# **Final Report**

China-Japan-Korea Joint Project

"Trilateral Cooperation for Improvement of Supply Chain Connectivity (SCC)"

2016



The Joint Project "Trilateral Cooperation for Improvement of Supply Chain Connectivity (SCC)" was researched by the Chinese Academy of International Trade and Economic Cooperation (CAITEC), Japan External Trade Organization (JETRO), Korea Trade-Investment Promotion Agency (KOTRA), and Korea Institute for International Economic Policy (KIEP), under the coordination of the Trilateral Cooperation Secretariat (TCS).

The Final Report of the Joint Project was summarized by the TCS, based on the research results provided by the above research institutes. The Final Report was reviewed by the Ministry of Commerce of the People's Republic of China (MOFCOM), the Ministry of Economy, Trade and Industry of Japan (METI) and the Ministry of Trade, Industry and Energy of the Republic of Korea (MOTIE).

## Contents

1. Introduction	2
2. Overview of Current Status of Supply Chain Connectivity in Three Countries	3
3. Best Practices on Supply Chain Connectivity in Three Countries	4
4. Survey Results	7
5. Issues for Improvement and Action Plans	9
6. Policy Recommendation for Future Direction	.10

#### **1. Introduction**

The People's Republic of China (China), Japan, and the Republic of Korea (ROK) are the economic engines in the world, constituting 21% and 22% of the world population and GDP, respectively. The trade volume of the goods produced from these three countries accounts for approximately 20% of the world trade volume. Compared to the trade volume of ASEAN (7%), the EU (32%), and NAFTA (16%), the three countries also show significance in the global trade. It is important to notice that the three countries are also major trading partners with each other. In 2015, Japan and ROK ranked the 3<sup>rd</sup> and 4<sup>th</sup>, respectively, in China's export destinations. China and ROK were Japan's 2<sup>nd</sup> and 3<sup>rd</sup> export destinations, while China and Japan were ROK's 1<sup>st</sup> and 3<sup>rd</sup> destinations.

Nevertheless, the three countries show a low intra-regional trade ratio (19.5%), compared to that of ASEAN (24%), NAFTA (42%), and the EU (63%). However, since the intermediary goods are traded between the three countries to produce the final goods, the improvement of Supply Chain Connectivity (SCC) between the three countries is expected to strengthen the economic relationship between them and boost their economies by expanding intra-trade.

In this regard, the three countries shared a common view that the cooperation in logistics and distribution is essential to assure mutually beneficial and sustainable development at the 10<sup>th</sup> Trilateral Economic and Trade Ministers' Meeting held on October 30, 2015 in Seoul, and the three economic ministers agreed to start the Joint Project "Trilateral Cooperation for Improvement of Supply Chain Connectivity (SCC)." At the 6<sup>th</sup> Trilateral Summit held on November 1, 2015 in Seoul, the three leaders emphasized that the three countries would further strengthen economic and trade relations and deepen the convergence of interests and enhance cooperation with a view of creating an attractive environment for trade and investment. Hence, the three countries have agreed on launching this Joint Project, recognizing that the efficiency and smoothness of logistics in these countries are extremely important for increasing productivity of their economies, expanding investments between them, and improving economic growth in this region.

This Final Report of the Joint Project is the follow-up outcome of the 6<sup>th</sup> Trilateral Summit. As agreed to launch the Joint Project by the leaders, the project was carried out by the Trilateral

Cooperation Secretariat (TCS) in collaboration with the Chinese Academy of International Trade and Economic Cooperation (CAITEC), Japan External Trade Organization (JETRO), Korea Trade-Investment Promotion Agency (KOTRA), and Korea Institute for International Economic Policy (KIEP). The survey and research were conducted by the research institutes, and TCS compiled this Final Report from the outcome of the surveys conducted by the research institutes as well as four series of Working Group (WG) meetings organized by TCS with participation of the research institutes and relevant governments.<sup>1</sup>

This Final Report reviews the current status of SCC and best practices in the three countries, highlights the survey results of the research institutes, and determines future directions for improvement. Thus, the Final Report will provide the three governments with cases to be improved as well as a vision for possible cooperation for improving the supply chain performance by collecting opinions from supply chain users.

