic, Director of the “Belt and Road” Institute, University of Novi Sad, Serbia, delivered thematic reports.

## **2021 Pujiang Innovation Forum Bulletin VI**

### **BRI Innovation Cooperation on Green Development, Health Innovation and Digital Development Issues**

Starting from 2020, the global spread of the COVID-19 pandemic and the rapid changes in the world landscape have posed lots of challenges to the sustainable economic and social development of the “Belt and Road” countries, but also have reinforced the conviction of the “Belt and Road” countries to build a community of shared future for mankind together. **The participating guests expressed their determination to jointly build the “Belt and Road”, and agreed unanimously that the BRI cooperation on science and technology innovation has produced fruitful results as the communication is continuously intensified, and policy alignment is constantly strengthened. The cooperation on science and technology innovation may contribute more to the common challenges faced by and the sustainable development of the human society.**

#### **I. The BRI Cooperation on Science and Technology Innovation Has Produced Fruitful Results**

**Firstly, the BRI has entered Phase 2.0, in which the cooperation on science and technology innovation plays a crucial role. As proposed by HUANG Renwei, Vice Dean of Institute of BRI and Global Governance, Fudan University, the global capital chain,**

industry chain, and supply chain have shrunk in varying degrees due to the COVID-19 pandemic. As the BRI enters Phase 2.0, China's science and technology investment has become the key to grasping the new development opportunities brought by the BRI. For China, to combine science and technology with the BRI is a path towards the future development of the "Belt and Road", which is also a source of hope for the development of China and the world. China is currently investing in high-tech technologies such as the information technology in a continuous manner on the basis of the construction of infrastructures, the improved capabilities in outbound investment, the extension of industry chain, and the expansion of logistics and transportation to improve the capabilities to construct roads and ports long the "Belt and Road", and have achieved very good results.

**Secondly, China works diligently and assiduously to take the initiative in producing satisfactory results in the key fields of the BRI science and technology innovation.** According to **RUAN Xiangping, Inspector of Department of International Cooperation, MOST**, with years of joint efforts made by multiple parties, the BRI cooperation on science and technology innovation has become the core of and an important driver for the co-construction of the "Belt and Road". In recent years, the construction of the science and technology innovation community of the "Belt and Road" has been making steady progress, with remarkable results achieved in the cooperation between China and other "Belt and Road" countries concerning scientific research projects,

innovation platforms, the construction of the national technology transfer network, and S&T and cultural exchanges. Up to now, China has ensured S&T cooperation with 161 countries and regions, signed 114 intergovernmental agreements on S&T cooperation, 84 of which are signed with “Belt and Road” countries, laying a crucial institutional foundation for the BRI cooperation on science and technology innovation. The introduction by **QIN Wenbo, President of Shanghai Academy of Science & Technology** was about the science and technology innovation and practices of Shanghai against the backdrop of the “peak carbon dioxide emissions and carbon neutrality” strategy. Through the construction of a S&T innovation center with global influence and the development of green sci-tech finance, the two landmark practices, Shanghai is working hard to facilitate green and low-carbon development, striving to become a role model leading the green, low-carbon, safe, and sustainable development of international mega cities.

**Thirdly, different countries stick to discussions, co-construction and sharing, and facilitate the development of “Belt and Road” countries and regions through the cooperation on science and technology innovation.** As stressed by **Mohammed AlHashmi, Chief Technology Officer, Expo 2020 Dubai**, China plays an important role in the preparation of Expo 2020 Dubai. We have communication and cooperation on AI, robotics and other fields, and hope that the Expo can facilitate the deeper S&T cooperation between China and Dubai. According to **Manzoor Hussain Soomro, President of ECO Science**

**Foundation, Pakistan**, the BRI has offered great potential for the “Belt and Road” countries to usher in a new era of trade, economic and industrial growth. To take full advantage of the “Belt and Road”, the participating countries shall cultivate adequate technical labor, and forge an alliance to facilitate the cross-border cooperation on science and technology innovation (STI). **Branislav Djordjevic, President of Institute of International Politics and Economics, Belgrade, Serbia** recognized the cooperation between China and Serbia on digital transformation and AI, and appreciated China’s material and technical support during the pandemic. Through the comparative study on China and Thailand in poverty eradication, **TANG Zhimin, President of China-ASEAN Studies (Chinese Academy of Sciences)** found that science and technology innovation and digital technologies such as the blockchain and big data, as well as online delivery and e-commerce have provided the two countries with good solutions to targeted poverty alleviation.

