

Thoughts on the Industrial Development and Economic Cooperation in the Border Area between China and the DPRK:

From the Perspective of the Liaoning Coastal Economic Zone and the Changchun–Jilin–Tumen Development

Dongming Zhang *

Abstract

Against a backdrop of China and the DPRK implementing new development strategies, the economic and trade relations between the two countries entered a new stage of development with the start of the economic zone cooperation part of the project in June 2011. Industrial cooperation is expected gradually to become the main direction for the development of bilateral economic and trade relations, within which the logistics, infrastructure, resources, energy, manufacturing, technology, tourism, agriculture, and fisheries industries are expected to become the main content of cooperation. At the same time, the current situation for China–DPRK economic and trade cooperation and the reality of the basic conditions make such cooperation more conducive to developing the border regions of both sides first of all, then gradually push it forward, and cooperation in the area of logistics is expected to play the breakthrough role.

Keywords: China–DPRK economic relations, industrial development and cooperation, logistics infrastructure, cross-border economic cooperation, cross-border free trade zone, Liaoning Coastal Economic Zone, Chang-Ji-Tu [Changchun–Jilin–Tumen] development

1. Introduction

The People's Republic of China and the Democratic People's Republic of Korea (DPRK) have maintained traditional relationships of friendship and cooperation with each other since the establishment of diplomatic relations between the two countries in October 1949. Sino-DPRK trade remains one of the external economic and trade relations on which the DPRK places the greatest emphasis, and the bilateral economic and trade cooperation have continued to develop in a stable manner, although it has grown at a moderate rate in recent years. A series of agreements signed by both countries has played an important role in developing the economic and trade relations between the two over the several decades and made remarkable accomplishments as China and the DPRK promoted cooperation in the area of economy and trade.

After thirty years or so of reform and open-economy policy, China produced extremely remarkable results in economic, social and other areas, and in 2010, it became the world's second largest economy. In 2011, with the launch of its development strategy based on the 12th Five-Year Plan (12-5 Plan), China entered a new phase of its economic and social development. Northeast China, which abuts on the DPRK, is a major area for economic and trade cooperation with the DPRK. In its national economic development strategy for the new age, however, China worked out a new development strategy for its Northeast economic district, including the Harbin-Daqing-Qiqihar Industrial Corridor, to lay the solid foundation for economic growth for the coming years while focusing on two national development strategies for the district: the Liaoning

Coastal Economic Zone Development Plan and the Changchun-Jilin-Tumen Development and Opening-up Pilot Area. On the other hand, the DPRK had difficulties achieving economic development because it was long punished by international sanctions in various areas such as economy and technology, but it still managed to attain a certain degree of economic development. In 2012, the DPRK announced its strategic goal “Opening the Door to a Powerful and Prosperous Country,” and is attempting to concentrate all its energies on economic development.

As China has continued to achieve rapid economic growth since it launched its economic development strategy for the new age, the DPRK will accelerate its economic development through its development strategy known as “Opening up the Door to a Powerful and Prosperous Country.” Therefore, the economic and trade relations between China and the DPRK will be further strengthened, and industrial cooperation will become an important factor for the strengthening of such relations as the content and format of economic and trade cooperation between the two countries undergo changes with the advancement of their respective development strategies. In June 2011, part of the cooperation project for the two countries to jointly develop the Rason Economic and Trade Zone and the Hwanggumphyong and Wihwado Economic Zone began, and it is expected that this will bring Sino-DPRK economic and trade cooperation to a new stage of development.

2. Foundation and the Present Condition of Industrial Development and Cooperation in the Sino-DPRK Border Area

2.1 Sino-DPRK Economic and Trade Relations: “Aid and Cooperation” to “Cooperation and Aid”

Sino-DPRK trade began in 1950, and after the 1970s, the Agreement on Mutual Supply of Critical Materials 1971-1976 was signed. In January 1976, the Sino-DPRK friendship oil pipeline built jointly by the two countries went into operation. After the 1980s, in addition to continuing to provide oil to the DPRK at a preferential price, China offered food assistance each year. It also provided economic assistance mainly for light industries. Major aid programs included (1) the remodeling of power transmission lines at three hydroelectric power plants along the Yalu River; (2) the construction of the 190,000-kW Taipingwan power plant in 1982; (3) the building in Sinuiju of a petroleum refinery with the capacity to annually process two million tons of crude oil provided by China; (4) the construction of the oil fuel plant in Huichon and gear and measuring equipment plants in Pyongyang; and (5) the construction of a paper mill in Haeju, a textile plant in Sinuiju, and pen and radio parts plants in Hamhung, as well as the expansion of power transmission networks in Pyongyang in 1988.

In the early 1990s, Sino-DPRK trade became prosperous. After 1991, China was the most important trade partner of the DPRK. In 1996, the two countries signed the China-DPRK Economic and Technological Exchange Agreement. In addition, the bilateral cooperation produced new results in various fields, and Sino-DPRK trade showed a sign of resurgence. In general, the economic relations between the two countries were extremely active throughout the 1990s.

At the beginning of the 21st century, China and the DPRK started to step up economic and trade cooperation between the two in a completely new international environment. First,

investments became market-oriented and came to be underpinned by legislation. In January 2005, when he had a meeting with General Secretary Kim Jong Il, Prime Minister Wen Jiabao spelled out the principles of economic cooperation—“government leadership, participation by businesses, market administration, and mutual benefits”—and, based on these principles, attempted to incorporate these market elements into the bilateral investment cooperation initiatives. In the same year, the governments of the two countries entered into the Agreement on Preferential Treatment to and Protection of Investments to provide legal guarantee to the standardization of economic cooperation between the two countries. This helped further increase the attention of Chinese businesses toward investments in the DPRK.¹ In October 2005, with the support of China, the construction of a friendship glass factory in the DPRK’s Taean was completed, and the factory started operation, a typical example of Sino-DPRK economic cooperation in this decade.

Then new progress was made in cooperation in the area of science and technology. In December 2007, the 42nd session of the Joint Committee on Science and Technology took place in Pyongyang. During the meeting, participants from the two countries exchanged opinions about science and technology cooperation projects that would soon be carried out and agreed to promote new cooperation in such fields as agriculture, meteorology, water utilization, computing software development, geology, aquaculture, sanitation and communicable disease control, coal use, and administrative management of science and technology. The Chinese and DPRK governments then concluded the 2008 Protocol on Science and Technology Cooperation Projects, adding a new page to their relationship of cooperation.

