# **Analysis of Chongzuo's Construction of Science and Technology Innovation Center Oriented to ASEAN in the New Period**

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Abstract: The 2020 Central Economic Work Conference proposed to support qualified places to build international and regional science and technology innovation centers. This not only provides a fundamental guideline for Chongzuo to build a science and technology innovation center oriented to ASEAN, but also has important significance for Chongzuo to make a good start in the 14th Five-Year Plan, it is of great significance to the leapfrog development of economy and society. This paper discusses the great significance of Chongzuo's construction of the ASEAN-oriented science and technology innovation center in the new period for the implementation of the national major strategy, the implementation of the country's construction of a new development pattern and the building of a powerful engine of high-quality development in Chongzuo, and analyzes the advantages of Chongzuo in the establishment of the ASEAN-oriented science and technology innovation center in terms of policy, talent, market and so on. The establishment of the science and innovation center of Chongzuo is realized from five dimensions, namely, elevating the establishment of the science and innovation center oriented to ASEAN to a major strategic level, multi-sectoral cooperation, good service work, establishment of multi-party co-construction mechanism, establishment of flexible science and innovation system and improvement of the insurance mechanism of research.

Keywords: New Era, Chongzuo, Science and Technology Innovation Center, Path

# 1. Introduction

Throughout the history of human development, scientific and technological innovation has played an extremely important role in the rise of a country [1]. The changes among powerful countries have strongly proved that those who master the latest science and technology can take the initiative in the fierce competition in the future, and lead the development trend of the times Science and technology innovation center as an important carrier to promote the realization of science and technology innovation, its importance is self-evident. At the just-passed 2020 Central Economic Work Conference, it was proposed to support local governments in building international and regional science and technology innovation centers where conditions permit [2]. In recent years, major cities such as Shanghai, Guangzhou and Chengdu have also put forward strategic goals and development paths for the establishment of science and technology centers have achieved positive results. As a city on the southern frontier of China, Chongzuo's strategic position has become increasingly prominent. It is not only an important node city along the Belt and Road, but also a leading place for major national strategies such as China (Guangxi) Pilot Free Trade Zone and the financial opening gateway to ASEAN. The 14th Five-Year Plan is also a crucial period for Chongzuo to start a new journey of socialist modernization together with the people of China and Guangxi. All of these have provided fundamental guidelines and references for Chongzuo to establish the ASEA-oriented science and technology innovation center. In order to achieve these strategic goals, it is urgent to play the leading role of science and technology. Since its establishment as a city, Chongzuo has already possessed policy advantages, talent advantages, market demand and development foundation for establishing a science and technology innovation center oriented to ASEAN after years of development. With the increase in external opportunities and the maturity of internal conditions, it is the right time for Chongzuo to build science and technology innovation center oriented to ASEAN.

# 2. The significance of Chongzuo's establish science and technology innovation center oriented to ASEAN

In 2020, the total trade value between China and ASEAN surpasses the EU and becomes China's largest trading partner. ASEAN is not only officially China's largest trading partner, it is also the largest trading partner of Guangxi for 20 consecutive years [3]. In 2020, Guangxi's import and export trade with ASEAN reach 237.57 billion yuan. ASEAN plays an important role in stabilizing China's foreign trade, and it also fully demonstrates that ASEAN countries' strategic position in building an international cycle system under the new development pattern has risen. Guangxi must enhance the competitiveness of related industries against ASEAN countries and occupy the middle and high end of the industrial chain. As a bridgehead facing ASEAN, Chongzuo has an unparalleled geographical advantage, and it should take the initiative to carry this banner. The key to achieving these industrial goals lies in accelerating the establishment of ASEAN-oriented science and technology innovation center, leading the development of the industry with technology.