## **II. Grasp the New Opportunities Offered by the BRI Cooperation on Science and Technology Innovation in Face of Challenges**

**Firstly, we shall center on the shared concerns and deepen the connotation of the BRI cooperation on science and technology innovation.** As suggested by **RUAN Xiangping, Inspector of Department of International Cooperation, MOST**, a new wave of

scientific and technological revolution and industrial transformation has been triggered. The common challenges we humans face such as the COVID-19 pandemic and climate change are increasingly complex and serious, and the cooperation on science and technology innovation in health, digitalization, greenness and the like is more urgently-needed than ever. To intensify the BRI cooperation on science and technology innovation will play an important role in addressing global challenges and realizing long-term sustainable development. According to **HUANG Renwei, Vice Dean of Institute of BRI and Global Governance, Fudan University**, to grasp the growth points brought by the “Belt and Road”, we shall combine science and technology with the “Belt and Road” and intensify the cooperation on science and technology innovation. Specifically, there are four directions to follow: firstly, integrate high technologies including the 5G technology into the construction of roads and ports, and transform the “Belt and Road” into a global Internet of Things, a new global communications system, and a new global industry network; secondly, apply a large amount of technologies in life sciences, medicine and public health to “Belt and Road” countries; thirdly, apply ecological and low-carbon technologies to the “Belt and Road” industry chain to facilitate the industrialization of the “Belt and Road” countries while realizing their low-carbon, green and industrial development; fourthly, form a mechanism for the BRI cooperation on science and technology innovation through the agreements on S&T cooperation, the cultivation of S&T talents, the construction of S&T experimental bases, the transfer and commercialization of scientific and technological

achievements and other means, to drive the development of “Belt and Road” countries.

**Secondly, we shall construct the Digital Silk Road in an innovative way.** Multiple speakers proposed that as the BRI cooperation is further facilitated, digitalization has emerged as a new direction. As suggested by **WEI Min, Professor at Chongqing University of Posts and Telecommunications, and Director of National-level International S&T Cooperation Base for Industry IoT**, China and other building countries of the “Belt and Road” have realized that to gather relevant digital innovation resources and realize effective allocation may improve a country’s innovation strength. In particular, against the COVID-19 pandemic, realizing connectivity through the construction of digital infrastructure and digital information may contribute to the economic recovery of various countries. According to **Branislav Djordjevic, President of Institute of International Politics and Economics, Belgrade, Serbia**, Serbia fully understands the importance of digitalization and its influence on economic development, takes the *Strategy of Digital Skills Development in the Republic of Serbia* taken as an opportunity to vigorously facilitate the building of an e-government, the digital skill education and science and technology parks, and cooperates with China on the strategic research into AI. **Bojan Lalic, Director of the “Belt and Road” Institute, University of Novi Sad, Serbia** offered a comprehensive description of the cooperation between China and Serbia on science and technology, economy, culture,

trade and other fields, and stressed the cooperation on the “AI Highway” strategy between the two countries and the S&T cooperation on emerging fields in the Serbian-Chinese Industrial Park.

**Thirdly, we shall construct the Healthy Silk Road in an innovative way.** In the opinion of the participating guests, the fight against the pandemic is currently the most urgent issue for countries to deal with. As proposed by **HUANG Renwei, Vice Dean of Institute of BRI and Global Governance, Fudan University**, to develop public health infrastructure is the priority of priorities for the “Belt and Road” countries. We shall not be entangled with western countries for vaccine issues, but shall vigorously develop technologies against the pandemic in partnership with the “Belt and Road” countries, which is the key. **Bojan Lalic, Director of the “Belt and Road” Institute, University of Novi Sad, Serbia** proposed to enable Serbia to make quick response to the pandemic through digital transformation and development, which played an important role in the national mobilization for vaccination. Serbia is currently the second in Europe in terms of immunization coverage, and also one of the first countries gaining the qualification for issuing vaccine passports.

**Fourthly, we shall construct the Green Silk Road in an innovative way.** Carbon reduction and sustainable development are two major global challenges we face together, requiring international cooperation. In the opinion of **XU Qinhua, Vice President of Institute**

**of National Development, Renmin University**, the “Belt and Road” is crucial to the achievement of the United Nations Sustainable Development Goals. China and the “Belt and Road” countries are facing the same difficulties in protecting the ecological environment while achieving their own goals of development and economic growth. The green development of the “Belt and Road” can help developing countries exit from their dependency on the traditional high-carbon development pattern. On the basis of research and analysis, XU suggested that China may play a crucial role in the construction of the Green Silk Road, which is mainly based on China’s science and technology innovation, especially the application of its green and sustainable achievements in science and technology innovation and its investment in the “Belt and Road” countries and regions in terms of science and technology innovation, green technologies and sustainable technologies. **Kanchana Wanichkorn, Deputy Director of Office of National Higher Education, Science, Research and Innovation Policy Council** proposed the Biological Condition Gradient (BCG) model, and introduced how to facilitate the inclusive economic development of Thailand with advanced technologies and raise the value of the industry chain with advanced technologies of high added value to facilitate industrial upgrading. Meanwhile, it is hoped that the cooperation on science and technology innovation may lead to the development of the circular economy, the reduction in industrial costs, the creation of new business opportunities, the increase in green positions, and the development of a low-carbon society.