Overall, some thirty years have passed since China adopted a reform and open economy policy. The Chinese economy has achieved tremendous growth under the principle of a market economy, obtaining enormous results. The Chinese government has continued to provide extremely important assistance to the DPRK, playing a crucial role in developing the DPRK economy and supporting the lives of DPRK citizens. As mentioned above, the successful completion of a friendship glass factory in Taean, the DPRK, and the commencement of its operation with the support of China epitomize China’s support for the DPRK during this period. This is also a major proof of the bilateral industrial cooperation.

2.2 Institutional Bases of Economic, Trade, and Industrial Cooperation: Important Bilateral Agreements

Since the establishment of diplomatic relations between the two countries, China and the DPRK have reached a series of bilateral cooperation agreements to promote cooperation and development to mutual interests in the fields of economy and trade. Major bilateral agreements include:

- (1) China-DPRK Economic and Cultural Cooperation Agreement (1953)
- (2) China-DPRK Friendship, Cooperation, and Mutual Aid Treaty (1961)
- (3) China-DPRK Consular Treaty (1985)
- (4) China-DPRK Economic and Technological Exchange Agreement (1996)
- (5) Agreement on Preferential Treatment to and Protection of Investments (2005)
- (6) Agreement between the Chinese and DPRK Governments on Joint Marine Oil Development (2005)
- (7) Agreement between the Chinese and DPRK Governments on Automobile Transport (2008)

- (8) Economic and Technological Cooperation Agreement, the Agreement on Cooperation in Exchange for Education Organizations, the Memorandum of Agreement on Exchange Cooperation in the Software Industry, and the Memorandum of Agreement on Visits of Chinese Tourist Groups to the DPRK (2009)²
- (9) China-DPRK Maritime Management Agreement on Cooperation in the Valley of the Yalu River (April 2011)³

In short, since the beginning of the 21st century, Sino-DPRK cooperation in the economic and trade areas has constantly gained momentum as both the Chinese and DPRK economies continued to develop.

2.3 Economic Bases of Economic, Trade, and Industrial Cooperation between China and the DPRK

2.3.1. Continuous and Stable Development of Bilateral Trade

Since they established diplomatic relations with each other, China and the DPRK have seen their bilateral trade continue to grow in a stable manner, particularly in recent years during which their economic exchange, trade, and cooperation expanded. The figures shown below suggest a general trend in the development of the two countries' economies and bilateral trade. In 1999, since China introduced a system to settle accounts in foreign currency, the DPRK ran short of foreign currency, and as a result, the value of trade between the two countries declined. In subsequent years, the bilateral trade continued to rise with the years.

Table 1. Statistics of Sino-DPRK Trade

Unit: US\$100 million

Year	Value
1993	8.99
1999	3.7
2001	7.39
2005	15.8
2007	19.7
2008	27.9
2009	27.0

Source: This table has been created using each year's edition of the *China Trade and External Economic Statistical Yearbook*

The Sino-DPRK trade during the first half of 2010 reached US\$1.28 billion, a 16.4% increase compared to 2009, when it amounted to US\$1.1 billion. The DPRK mainly imported crude oil from China, and crude oil accounted for 27% of the DPRK's total imports, followed by textile goods and non-metal products. The DPRK, meanwhile, mainly exports coal, iron ore, and other mineral resources, which represent 51% if combined, and non-metal mineral products account for 20%.

2.3.2 Settlement of cross-border trade accounts in the Chinese currency, the yuan

In June 2010, the Chinese government designated Liaoning Province as a test area for “settlement of cross-border trade accounts in the Chinese currency, the yuan” and attempted to expand the range of areas other than the test one from certain regions such as Hong Kong and Singapore to the entire world. On September 19, 2010, the city of Dandong began to settle cross-border trade accounts in the Chinese currency, the yuan, on a trial basis. This meant that the key currency to settle Sino-DPRK trade accounts was switched from the dollar to the renminbi (RMB), an attempt to encourage legal trade between the two countries and prevent private trade activities. Currently, more than 70% of Sino-DPRK trade goes through Dandong.

2.4 Present Condition of Economic, Trade, and Industrial Cooperation between China and the DPRK

2.4.1 Energy Cooperation

Sino-DPRK cooperation in the energy field is concentrated on electricity and petroleum. In terms of electricity, in addition to the power plants located along the Yalu River, which are shared by the two countries, the collaborative development of new power plants is under way, and their construction has already started. On March 31, 2010, the construction of the Wangjianglou and Wenyue [Munak] power plants, which are both built with the cooperation of the two countries, began. The groundbreaking ceremony was attended by Chen Weigen, Vice Governor of China’s Jilin Province, Kim Man Su, DPRK Vice Minister of Electric Power and Industry, and other guests. Located in the city of Ji’an in Jilin Province in the valley of the Yalu River, which runs along the China-DPRK border, these two power plants are Jilin Province’s priority projects. The construction work spans from 2010 to 2013, and in the future, these hydroelectric power plants from which both countries will benefit will further bolster economic cooperation between the two countries.⁴

Another area of cooperation in this field is ocean oil development. From December 24 to 27, 2005, a government delegation headed by Deputy Prime Minister Ro Tu Chol of the DPRK visited China. Wen Jiabao, Premier of China’s State Council, Zeng Peiyan, Deputy Premier, and Tang Jiaxuan, who served on the State Council, had separate meetings with the delegation. Zeng Peiyan and Ro Tu Chol signed the Agreement between the Chinese and DPRK Governments on Joint Ocean Oil Development on behalf of their respective governments.

2.4.2 Distribution Cooperation

The policy of China for cooperation in distribution systems basically agrees with that of the DPRK. In July 2008, the two countries entered into the Agreement between the Chinese and DPRK Governments on Automobile Transport through consultations, providing legal guarantee to develop cooperation in international road transport between the two countries. This arrangement will enable DPRK freight cars and automobiles to head directly for the European Continent through China in the future.

On February 25, 2010, in Dandong City, Liaoning Province, Wu Hailong, Assistant Director-General of the Chinese Ministry of Foreign Affairs, and Pak Kil Yon, DPRK Deputy Minister of Foreign Affairs, signed the Agreement between the Government of the People’s Republic of China and the Government of the Democratic People’s Republic of Korea on the Joint Construction, Management, Maintenance, and Protection of the Bridge over the Yalu River, Which Constitutes the Boundary between the Two Countries.⁵

In early October of 2010, Chinese Prime Minister Wen Jiabao visited the DPRK and decided that both countries would agree to build a new large bridge over the Yalu River, a border river, and officially initiate construction-related operations.⁶ A groundbreaking ceremony for the project was then held at the end of the same year.