# 2.1 Conducive to the implementation and promotion of major national strategies

Since 2012, China has frequently issued strategies and policies related to Guangxi for the coordinated development of regional economy and the promotion of western development. From the development strategy of "One Belt and One Road", General Secretary Xi Jinping has given Guangxi the new mission of "Three Positions", building a new land-sea channel in the west, building a financial open gateway to ASEAN, building a national border development and opening zone, and accelerating the improvement of the Pearl River-Xijiang economy Belt and construction of cross-strait industrial cooperation zone, China-ASEAN Free Trade Area, Beibu Gulf Economic Zone, the Pearl River-Xijiang Economic Zone, and the "Overall Plan for China (Guangxi) Pilot Free Trade Zone" in 2019 and "About the New Era" in 2020 "Guiding Opinions on Promoting the Development of the Western Region and Forming a New Pattern", and a series of strategies and policies including the 2020 Regional Comprehensive Economic Partnership Agreement (RCEP) Bringing a series of strategic and policy support to Guangxi, and also changing the situation of Chongzuo's deviation from the center of strategy and policy in the past. Chongzuo has accelerated the establishment of an ASEAN-oriented science and technology innovation center, which has a significant traction effect on the implementation of major national strategies and policies.

#### 2.2 Conducive to assist in building a new development pattern

Accelerating the formation of a new development pattern with the domestic cycle as the main body and the mutual promotion of the international and domestic dual cycles is China's current major decisionmaking deployment in response to new changes at home and abroad [4]. Mainly, smooth flow includes domestic links, industries, departments, and regions, but this does not mean ignoring the construction of an international circulation system. On the contrary, it will not only help Guangxi strengthen economic and trade relations with Chongqing, Guizhou, Gansu and other provinces, building a complete and unified domestic market, avoiding disorderly competition and benefit externally. Conducive to taking advantage of Guangxi's border, river, and coastal advantages to develop trade exchanges with ASEAN countries, a region with great advantages and potential. This requires further expansion. Opening up will further strengthen foreign economic and trade ties, promote mutual benefit and win-win results, and achieve mutual promotion of domestic and international double cycles. By accelerating the establishment of ASEAN-oriented science and innovation centers to enhance industrial competitiveness, on the one hand, we will promote the region to further develop the ASEAN country's market; on the other hand, the increase in national income will bring about the expansion of import demand, which will help our region to smooth the international and domestic dual cycle and serve The overall situation of Guangxi's economic and social development.

### 2.3 Conducive to building a powerful engine for the high-quality development of Chongzuo

China proposes to build three passages from Chongqing and Chengdu to the Beibu Gulf estuary, which together form the main passage of the new western land-sea passage, which means that Guangxi is an important hub for goods from the western region to go to ASEAN [5]. Chongzuo's acceleration of the establishment of an ASEAN-oriented science and innovation center is conducive to the strength of the city of Chongzuo, promoting the efficient agglomeration of production factors in the region, forming information flow, project flow, and capital flow, promoting the development of Chongzuo's industrial

clusters, and accelerating the formation of a pole. Chemical effect and diffusion effect. Accelerate Chongzuo to improve the level of open economy, becoming a powerful engine leading the high quality development of Chongzuo.

# 3. Significant advantages of Chongzuo in establishing science and technology innovation center oriented to ASEAN

#### 3.1 Continuous release of policy dividends

In recent years, Guangxi Zhuang Autonomous Region has issued a series of policies to support technological innovation. In 2016, the "Thirteenth Five-Year Plan for Guangxi Science and Technology Innovation" was formulated. In 2018, the "Guangxi Participation in the "Belt and Road" Science and Technology Innovation Action Plan Implementation Plan (2018-2020)" was formulated. In 2019, the "Guangxi Science and Technology Innovation Support Industry High Quality Development Three-year Action Plan (2018-2020)" and "Measures on Further Deepening the Reform of the Science and Technology System to Promote Scientific and Technological Innovation and Promote the High-quality Development of Guangxi" in 2020. In 2017, Chongzuo formulated the "Interim Measures for the Administration of Subsidies for Chongzuo Enterprises after the Purchase of Scientific and Technological Achievements". These policies clarify the significance of scientific and technological innovation, strengthening the guidance of scientific and technological innovation policies, increasing support for the implementation of scientific and technological innovation strategies, planting the city's soil for scientific and technological innovation, providing policy support for the establishment of Chongzuo for the establishment of science and technology innovation center oriented to ASEAN.