### 2. Overview of Current Status of Supply Chain Connectivity in Three Countries

In 2015, the trade volume of the three countries accounted for approximately 20% of the world trade, while the intra-regional trade ratio between the three countries accounted for 19.5%. These portions have a particular feature that between the three countries, the production networks have been strengthened. The export of intermediate goods increases within the East Asian region, while the share of final goods is high in export bound for the EU and the US. In order to promote international trade activities in the three countries in mutually beneficial ways, the three countries have already signed the Trilateral Investment Agreement in 2012, and are currently negotiating for the conclusion of Trilateral FTA. In the areas of transport and logistics, the three countries agreed to publish the "Joint Report on Distribution and Logistics among Japan, China, and Korea" in the 3<sup>rd</sup> Trilateral Economic and Trade Ministers' Meeting in 2004, and published the Joint Reports in 2006 and 2008. Those Reports analyzed current situations

<sup>&</sup>lt;sup>1</sup> The 1<sup>st</sup> WG meeting was held on January 21, 2016 in TCS, Seoul; the 2<sup>nd</sup> meeting on March 31, 2016 in Tokyo; the 3<sup>rd</sup> meeting on June 27-28, 2016 in Beijing; and the 4<sup>th</sup> meeting on August 18-19, 2016 in TCS, Seoul.

and described action plans and issues for each country. In the 7<sup>th</sup> Trilateral Economic and Trade Ministers' Meeting in 2010, the three ministers agreed to strengthen the cooperation in distribution and logistics area, reflecting the deepening of economic and trade relations between the three countries.

In transport and logistics, the three countries agreed to create a seamless logistics system, establish an environmentally-friendly logistics system, and continue working towards a balance between security and efficiency in logistics within the Northeast Asian region through the trilateral consultative mechanism. In particular, the three countries have networked through "North East Asia Logistics Information Service Network (NEAL-NET)" since 2010. This transnational, non-profit cooperative mechanism for logistics information exchange and technological cooperation aims to improve the overall logistics informationization level of Northeast Asia by creating an interconnection platform and unified basic exchange standard in order to advance regional cooperation. Thanks to the network, the three countries can get the information on departure and arrival time of container ships, shipping and order schedules, and time table on containers getting in and out between them. Furthermore, the governments of the three countries discussed and announced the agenda for the improvement of the business environment in 2008, which plays an important role in reducing the supply chain transaction cost between the three countries.

Through the above-mentioned cooperation, the three countries continuously make efforts to improve the efficiency and security level, reduce costs, secure a smooth use of the system, and expand trading activities.

#### **3. Best Practices on Supply Chain Connectivity in Three Countries**

In fact, the three countries have many best practices on SCC. For this Joint Project, the examples below are carefully chosen by CAITEC, JETRO, and KOTRA/KIEP as model cases for the improvement of SCC between the three countries.

First, through the *unification of HS code classification criteria*, Japan made all criteria for tariff classifications unified under the 3 levels of authority, the Customs Agents, the Bureau of

Customs classification center and the Ministry of Finance Bureau of Customs. This practice shows that the customs process becomes more efficient and transparent by the centralized control via the same database in order to unify HS classification in Japan, the training system provided to the customs personnel at the Classification Center. Japan Customs respond to all written, email and verbal inquiries on HS code classification, except for those that are in court or being disputed. In addition, they ensure transparency by releasing the written inquiries using the advance ruling system, as well as examples of classifications that may easily cause disagreement, on the Customs website.