In addition, the two countries have made progress in cooperation for the integration of roads and railways, ports and harbors, and industrial areas.⁷ China and the DPRK already reached an agreement on the collaborative development and use of Rajin Port, and the construction of Pier 1's Terminal 1 has already been completed. With the capacity to store 40,000 tons of cargo, the new terminal is now capable of loading and unloading 1.5 million tons of coal annually. So far, the two countries have also agreed to build Terminals 2 and 3 on Pier 1 with Phase 2 of the construction project scheduled to begin soon. This will enable the loading and unloading of 300,000 TEU of cargo annually. Phase 3 is expected to give the pier the capacity of transshipping one million tons of food and feed annually.

Therefore, Rajin Port and its distribution facilities have great potential for development, and once they start to develop, they are extremely significant not only for the DPRK's economic development but also for the development of the Changchun-Jilin-Tumen area, which is an integral part of China's development strategy for its Northeast region.

Noteworthy is the construction of the Sino-DPRK Friendship Logistics Center, which was proposed by the DPRK in early 2008, and this large-scale logistics center will be built by Chinese and DPRK enterprises in Sinuiju. The two countries have already discussed and negotiated on this project. The DPRK has already chosen a Chinese investment firm and signed an investment agreement for this undertaking. The logistics center will be constructed with its funds and construction materials provided by Chinese enterprises and its construction site and labor by their DPRK counterpart. Irrespective of the actual progress made so far, the very fact that this project was proposed by the DPRK and its plan are worth taking interest in and paying attention to, and many place great expectations on the project. With the commencement of construction work for a new large bridge over the Yalu River at the end of 2010 and the start in June 2011 of part of the project in which China and the DPRK work with each other to develop the Hwanggumphyong and Wihwado Economic Zone, it is expected that the China-DPRK reciprocal relationship of cooperation in this field will enter a new phase of development.

2.4.3 Promotion of construction of cross-border free trade areas

On August 30, 2009, the State Council approved the "Cooperation and Development Planning Outline of the Tumen River Area of China: Setting Changjitu [Changchun-Jilin-Tumen] as the Development and Opening-up Pilot Area". The planning outline aims to advance the participation by Changchun-Jilin-Tumen in the Tumen River international regional cooperation project and promote step-by-step the construction of a free trade area straddling the Tumen River border while maintaining the principle of "from easy to difficult" and "bilateral to multilateral" based on the Hunchun Frontier Economic Cooperation District. Eventually, it aims to promote cooperation across the Sino-DPRK border, in other words, promote the formation and development of a free trade area straddling the Tumen River border.⁸

So far, the Hunchun Frontier Economic Cooperation District has already developed into a state-level frontier economic cooperation district. On March 9, 1992, the State Council recognized Hunchun as an externally open frontier city and at the same time approved the establishment of the Hunchun Frontier Economic Cooperation District. Hunchun has fully

developed and used the Sino-Russia Hunchun Port, China-Russia Hunchun Railway Port, Sino-DPRK Quanhe Port, and Sino-DPRK Shatuozi Port and enlivened trade with Russia and the DPRK.

As described above, China and the DPRK have used each other's gateways as the starting points of important economic cooperation and development routes and promoted the construction of free trade areas across the boundary through cross-border economic cooperation. Furthermore, the two countries are aiming to establish a new phase of bilateral economic cooperation, and this development policy is worthy of note.

3. Industrial Development and Cooperation across the China-DPRK Border

3.1 Logistical Base of Economic, Trade, and Industrial Cooperation across the China-DPRK Border: Ports and Transport

There are twelve major ports between China and the DPRK: Jilin Quanhe Port,⁹ Jilin Shatuozi Port, Jilin Guchengli Port,¹⁰ Jilin Sanhe Port,¹¹ Jilin Kaishantun Port, Jilin Ji'an Port,¹² Jilin Tumen Port,¹³ Jilin Nanping Port, Dandong Taipingwan Port, Dandong Road Port,¹⁴ Dandong Railway Port,¹⁵ and Dandonggang Port.¹⁶ Most of the cargo traded between the two countries uses these ports, and in particular, Dandong Port accounts for a large percentage of the total cargo traded.

The logistics infrastructure between China and the DPRK consists mainly of roads, railways, seaports, airports, and networked communication equipment. Many roads run between the two countries, and the most important of them is one that runs through Dandong Port and leads to one of the DPRK's major trunk roads that connect Pyongyang and Sinuiju.

Another important type of infrastructure between the two countries is railways. Railways are a major means of transport in the DPRK, carrying more than 90% of cargo and more than 60% of passengers. The DPRK has several railway routes for international intermodal transport: Pyongyang-Beijing (international intermodal passenger transport between China and the DPRK has been provided since 1954); Pyongyang-Moscow (international intermodal passenger transport between the DPRK and the former Soviet Union has been provided since 1955); Sinuiju-Dandong, Manpho-Ji'an, Namyang-Tumen (international intermodal cargo transport between China and the DPRK has been provided since 1954); Pyongyang-Moscow (international cargo transport); and Rajin-Tumen (tourist trains).

Still another important type of infrastructure is trade ports. The DPRK has nine major trade ports: Chongjin, Rajin, Sonbong, Hungnam, Wonsan, and Sinpho on the east coast, and Nampho, Songrim, and Haeju on the west coast. Among these ports, Rajin, Sonbong, and Chongjin are free trade ports. DPRK trade ports handle approximately 35 million tons of cargo annually, and the largest of all trade ports is Chongjin.

The most noticeable of all DPRK trade ports is Rajin Port, located in the southwestern part of Rason City in North Hamgyong Province. The port, 10-20 m deep, has three piers. It became a trade port in 1974 and was designated as a free economy trade port in 1991. It handles four million tons of cargo annually and has grown as a port dedicated to container ships. Russian and Japanese vessels had transshipped cargo only at Chongjin Port. Since the Chinese province of Jilin opened a Yanbian-Rajin-Busan route in 1955, Rajin Port has become part of the important sea route that connects Northeast Asian countries, including China, the DPRK, the ROK, and

Japan. Other noticeable trade ports include Sonbong, located in the northeast of Rason City, which is dedicated to oil.

3.2 Strategic Base of Industrial Development and Cooperation: China-DPRK Economic Development Strategy for the New Age

3.2.1 The DPRK: Construction of a Powerful and Prosperous Country, Opening the Door to a Powerful and Prosperous Country

The slogan “Powerful and Prosperous Country” was first found in a political discussion in the August 2, 1998 issue of the *Rodong Sinmun* (Newspaper of the Workers), an organ of the Workers’ Party of Korea. The article pointed out that the new goal the DPRK should achieve was to construct a powerful and prosperous country. Later, in 1999, the New Year’s editorial emphasized again that 1999 was a year of change in which the country should start its efforts to construct a powerful and prosperous country and move all its army forward. This meant that the DPRK entered the new age in which it would build such a country. The DPRK announced three major strategic goals to construct a powerful and prosperous country—to construct a militarily, politically, and economically powerful country. Basically, it has achieved the goal of constructing a militarily and politically powerful country, and the current major goal is to construct an economically powerful country.