#### 3.2 The talent capital advantage continues to improve

Talents are the core force to promote scientific and technological progress. Colleges and universities, known as the highland of talents, are the units with the richest scientific research results and one of the units with the most innovative elements. The number and quality of universities determines the region to a large extent. The level of industrial development within the scope. In recent years, Chongzuo has achieved an increase in both the quantity and quality of colleges and students. Currently, there are Guangxi Normal University for Nationalities, Guilin University of Technology Airport Campus, Guangxi City Vocational University, Chongzuo Preschool Teachers College, Chongzuo ASEAN International Vocational Education College, Guangxi Vocational College of Science and Technology, Guangxi Vocational College of Science and Technology, Guangxi Vocational College of Natural Resources and many other colleges and universities. The city has more than 3,000 college teachers and more than 80,000 students. Chongzuo is a small highland of talent pool second only to Nanning and Guilin in the number of universities. Moreover, in recent years, Chongzuo has vigorously carried out the introduction of highlevel talents. The number of first-class professional undergraduates, masters and doctoral students has increased significantly, and the number of talents has risen sharply. Today, Chongzuo has the conditions to establish a science and technology innovation center for ASEAN countries in terms of the number of colleges and universities, the number of college teachers, the size of talents and the talent reserve.

### 3.3 The market demand continues to be strong

Chongzuo accounts for nearly 80% of Guangxi's border trade with ASEAN countries. It is familiar with the demands of ASEAN countries for scientific and technological achievements in trade with ASEAN countries, especially in the light cultivation of agricultural products, standardized cultivation, fertilization, agricultural production, Agricultural products seed cultivation, agricultural machinery and equipment, agricultural products preservation and other technical requirements are strong, and the prospects are broad. In addition, as China's economy enters a new normal, China has changed from a shortage economy in the past to a surplus economy now. The people's demand for products in quantity has turned to quality demands. All kinds of enterprises in Chongzuo urgently need to enhance their core competitiveness through technological innovation and achieve victory by quality. The superposition of these two factors constitutes the actual and potential needs of Chongzuo to create an ASEAN science and innovation center.

# 3.4 The number of innovation platforms continues to increase

In 2019, Chongzuo added Qne national-level scientific research base, One autonomous region-level maker space, One autonomous region-level enterprise technology center, Three—autonomous region-level star creation worlds, and three city-level engineering technology research centers. There are Thirty-three high-tech enterprises, among which Chongzuo-Central South University Joint Research Center, Chinalco Guangxi-ASEAN (Chongzuo) Rare Earth Research Institute, and CITIC New Energy Materials Research Institute are key scientific and technological innovation institutes. Chinalco Guangxi Guosheng Rare Earth, CITIC Dameng, Xinzhen Manganese, Nanguo Copper and other enterprises have transformed Eleven scientific and technological achievements, and other industries transformed Two scientific and technological achievements, and Forty-two—technological transactions. In addition, major universities in the administrative area of Chongzuo have established R&D centers and experimental centers. Chongzuo has a solid foundation for establishing science and technology innovation center oriented to ASEAN in terms of indicators such as innovation platform, innovation level, and innovation results.

# 4. Analysis the goal and the path of Chongzuo's Construction of science and technology innovation Center Oriented to ASEAN

To establish science and technology innovation Center Oriented to ASEAN, Chongzuo should first plan and establish a platform for research and development cooperation and achievement promotion, focusing on joint scientific research and technology demonstration and promotion activities, focusing on conquering the urgently needed technologies in the market, and then conduct basic research to build a solid scientific research foundation. Integrate the current various innovation platforms, R&D centers, crowd-creation spaces, engineering technology research centers, etc., to establish a national science and innovation center mainly for ASEAN, and five autonomous region-level science and innovation centers for ASEAN to form a science and technology center, Innovation Center Group. During the 14th Five-Year Plan period, the average annual growth rate of capital investment in the Science and Technology Innovation Center will reach 5%. Strive to increase the number of scientific research talents for ASEAN countries by more than 30% and the conversion rate of scientific and technological achievements to more than 85% within 3-5 years.

#### 4.1 Elevate the Science and Technology Innovation Center to a major strategic level

The implementation of major projects requires the guidance of major strategies. The establishment of science and technology innovation center oriented to ASEAN is of great significance in the construction of China (Guangxi) Free Trade Pilot Zone and the creation of an open financial portal for ASEAN, creating a social innovation atmosphere, improving the level of technological exchanges with ASEAN countries, and occupying the middle and high end of the industrial chain. High-end and other aspects are of great significance. The realization of this significant significance requires strategic attention. Chongzuo need to elevate the establishment of Science and Technology Innovation Center a strategic level related to the overall future development of Chongzuo. It will be given politically as a key project during the 14th Five-Year Plan of Chongzuo. The establishment of Science and Technology Innovation Center Oriented to ASEAN as a key project in Chongzuo during the 14th Five-Year Plan period, will be highly valued politically, and the administrative power will be used to promote social attention and increase the attention and participation of the entire society.