Second, as the Port of Busan, ROK, has raised its position to the hub port level for Northeast Asia, Japanese logistics firms are currently expanding various operations in this port. One of the elements that support the Busan Port is its cutting-edge port IT system. Through the Port Management Information System (Port-MIS) built by the Ministry of Maritime Affairs and Fisheries of ROK, users are able to carry out all procedures for the entry and exit of ships from ports through internet submissions. Port-MIS is also applicable on users' mobile phones (Smart Mobile Port-MIS). Alongside Port-MIS, congestion at the entrance to the container terminal has also been eliminated through the realization of management for entry and exit through gates with the introduction of Radio Frequency Identifier (RFID) cards. The introduction of the advanced IT system in ports can be worth considering for the improvement of SCC among the three countries.

Third, Regulated Agent & Known Shipper regulation (RA/KS) in Japan has been implemented since 2005 under the Civil Aviation Bureau of the Ministry of Land, Infrastructure, Transport and Tourism of Japan. With the rapid increase in e-commerce sales and the new launch of airlines in Incheon and Pudong Airports in ROK and in China, respectively, the improved air cargo security mechanism became more important than before. In this regard, RA/KS in Japan is a good practice to focus on in the three countries.

Fourth, Qingdao Qianwan Free Trade Port Zone (QFTZ) in Shandong Province, China, was established in 1992, which has been a modern international logistics center for trade between China, Japan, and ROK. A series of practices are undertaken in the zone including the mutually-recognized Authorized Economic Operators (AEO), Sino–Korea land and Sea Automobile Cargo Transportation, and the third-party testing. Firstly, the mutually-recognized AEO by

China and ROK improves clearance efficiency. The Customs of China lists highly-authorized enterprises in the Sino-Korea mutually-recognized AEO arrangement, so that the exported goods to ROK from those enterprises enjoy the simplified check-up procedure and document review, and also receive the prioritized clearance process. Altogether 200 highly-authorized enterprises in Shandong Province (109 of them are located in Qingdao City) have benefited from the mutually-recognized AEO. According to the statistics, the clearance time of exporting to ROK by shipping and air reduces by 34.78% and 71.43%, respectively. Secondly, China and ROK run the Sino-Korea Land and Sea Joint Automobile Cargo Transportation System between Qingdao, Yantai, Weihai, Incheon, and Pyeongtaek ports. The tractor receives the trailer directly from the cabin, making the "door to door" delivery with reduced shock and shortened time. As for the next step, China and ROK will explore the land and sea joint automobile cargo transportation system used for truckload mode to significantly increase the amount of the land-sea joint transportation operation between China and ROK. Thirdly, to expand the business cooperation in the area of the third-party testing, the Exit Inspection and Quarantine Technology Center of Shandong and ROK's largest third party testing organization-Korea Research Institute of Chemical Fusion (KTR) -carry out the Sino-Korea pre-testing cooperation toward food and agriculture products. They also establish the liquor and food-testing laboratory in Qingdao Qianwan Free Trade Port Zone. The lab is qualified as the "third-party testing organization" by the Supervision Department of Food and Drugs of ROK. The exported food and agriculture products to ROK are to be tested by the lab, and the testing result will be recognized by the Supervision Department of Food and Drugs of ROK. When the qualified goods arrive at ROK, they will not need to be checked for a second time. This approach significantly improves the clearance efficiency and lowers risks for enterprises.

Fifth, the Korea–China Customs Service started a shipping service from Incheon/Pyeongtaek Port in ROK to Weihai/Qingdao/Huangdao Port in China in June 2015. It is an e-commerce postal delivery service via ferries. Since the service is provided at a cheaper cost and simple clearance with the requirement of only X-ray examination, this practice was selected as one of the best practices by research institutes.

#### 4. Survey Results

While the three countries have made considerable joint efforts and initiated numerous practices such as the aforementioned examples, this Joint Project has collected voices and requests from direct users of SCC and business communities to clarify the current situation and issues to be solved in the entire supply chain from manufacturing to selling.