In 2008, ten years after the announcement of the strategic goal of constructing a powerful and prosperous socialist country, the DPRK designated 2008 as a year of historical change in the New Year’s editorial of its labor party’s organ and indicated that it would open the door to a powerful and prosperous country in 2012. In the New Year’s editorial of 2009, it designated 2009 as a year of high tide for a new revolution and stated that the year’s principal task was economic construction. In the New Year’s editorial of 2010, it stated that the primary task of 2010 was to call for the offensive to improve the living standards of people, stressing that major efforts should be directed to develop light industries and agriculture.

The main theme of the New Year’s editorial in 2011 was to “further accelerate the development of light industries in the future and make it a major turning point to improve the living standards of people and construct a powerful and prosperous country”.¹⁷ This was the second time after 2010 for the *Rodong Sinmun* to take up economy as a theme of its New Year’s address. The editorial designated 2011 as a year of light industries, listing coal, electricity, metal, and construction for railway transport, etc. as major industrial sectors that should support light industries. Noteworthy in this context is the frequent use of “light industries” and “improvement of the lives of the people” throughout the editorial: in the newspaper, “light industries” is used 21 times, and “national life” 19 times. These were more frequently referred to than the names of the top echelons of state officials in the DPRK and slogans such as “military first politics.”

In early 2011, the DPRK worked out and announced the Ten-year Strategic Plan for National Economic Development and set definite strategic goals for basic industries such as infrastructure development, agriculture, electricity, coal, petroleum, and metals, and for regional development. It also stated that in 2012 it would establish a framework for opening the door to a powerful and prosperous country and that in 2020 it would show an outlook for future development, which was comparable to that for industrialized countries. In order to push forward with this strategic plan, the DPRK government established a new political organization, the National Economic Development Administration, which is responsible for economic construction, and delegated

all its authority to the Korea Taepung International Investment Group to implement all major projects under this plan.

Since it started to implement the “Opening the Door to a Powerful and Prosperous Country” strategy, the DPRK has taken several political measures to promote the opening of the country to the external world. On January 5, 2010, the DPRK designated Pyongyang City as a directly managed city and Rason, Kaesong, and Nampho Cities as special-grade cities through a government ordinance issued by the Standing Committee of the Supreme People’s Assembly. This measure—“The Cabinet of the Democratic People’s Republic of Korea and related organizations shall decide specific measures based on the government ordinance”—can be interpreted as follows: the DPRK plans to construct Rason as a special district and invite foreign capital investments.

This measure indicates that the DPRK intends to further advance the opening of its economy to the external world, and this area is expected to become a center of economic, trade, and industrial cooperation, particularly logistics cooperation, between China and the DPRK in the future.

3.2.2 New Strategic Arrangement for Development in the Northeast China Economic Area

Currently, China’s Northeast region consists of four economic zones called “three horizontal, one vertical.” “One vertical” refers to the Ha-Da economic zone, an economic zone formed along the Ha-Da Railway. The first plan for “three horizontal” is to construct the Liaoning Coastal Economic Open Zone, mainly based on the “five points, one line” plan—in other words, construct five province-level development areas along the Yellow Sea and Bohai Sea in an integrated manner. The second plan is to construct the Changchun-Jilin-Tumen Development and Opening-up Pilot Area in Jilin Province, and third is to construct the Harbin-Daqing-Qiqihar Industrial Corridor, a new industrial area along the Heilongjiang River.

On July 1, 2009, the Standing Committee of the State Council discussed and approved the Liaoning Coastal Economic Zone Development Plan. The plan’s development strategy positioned the Liaoning Coastal Economic Zone as a new economic growth area that would play a central role in promoting the economic development of Northeast China, and the eventual objective of the strategy is to build a new open, strategic area in Northeast Asia that extends over Northeast China and four cities in the eastern part of Inner Mongolia. The Liaoning Coastal Economic Zone, which includes Dalian, Dandong, Jinzhou, Yingkou, Panjin, Huludao, and other coastal cities, is a key area in the Bohai Sea Rim Region and the Northeast Asian economic zone and has abundant natural resources, high industrial capabilities, and well-developed transport systems. For this reason, it is strategically significant for the Liaoning Coastal Economic Zone to accelerate economic arrangement, promote concerted regional development, and facilitate the opening of its economy to the external world.

According to this plan, the Liaoning Coastal Economic Zone aims to optimize its industrial structure and upgrade its industrial level, strengthen its basically superior machine manufacturing and raw materials industries, and expand its high-tech industries. It also aims to develop modern service industries and modern agriculture, improve traditionally advantageous industries through remodeled information technology, and enhance product quality, thus establishing modern industrial systems centered on advanced manufacturing industries. The primary goal of the plan is industrial development, particularly manufacturing, modern services, and modern agriculture.

Then, on August 30, 2009, the State Council approved the “Cooperation and Development

Planning Outline of the Tumen River Area of China: Setting Changjitu [Changchun–Jilin–Tumen] as the Development and Opening-up Pilot Area”. In this outline, it clarified China’s basic policy to look for new models for the development and opening of frontier areas and finalized a general framework for action so that China could participate in and promote economic cooperation and development in the Tumen River area.¹⁸ On September 27, 2010, the Hunchun-Tumen Expressway was opened for traffic, and this made the Changchun-Jilin-Tumen route go into full operation, laying the foundation for the development of the Changchun-Jilin-Tumen area as a development and opening-up pilot area.

The main part of the Changchun-Jilin-Tumen Development and Opening-up Pilot Area constitutes the core of the China Tumen River Area,¹⁹ and the important point in accelerating the development of the Changchun-Jilin-Tumen Pilot Area is to construct international sea routes. The outline of the plan describes details of the following three policies: “borrow ports to go out to the ocean”; “go out of the country and connect seas”; and “connect ports to go out to the ocean”. In recent years, with the implementation of large-scale projects, the Changchun-Jilin-Tumen Pilot Area produced rudimentary results in relation to the policy “extend domestic trade to overseas countries” and the other three listed above. In March 2010, China acquired the right to lease the DPRK’s Rajin Port for ten years, opening the external logistics route for traffic, and this merits attention.²⁰

According to the public announcement of September 2010, released by the customs office, domestically traded cargo in Jilin Province goes through Wonjong in the DPRK after embarkation formalities at Hunchun Quanhe Port, is transshipped at Rajin Port, and enters China again at Shanghai or Ningbo Port. In short, the purpose of “permitting and supporting Jilin Province as a trial area for transporting domestically traded cargo across the border” as announced by the customs office is to facilitate the promotion by the state of former industrial bases in the Northeast region and the strategic arrangement of the China Tumen River Area Cooperative Development Plan, and to further cooperation in the transport of domestically traded cross-border cargo using foreign ports.²¹ At the same time, the designation by the Ministry of Commerce of Yanji and Tumen as today’s model cities in the field of logistics contributes to the development strategy of the Changchun-Jilin-Tumen Pilot Area.