# 4.2 Multi-departmental cooperation and good service work

The establishment of science and technology innovation center oriented to ASEAN involves multiple departments. The municipal development and reform, industry and information technology, finance, science and technology, education, investment promotion and other departments must work together to strengthen work coordination, refine work measures, and form a joint force for the establishment of science and technology innovation. Specifically, all units work together to clarify the relevant conditions of the projects that need to be included in the joint research of the science and technology center, and set out to establish a "service team" that is coordinated at the city and county levels. According to a science and technology project, a city-level comrade is responsible The overall responsibility, a department-level comrade, implement the work model of a science and innovation alliance as a service, and support the service team for the research and development of related science and innovation projects. Municipal

leaders do a good job of deployment in terms of project construction, talent introduction, technological innovation, and policy support, and promote the establishment of science and technology innovation centers to make substantive progress as soon as possible. The service team do a good job in the implementation of problems such as poor connection of science and innovation projects, lack of talents, lack of funds, and poor transformation of results, and play the role of coordinator and server.

# 4.3 Establish a multi-party joint construction and sharing mechanism.

Technological innovation and achievement transformation is a systematic project, in the theory, it requires the participation of the entire society. However, technological innovation requires a certain foundation and threshold, and certain specific subjects are required to form it. Therefore, the establishment of the mechanism adheres to the principle of government guidance, universities, research institutes, R&D centers, enterprises and talents in specific operations, adheres to specialized division of labor and cooperation, and discusses and jointly builds science and technology innovation centers. Universities and research centers serve as gathering places for R&D talents, enterprises as stakeholders and related parties that promote scientific and technological research and development, and the municipal government and science and technology bureaus serve as macro guides and planning participants. Integrate existing platforms, R&D centers, human resources, and financial resources in the establishment of the Science and Technology Innovation Center, and gather multiple forces to jointly establish science and technology innovation center oriented to ASEAN. Chongzuo should learn the measures introduced by Guangzhou, Chengdu and other cities to promote the research and development and transformation of scientific and technological achievements, exploring the development model of integration of government, academy, academy and enterprise, and inspiring the enthusiasm for research and development and transformation of achievements.

#### 4.4 Establish a flexible science and technology innovation system to stimulate innovation vitality

The market plays a decisive role in the allocation of resources. The government conducts macro-control to realize investment facilitation reforms, financial opening up, and government functions are in place, focusing on the establishment of scientific innovation centers for institutional innovation. First of all, focus on exploring the management model for the facilitation of the entry and exit of overseas scientific research personnel, and prepare mechanisms for the facilitation of entry and exit of overseas scientific research funds and scientific researchers in Chongzuo. Exploring the construction of cross-border financial pilot zones in the border zone on the introduction of funds from ASEAN countries, strengthening communication and exchanges among Southeast Asian financial institutions, and actively cooperating in capital introduction, payment and settlement and settlement, and payment on behalf of others. Establish a sound cooperation mechanism for cross-border scientific research personnel. Both China and ASEAN countries conduct research on cooperation between government management departments, the introduction of scientific research personnel, immigration management, etc., and explore suitable paths for the introduction of scientific research personnel.

# 4.5 Improve the research and development and transformation insurance mechanism of achievements

Technological innovation and achievement transformation have the characteristics of externality, complexity, uncertainty, high risk, and inestimable expected benefits, which has led to the lack of enthusiasm and initiative of R&D forces in technology research and development. Therefore, first, Chongzuo must establish a special technology innovation fund and conversion risk mechanism based on the characteristics of technology innovation and the expected return of technology innovation results; second, it must guide social insurance institutions to create insurance products based on the risk points of technological innovation. So that the failure of the scientific and technological innovation center's research and development activities can be compensated, and the enthusiasm for technological innovation is protected. Third, the provincial and municipal governments should also take measures to compensate for the risk of loss of insurance institutions due to the failure of underwriting technological innovations, and to inspire insurance institutions to take the initiative in underwriting.

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