### **III. Conduct Co-construction and Explore New Paths to the BRI Cooperation on Science and Technology Innovation**

**Firstly, we shall tell the stories of different countries and jointly develop the concept of innovation community.** As proposed by **RUAN Xiangping, Inspector of Department of International Cooperation, MOST**, we shall intensify the discussions and communication on how to strengthen the alignment of the “Belt and Road” policies and the integration of innovation elements, and facilitate the formation of a larger and higher-level open cooperation mechanism for science and technology innovation around “green development, health innovation and digital development” and other fields, so as to contribute the science and technology innovation strength of the “Belt and Road” to build a BRI science and technology innovation community and address the common challenges faced by mankind. In the opinion of **Manzoor Hussain Soomro, President of ECO Science Foundation, Pakistan**, China has become a global technical leader and is at a world-leading position in many emerging technologies. It is an imperative for the “Belt and Road” countries to foster closer cooperation with China. Therefore, the “Belt and Road” countries shall acquire expertise, best practices and new technologies through the “Belt and Road” platform to realize sustainable development. As pointed out by **QIN Wenbo, President of Shanghai Academy of Science & Technology**, China and the “Belt and Road” countries are at the crucial stage of industrialization and urbanization. To realize the continuous and dramatic decline in carbon intensity, we shall

uphold the new development concept of innovation, coordination, greenness, openness and sharing.

**Secondly, we shall share the experience of different countries for mutual benefit and win-win results.** As suggested by **Marcin Piatkowski, Senior Economist, World Bank Representative Office in China**, China has made remarkable progress on improving the business environment, and thus become a development model for other countries in the world including the “Belt and Road” countries. In terms of innovation, China is the second largest R&D investment power following America. It is necessary to boost the efficiency of R&D investment and innovation, and gain cooperation with the “Belt and Road” countries through cooperative studies, R&D and various activities. **Kanchana Wanichkorn, Deputy Director of Office of National Higher Education, Science, Research and Innovation Policy Council** proposed some measures to implement in the development pattern of an ecological, circular and green economy for the facilitation of the BRI innovation cooperation: firstly, hold the Policy Forum on ecological, circular, and green economy; secondly, predict ecological, recycling, and green technologies and analyze their commercial prospects; thirdly, build new platforms for circular economy design and business innovation. **Bojan Lalic, Director of the “Belt and Road” Institute, University of Novi Sad, Serbia** stressed that Serbia has strategic geographical advantage and is the coordination center for infrastructure construction under the China-Central and Eastern Europe cooperation mechanism, playing a

crucial role in the future development of the China-Central and Eastern Europe cooperation mechanism and the “Belt and Road” mechanism. Serbia aims to become the Shenzhen Special Economic Zone in Europe, and hopes the bilateral cooperation between China and Serbia may offer a pattern model for the BRI cooperation.

**Thirdly, we shall seek the wisdom of different countries to address the common challenges.** Facing digital transformation, **WEI Min, Professor at Chongqing University of Posts and Telecommunications, and Director of National-level International S&T Cooperation Base for Industry IoT** proposed three directions for the BRI cooperation on digital innovation: firstly, utilize digital education and innovation, i.e., further integrate the digital concept into talent cultivation through education and pass on technologies through digital education; secondly, create a standard digital ecosystem through the projects on digital innovation, digitalization, cyberization and intelligentization, and proactively develop standards for digital technologies and digital transformation; thirdly, promote the demonstration application of digital innovation to facilitate the work on BRI digital innovation from sites to regions. As suggested by **Marcin Piatkowski, Senior Economist, World Bank Representative Office in China**, China can be a global leader in green development. China and the “Belt and Road” countries shall accelerate the innovation in and the development of green technologies, and it is hoped that China can take the lead in adopting global standards, be a global leader in green

industrial park, and show its achievements to the whole world. **QIN Wenbo, President of Shanghai Academy of Science & Technology** shared Shanghai's considerations and suggestions on the continuous intensification of science and technology innovation under the "peak carbon dioxide emissions and carbon neutrality" strategy: firstly, attach importance to top-level planning; secondly, continue to do promotion; thirdly, intensify organizational construction and vigorously develop scientific research institutes organizing scientific research, and increase the supply of low-carbon technologies and the proportion of low-carbon/zero-carbon industries in the overall industrial structure to ensure the collaborative R&D across different fields, regions and industries.

**Summarized by ZHANG Xuanyu**