3.3 Major Areas of Industrial Development and Cooperation across the Sino-DPRK Border

The foregoing can be summarized as follows: given the current status of economic development and industry, China and the DPRK can promote industrial development and cooperation in the fields specified below:

First is cooperation in the logistics field. There is no doubt that logistics is the most important of all fields of economic cooperation between the two countries. Between China and the DPRK, there is already well-developed logistics infrastructure such as railways, roads, and ports and harbors, which constitute the basis of cooperation between the two countries in the field of logistics. Further strengthened logistics infrastructure will lay the solid foundation for bringing Sino-DPRK cooperation in the logistics field to a new phase of development, and help advance the bilateral economic and trade cooperation in all areas. In light of the present state of affairs, it is realistic and practicable to start by establishing closer cooperation in the logistics infrastructure of frontier areas and later promote and expand the range of cooperation gradually.

What is more important is that from a long-term perspective, this is extremely advantageous

in establishing a logistics network between China and the Korean Peninsula. Linking a logistics network in the Korean Peninsula with that in Northeast China will not only enable promotion of three-way trade and economic cooperation. But it will also be useful in promoting the development and prosperity of the entire Northeast Asian region, including the Korean Peninsula, if this logistics network is connected to Japan, Russia, and Europe. Therefore, from this perspective, it is expected that logistics cooperation between China and the DPRK will bring a breakthrough to build a framework for regional economic cooperation in Northeast Asia.²²

Second is cooperation in infrastructure development. China shares a long land-border with the DPRK, and the Yalu and Tumen Rivers constitute the Sino-DPRK border. There are already many ports in operation along the rivers, but due to delay in the development of infrastructure such as railways, roads, and ports in the DPRK, this region lacks means of transport in relative terms. Little progress has been made in modernizing service facilities, and this and other factors restrict cooperation between the two countries. In fact, the DPRK has shown its stance of extending cooperation to infrastructure development in various ways. The cooperation between China and the DPRK in the Rajin Port Project in the DPRK is an indication of the DPRK's attitude toward this policy. The two countries can establish closer cooperation in infrastructure development using this as a starting point. In addition, improved infrastructure development will ensure active cooperation in the logistics field, and this will in turn lay the important foundation for further development of economic and trade cooperation.

The advancement of Sino-DPRK cooperation in port operation and use will gradually increase the possibility of building a new logistics route in Northeast Asia, which, connecting China with Mongolia and running north to south through the Northeast economic region, will reach the ROK and Japan via Russia and the DPRK. And at the same time, in China, the construction of regional logistics routes as represented by the Northeast Eastern Railway is progressing smoothly.

Third is cooperation in the field of natural resources. The DPRK abounds in natural resources, and, for example, its reserves of coal, iron, graphite, gold, silver, lead, and other minerals are remarkable. Noticeable is the fact that the DPRK government has agreed to invite foreign capital for resource development and is attempting to consider resource development models using joint ventures. In addition to the cooperation projects already being implemented, China and the DPRK are striving to expand cooperation in the resource field mainly by raising the processing level for natural resources.

Fourth is cooperation in the energy field. Up to now, the cooperation between the two countries in this field has focused chiefly on electricity and petroleum. In the new circumstances of energy development in the world, China and the DPRK must continue to consider and promote the project to reconstruct power plants in the valley of the Yalu River. At the same time, they must pay attention to and advance cooperation in the field of new energy. It is necessary to cooperate in project development for solar, wind, and geothermal energy, too. This will help satisfy energy and electricity demand in the two countries, particularly the DPRK, and meet the trends in green growth as they unfold.

China has already established a favorable foundation in the field of new energy development. Power plants using wind energy in the Northeast economic district occupy a pioneering position, providing a favorable foundation for cooperation between the two countries in this field. On the other hand, new energy development constitutes the core of the ROK's green growth strategy. Therefore, attention is focused on whether or not China and the ROK can work

together to develop new energy in the DPRK.

Fifth is cooperation in manufacturing. The two countries should consider cooperation in light industries (mainly labor-intensive manufacturing), which are closely related to the life of the people. In the DPRK, products from light industries, which are related to the life of the people, are in relatively short supply, but the country has a large, highly capable, and low-cost workforce. Therefore, China and the DPRK should use various methods of cooperation in this field by investing in the DPRK's labor-intensive industries such as processing of products. First, when Chinese enterprises consider investing in the DPRK's labor-intensive industries such as processing of products, they can be supplied with energy such as electricity if, taking into consideration the status of power supply in the DPRK, they install enterprises that can cooperate in investment on the DPRK side of frontier areas between the two countries. Then, if they install related enterprises in frontier areas close to the DPRK (development districts, for example), they can employ the DPRK's excellent labor resources using smooth operation systems (for example, commuting and lodging systems).

Sixth is cooperation in the field of tourism. The DPRK abounds in natural landscapes marked by towering mountains and limpid streams and distinctive ethnic cultural attractions. As an increasing number of Chinese tourists visit the DPRK, Sino-DPRK cooperation in tourism is progressing gradually. Revenue from tourism is directed to the development of tourism on which the DPRK places great emphasis. In 2008, the Chinese government designated the DPRK as a destination or country its citizens can visit for tourist purposes, thus opening the way for a new form of tourism cooperation mainly based on frontier tourism and one-day tours, which had been promoted by the two countries.

The favorable development of tourism laid the favorable foundation for expanding and advancing cooperation between China and the DPRK. In the future, based on the tourism projects carried out by the two countries in the past, China and the DPRK will be able to consider cross-border tourism cooperation—mainly ethnic tourism in frontier areas, ecological tourism, and tours by private car. They will also be able to broaden and develop bilateral cooperation constantly by, for example, expanding cultural tourism such as with Arirang.

Worthy of attention is the launch on April 26, 2011 of the first loop-type, cross-border tourism project in which China, the DPRK, and Russia simultaneously exempted their respective citizens from obtaining a visa to enter any of the countries.²³ The loop-type tourism among the three features Northeast Asia's first tourism route for which the obtaining of a visa is simultaneously exempted by the countries involved, and is also the first loop-type, cross-border tourism route offered by China.