Based on the different characteristics of industrial structures between China and Japan/ROK, CAITEC surveyed domestically-located Chinese companies, which are engaged in the supply chain with Japan and ROK, while JETRO and KOTRA/KIEP analyzed Japanese and Korean companies, respectively, located in the other two countries. The survey shows that there exists a list of user requirements for improvement on SCC between the three countries.

CAITEC collected a total of 135 valid questionnaires primarily from the related departments of commercial administration within Chinese government, industry associations, and enterprises. The survey examined the proportion of sales, raw material sources, import and export of products, and the key supply chain distribution. According to the survey, Chinese enterprises generally report no problem during the operation process of the supply chain. However, a few enterprises pointed out a couple of problems such as port and airport conditions and the absence of 24-hour customs clearance services. Regarding the implementation of laws and regulations, the surveyed Chinese enterprises are least satisfied with Japan and ROK's high customs clearance costs, inconsistency of related import and export licensing policies, and cumbersome FTA implementation process. CAITEC also conducted the interview with Chinese enterprises trading with Japan and ROK, relevant service organizations, and industry associations. The interviewees listed the tariff quota system, positive list system, complicated business visa formalities, joint guarantor system, and "re-entry permit" system as major problems in trade and logistics in Japan, while non-tariff barriers as a major problem in trade and logistics in ROK.

JETRO collected the responses from a total of 511 firms to their questionnaire survey on Japanese-affiliated firms and branch firms in sectors such as manufacturing, wholesale/retail, and logistics operation in China and ROK. The supply chain survey for Japanese companies in China indicates areas of potential improvement, such as logistics facilities (addressing the lack

of import and storage infrastructure for dangerous chemicals, improvement of cold chain logistics infrastructure development, and control technologies, etc.), consistency of policies for import and export permit, efficiency of customs clearance (unification of customs clearance and quarantine procedures for coastal and inland areas, unification of HS code classification criteria, faster imported foods customs, and inspection procedures, etc.), regional regulations (permit certifications, inspections, etc. relating to export and import), fostering logistic and customs personnel, and reducing the high cost in inland transportation. Interviewees of Japanese companies located in ROK pointed out that unifying container loading weight standards, developing a fair competitive environment, common AEO mutual recognition, workers dispatched from the harbor transportation union, and addressing Busan Port's poor road infrastructure, lack of land for warehouse use near Seoul, low safety awareness, pallet taxation, land price rise at the time of contract renewal, and issues of double number system of containers and chassis are areas of potential improvement.

KOTRA/KIEP targeted Korean firms operating in China, specifically those that were registered at the KOTRA database of Korean companies engaged in overseas operation for the survey on China, and a total of 197 companies responded to the questionnaires. Respondents pointed out that the level of management in infrastructure, utilization of FTA and safety management regulation, people-to-people exchange in the customs/logistics sector, and professional training of customs/logistics personnel need to be improved. KOTRA/KIEP selected 36 companies for an in-depth interview where interviewees answered that cold chain infrastructure in China, China's logistics security and safety management, consistency in import/export customs clearance process (HS code classification) and transparency in China's logistics regulations, cooperative system between relevant organizations, and digitalization/automation of import/export procedures are the main areas that need to be improved in China. KOTRA/KIEP targeted Korean firms operating in Japan, specifically those that were registered at the KOTRA database of Korean companies engaged in overseas operation for the survey on Japan, and a total of 115 companies responded to the questionnaires. Respondents identified levels of management in infrastructure and logistics information exchange as areas needing improvement regarding trade and logistics in Japan although companies' evaluation in the questionnaires was generally positive. KOTRA/KIEP selected 22 companies to interview where interviewees answered that the need for unified standards for pallets, difficulties in

securing trailers, excessive document requirement from the Japanese customs, the cost of container cleaning to foreign companies, and the absence of a system through which firms can check logistics information in real time reflect scope for improvement.