Seventh is cooperation in the field of science and technology. The DPRK government places great emphasis on development in the area of advanced technology, and this is evident from the fact that DPRK leaders focus on science and technology when they choose places to visit in China. There is enormous room for growth in the DPRK's information industries such as telephony, networking, and communications, and in recent years, the DPRK has cooperated with Egypt in developing telecommunications in the country. At the same time, the DPRK is cooperating with China in such areas as IT software development—proof that the two countries have great potential for cooperation in the field of high technology.

Eighth is cooperation in the field of agriculture and fisheries. Since the DPRK is relatively behind in agricultural technology, it is essential to apply more science and technology to agricultural production. The two examples of this are to increase the production of food crops per

unit area and improve the production of traditional agricultural products (matsutake mushrooms and Asian ginseng) for export. Other examples of useful cooperation include ecological agriculture and the production and processing of agricultural products. Meanwhile, fisheries in the DPRK have a certain degree of advantage, leaving tremendous room for cooperation in such fields as coastal fisheries, aquaculture, and the processing of marine products.

Noteworthy is the practical progress made in Sino-DPRK economic and trade cooperation in 2011. In June 2011, in order to promote economic and social development in the frontier area between the two countries and advance bilateral practical economic and trade cooperation, China and the DPRK agreed to cooperate with each other in developing the Rason Economic and Trade Zone, located in the DPRK, as well as the Hwanggumphyong and Wihwado Economic Zone,²⁴ and organized a joint guidance committee to cooperate in developing the two economic zones in China and the DPRK.²⁵ At the second meeting of the committee held from June 7 to 9, 2011, the two countries clarified the principles of development cooperation: government leadership, corporate initiative, market administration, and a reciprocal relationship.²⁶ They agreed to build the two economic zones as model bilateral economic and trade cooperation districts and a platform for economic and trade cooperation with various countries in the world, through joint efforts using the advantages of the respective countries. During the time-period of the meeting, the two countries held a groundbreaking ceremony for part of the two economic zone cooperation projects.

On September 15, 2012, an official ceremony was held in Hwanggumphyong, the DPRK, to celebrate the laying of a cornerstone for the office building of the committee to manage the Hwanggumphyong Economic Zone, jointly developed and managed by China and the DPRK.²⁷ This means the start of the project to develop the Hwanggumphyong Economic Zone, part of the “two-island economic zone” jointly managed by the two countries.

The commencement of part of the two economic zone projects is the embodiment of the principles of cooperation between the two countries. This will certainly have positive effects on the promotion of industrial development and cooperation between the two. At the same time, it means that China and the DPRK have entered a new age of economic cooperation. If this model achieves success, its significance lies in the fact that it has served as a direct contact point for the DPRK to incorporate the experience that China gained from 30 years or so of rapid economic growth into these new economic cooperation projects, which were carried out by the two countries under the new principles of cooperation, and that this has had positive effects on economic development in the DPRK. At the same time, the significance of the model is that the DPRK has established the most realistic platform to deepen economic and trade cooperation with various countries in the world at close range. This will help the DPRK to lay the foundation for participating in international economic cooperation and contribute to realization of peace and development in the Korean Peninsula.

4. Conclusion

What is discussed in the preceding sections can be summarized as follows: the series of cooperation agreements signed by China and the DPRK provided an institutional basis for further development of economic and trade relations between the two countries; the new economic development strategies of the two countries provided a strategic basis for development of economic and trade relations between the two countries; and the cooperation in the fields of

logistics, natural resources, energy, and so forth, established an economic basis for industrial cooperation between the two countries.

Focusing on its two national strategies, the Liaoning Coastal Economic Zone Development Plan and the “Cooperation and Development Planning Outline of the Tumen River Area of China: Setting Changjitu [Changchun–Jilin–Tumen] as the Development and Opening-up Pilot Area”, China began to implement the strategic arrangement of economic development for the new age in the Northeast economic district. This will surely lead the Northeast economic district to a new stage of economic development. As it carried out development strategies known as “Constructing a Powerful and Prosperous Country” and “Opening the Door to a Powerful and Prosperous Country,” the DPRK has taken strategic measures to advance economic development and establish closer economic and trade relations with the external world. China’s Northeast economic district, which borders on the DPRK, is a major area for economic and trade cooperation with the DPRK.

Therefore, it can be said that the economic development strategies implemented by China and the DPRK independently provided a sound platform for, and gave momentum to, further development of economic and trade relations between the two countries. At the same time, the nature and format of the bilateral economic and trade cooperation will change with the advancement of each country’s development strategy, and industrial cooperation will gain importance in this process. Major areas of industrial cooperation between the two countries will include logistics, social infrastructure, natural resources, energy, manufacturing, tourism, science and technology, agriculture, and fisheries, and industrial cooperation in these fields will be advanced starting from the frontier areas.

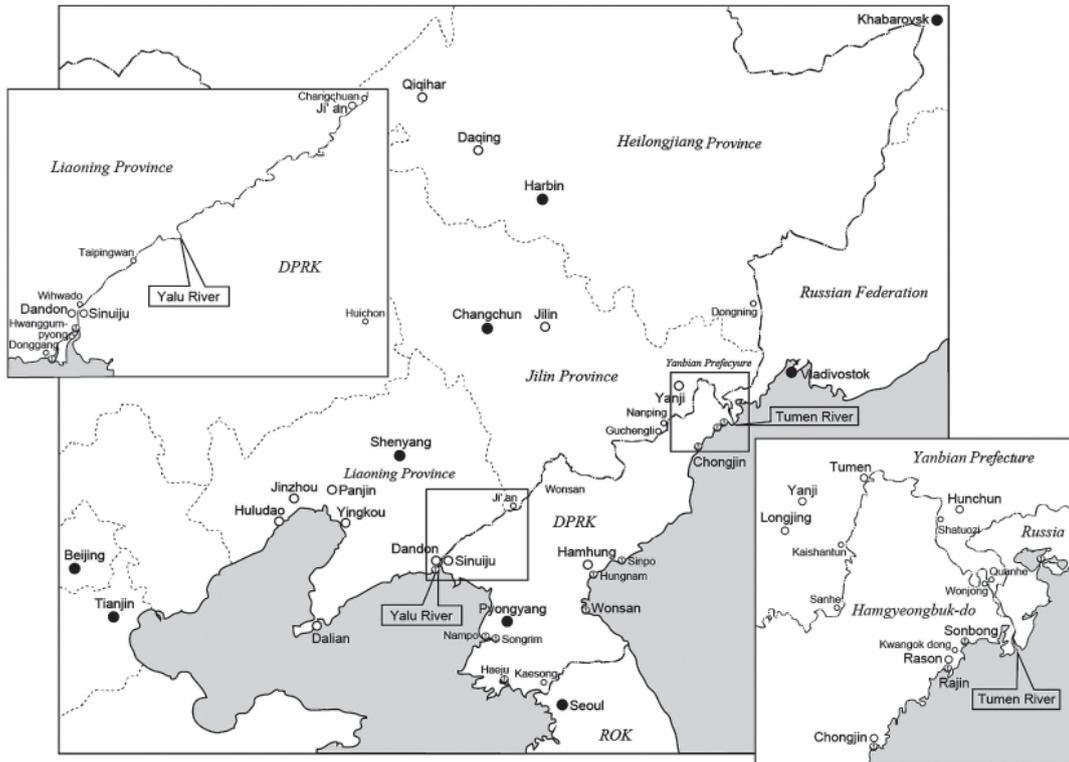
There is a lot of well-developed logistics infrastructure such as ports, railways, and roads between China and the DPRK. The two countries have laid a favorable foundation for logistics cooperation, though some of the facilities slightly lag behind others. As exemplified by the construction of the new Yalu River bridge in particular, the recent improvement of logistics infrastructure is clear proof that both countries have stepped up their cooperation in the field of logistics infrastructure, and this will provide a basis for even closer logistics cooperation between the two countries.

One especially noticeable point is that the cross-border logistics exchange and cooperation between China and the DPRK encourage joint industrial cooperation and development in related economic zones. From the viewpoint of long-term strategy, this will no doubt contribute to establishment of logistics networks and industrial cooperation between China and the Korean Peninsula, cooperation of logistics networks and industrial cooperation in the Korean Peninsula, establishment of huge logistics networks that combine all Northeast Asian countries and link them to Europe and industrial cooperation, and eventually promotion of the development and prosperity of the whole of Northeast Asia, including the Korean Peninsula. From this perspective, future cooperation in the logistics field will bring a breakthrough for building a framework for economic cooperation in Northeast Asia, and Sino-DPRK industrial cooperation will play a pivotal role in making this happen.

Another point is that the parts of the Sino-DPRK projects for the Rason Economic and Trade Zone and the Hwanggumphyong and Wihwado Economic Zone which have already started practically serve as model economic zones. On one hand, these projects contribute to development of China’s Northeast economic district, and on the other hand, they contribute to the economic development strategy currently being implemented by the DPRK. This will not

only encourage Sino-DPRK economic cooperation to enter a new phase of development but also contribute to establishment of the basis of the economic cooperation structure in Northeast Asia and thus to peace and development in the region.

Figure 1: China-DPRK Boarder Area (reference)



Source: ERINA

* DONGMING ZHANG, Deputy Dean, College of International Relations, Liaoning University; Director, Center for Korean Studies; and Professor and Ph.D. (Shenyang 110136)

[Funded Projects]: 2012 Liaoning Province Social Science Planning Fund Key Project “Research into the New Changes in the Situation on the Korean Peninsula and China’s Northeast Regional Development Strategy”, Project Approval No. L12AGJ003; 2011 Philosophy and Social Science Research Crucial Project “Research into Northeast Asian Regional Cooperation and the Opening-Up to the Outside World of China’s Northeast”, Project No. 11JZD050.

[基金项目]: 2012年度辽宁省社会科学规划基金重点项目《朝鲜半岛局势新变化与我国东北地区发展战略研究》, 项目批准号:L12AGJ003; 2011年度哲学社会科学重大攻关项目《东北亚区域合作与我国东北地区对外开放研究》, 项目编号: 11JZD050

¹ In 2007, over 70 Chinese enterprises participated in the Third International Autumn Product Fair hosted by the DPRK in Pyongyang. China permitted 77 investment projects during the period from January to August alone, and the total value of agreements amounted to approximately US\$380 million. For its part, the DPRK sent 19 scientific research organizations and enterprises to the 2007 Northeast Asia High-Tech Exhibition held in Shenyang.

² These agreements were signed in October 2009, when Prime Minister Wen Jiabao visited the DPRK.

³ On June 15, 2011, the Dandong Maritime Affairs Bureau of Liaoning Province and the North Phyongan Province Maritime Affairs Supervisory Agency of the DPRK conducted their first joint patrols and

inspections in the valley of the Yalu River.

- ⁴ Investments in the Wangjianglou (Imdo) power plant project are expected to total 600 million yuan. The power plant, located on the Chinese side of the river, has a maximum output of 40,000 kW and is capable of generating 154 million kWh of electricity annually. The construction period is from 2010 to 2013. Situated in Wangjiang Village, Qingshi Town of Ji an City, the dam is 36 km away from the center of the city and 1.5 km away from the DPRK s Imdo station. Meanwhile, investments in the Wenyue [Munak] (Changchuan) power station project are expected to total 500 million yuan. The power plant, located on the DPRK side of the river, has a maximum output of 40,000 kW and is capable of generating 154 million kWh of electricity annually. The construction period is from 2010 to 2013. Situated in Changchuan Village, Qingshi Town of Ji an City, the dam is 24 km away from the center of the city and 5.5 km away from the DPRK s Munak Station. The Yalu River, which constitutes the boundary between China and the DPRK, runs through Ji an City for 203.5 km, and provides abundant water resources to its valley. In this area, the river already has two hydroelectric power plants in Yunfeng and Weiyuan.
- ⁵ China Daily website: <http://www.chinadaily.com.cn/dfpd/2010-03/01>
- ⁶ The total length of the Yalu River Road Bridge, which is waiting for construction work to begin, is approximately 17 km of which 10.9 km is on the Chinese side. The investment budget is approximately 1.8 billion yuan (RMB) of which 1.2 billion yuan comes from within China.
- ⁷ In February 2008, Donglin Trade Company, based in Hunchun City, Jilin Province, entered into an agreement with the US Murdoch Group for a collaborative project to integrate roads and railways, ports and harbors, and industrial areas in China and the DPRK, and the two parties decide to invest three billion yuan in the first phase of the project. If this project is completed, the Tumen River Transport Corridor will be built, contributing greatly to the development of China-DPRK trade and significantly facilitating the establishment of the Northeast region s second largest route for overseas expansion. This project consists of three major pillars. One is roads and railways. The road in this project refers to one from the DPRK s Wonjong port of entry to Rajin Port (48.75 km), which is repaired and expanded according to China s second-class road standards. The railways relate to the Northeast China Railway, which will be newly built between Dongning, Heilongjiang Province, and Hunchun, Jilin Province (218.8 km), and the port railway from the DPRK s Rajin Port to China s Hunchun Quanhe port of entry (approximately 50 km). The second pillar is ports and harbors, and the project aims to remodel Piers 1, 2, and 3 of Rajin Port and plan and construct new piers based on these existing ones. It also refers to sea routes for passengers and cargoes which lead to ports along China s southeast coast, Japan, the ROK, and Southeast Asia from the DPRK s Rajin. The third pillar is industrial areas, and currently planned and constructed are the DPRK s Rason Chinese Investment Collaboration Area (the 1.3-square-kilometer area is located in Kwan gok-dong, which is situated between the DPRK s Rajin and Sonbong, and focuses on processing for export and business services) and the Harbor Bond and Distribution Area (the 3.7-square-kilometer area is located in Rajin Port s waterfront zone).
- ⁸ The short-term objective is to start an economic cooperation area that bestrides the Chinese-Russian (Hunchun-Khasan) boundary and demarcate certain areas from China s Hunchun City and Russia s Khasan district and manage them in a closed or semi-closed way while referring to the cooperation method used for the Qorghas port of entry on the boundary between China and Kazakhstan. At the same time, the long-term aim is to gradually create and develop a Chinese-Russian free trade area based on an economic cooperation area that extends over the boundary between China and Russia, in other words, an economic cooperation area that straddles the Hunchun-Khasan boundary.
- ⁹ Jilin Quanhe Port provides the best route that allows China to advance to the DPRK s Rajin-Sonbong Free Trade District. So far, Yanbian Shipping Co., Ltd. has used the port to begin scheduled container shipping services for the Yanji-Rajin-Busan route.
- ¹⁰ The port serves as a major route for Yanbian Prefecture s frontier trade with the DPRK s Ryanggang Province.
- ¹¹ The port serves as a major route for Yanbian Prefecture s frontier trade and automobile cargo transport with the DPRK s North Hamgyong Province.
- ¹² The Yalu River Bridge connects China s Mei-Ji Railway and the DPRK s railways, making it one of the three major trunk lines for railway transport between the two countries. Ji an is a first-class port under China s policy for opening its economy to the external world.
- ¹³ Jilin Tumen Port is connected by railways and road bridges. It is currently responsible for handling state, regional, and frontier trade between China and the DPRK as well as cross-border cargo imported from and exported to Russia, East European, and other countries through Tumen. It is also responsible for cargo transported by Chinese and Japanese businesses via the DPRK s Chongjin and immigration services between China and the DPRK.
- ¹⁴ The port permits the passage of Chinese and DPRK citizens with a valid passport, a visa, or a frontier pass, cargo, and means of transport. It also permits the passage of people who have a valid passport or a visa,

cargo, and means of transport from third countries. This is part of the major route used by China-DPRK trade and tourists.

- ¹⁵ Dandong Railway Port is one of China's largest railway ports. It is a first-class national port that was permitted to be opened externally through consultations between China and the DPRK in 1955. It is the only port abutting on China and the Korean Peninsula that allows people from third countries to pass through it.
- ¹⁶ Dandong Port is divided into the Dadong port area and the Langtou port area. The former is located in the southern part of Donggang City. Currently, it has six routes for scheduled domestic and international container ships and one international passenger transport route between Dandong and Incheon in the ROK. It has business tie-ups with over 70 ports in more than 30 countries and territories such as Japan, the ROK, the DPRK, Russia, and Hong Kong. It is also the Northeast region's second largest, fully equipped port that provides integrated international cargo, passenger, and container transport services.
- ¹⁷ New Year's joint editorial of January 1, 2011 for the *Rodong Sinmun*, Korean People's Army, and Young Avant-Garde; page 2 of the January 1, 2011 issue of the *Rodong Sinmun*
- ¹⁸ Up to now, this has been the only state-approved regional plan to open a frontier area and the only frontier development and opening-up pilot and model area that was permitted and implemented by the state.
- ¹⁹ The area includes part of Changchun City and Jilin City, Jilin Province (part of Changchun City refers to the urban areas of the city, Dehui City, Jiutai City, and Nongan Prefecture, and part of Jilin City relates to the urban areas of the city, Jiaohe City, and Yongji Prefecture) as well as Yanbian Prefecture (abbreviated as "Chang-Ji-Tu"). It has a total area of about 30,000 km² and a population of about 7.7 million. It accounts for 30% of Jilin Province's total area and population and represents 20% of its economy. According to the outline of the plan, the Changchun-Jilin-Tumen Development and Opening-up Pilot Area will be constructed with Hunchun as a gateway to open the economy and Yan(ji)-Long(jing)-Tu(men) as the area's first open-economy district. The area will be developed, and its economy opened, by linking it with frontier and inland areas, with Changchun and Jilin Cities as the foundation of development. The Pilot Area will take the initiative in breaking through difficulties, achieving high growth, building a new powerful economic zone, and serving as a model open-economy district, thus accelerating regional development in Jilin Province earlier than any other area.
- ²⁰ On March 7, 2010, Li Longxi (delegate to the National People's Congress, deputy secretary to the committee of Jilin Province's Yanbian Korean Autonomous Prefecture, and the governor of the prefecture) announced in Beijing that Jilin City would accelerate the construction of the Changchun-Jilin-Tumen Development and Opening-up Pilot Area. (See the website of the Changchun City government.)
- ²¹ "Transport of domestically traded cross-border cargo" refers to a method of shipping domestically traded cargo from a port in the area controlled by Chinese customs and transport it to another port in the area controlled by Chinese customs through areas outside the Chinese border.
- ²² Zhang Dongming, "Reflections on the Building of a Cooperation Framework for Northeast Asian Logistics", *Korean Unification Studies*, 2007, (11) [in Korean]
- ²³ Xinhuanet Changchun, April 26, 2011
- ²⁴ The Rason Economic and Trade Zone, located in the northeastern part of the DPRK, borders on the Yanbian areas in the Chinese province of Jilin. The Hwanggumphyong and Wihwado Economic Zone, located in the lower course of the Yalu River, abuts on the Dandong area in China's Liaoning Province.
- ²⁵ Chen Deming, Chinese Minister of Commerce, and Jang Song Thaek, Chief of the Central Administrative Department of the Workers' Party of Korea, served as chairman of the Joint Guidance Committee on the Chinese and DPRK Sides, respectively. In November 2010, the first meeting of the Joint Guidance Committee was held in Pyongyang, the DPRK.
- ²⁶ Xinhuanet, June 9, 2011
- ²⁷ Xinhuanet, September 15, 2011

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