#### **5. Issues for Improvement and Action Plans**

Based on the survey results, each research institute individually selected SCC improvement areas among the three countries. The improvement areas and suggested action plans by each research institute are as follows:

First, the Joint Project found that the business sectors experience inconvenience caused by nontariff barriers (NTB). In this regard, complicated procedures and criteria for temporary entry and foreign investors' residence; complex procedures and criteria for exporting products' inspections and quarantine; insufficient import and storage infrastructure for dangerous chemicals; and unfair competitive environment were identified by the research institutes. To address inconvenience caused by NTB, the introduction of the application for the short-term multiple entry visa and the establishment of a Sino–Korean unified technical inspection center were suggested.

Second, the Joint Project discovered the need to enhance the information sharing system related to SCC. In this regard, the lack of development and control technologies and human resources in cold chain logistics; high cost on inland transportation; and the absence of a platform or system for information access and advance notice for regulations and customs procedures, for online location tracking on vessels and containers, and for electronic customs were indicated. To strengthen the information sharing, a collaborative research on how to set up a smooth information-sharing platform and the promotion of the joint distribution with an aim of establishing an information sharing platform were recommended.

Third, the Joint Project determined that AEO need to be mutually recognized for smoother logistics. The establishment of a trilateral AEO approval system to contribute to smoother logistics between the three countries was jointly proposed.

Fourth, the Joint Project revealed that users expect more transparent and easy-to-use customs.

In this respect, complicated administrative procedure of tariff quota, inconsistent customs clearance and quarantine procedures for coastal and inland areas, inconsistent HS code classification criteria, slow imported food customs and inspection procedures, and the lack of transparent legal system were identified by the research institutes. For more transparent and easy-to-use customs, the introduction of simple formalities and steps for import license application, and the creation of SCC dialogue channels were suggested.

Fifth, the Joint Project understood that the users need to be provided consistent standards between the three countries. Regarding this, the lack of efficiency in the Positive List System (PLS), inconsistent Container Maximum Loading Weight Standards, high logistics cost for inland transportation and airport storage, and inconsistent HS code classification for identical products between the three countries were identified by the research institutes. For consistent standards between the three countries, the introduction of an early warning mechanism on trade disputes, building a technical inspection platform, and the cooperation for the unification of standard such as HS code were proposed.

Sixth, the Joint Project recognized the need to make efforts to simplify customs procedures between the three countries. Regarding this, the lack of network and service on sea express service and complex labeling procedures were identified. As part of our efforts to simplify customs procedures between the three countries, further cooperation in e-commerce trade was proposed.

#### 6. Policy Recommendation for Future Direction

This Joint Project highlighted the importance of SCC among three countries by reviewing the status and best practices, as well as by collecting voices and requests from the business sector that engages in supply chain activities in the three countries. The survey demonstrated their strong desire for trilateral cooperation on SCC improvement, which is essential for the enhancement of intra-trade and sustainable development in these countries.

Based on the before-mentioned issues to be improved and action plans suggested by the research institutes, the research institutes jointly proposed six directions for improvement of

SCC between the three countries as an outcome of the Joint Project.

First, further cooperation to eliminate or mitigate NTB between the three countries is necessary to create a smooth supply chain structure. The production structure between the three countries becomes more efficient by reducing supply chain barriers, which leads to intra-trade expansion. Second, the information sharing in the supply chain will lead to an efficient and transparent integrated system. The enhancement of a platform for information sharing related to SCC will harmonize the relevant system in the three countries. Third, the establishment of trilaterally recognized AEO will be beneficial for smoother logistics between the three countries by reducing security threats and time delay. Fourth, transparent and simplified trade facilitation enhances administrative efficiency, reducing costs and time. Further cooperation should be toward setting up joint, transparent, and easy-to-use customs. Fifth, the establishment of consistent standards between the three countries will improve the supply chain between the three countries. Sixth, the cooperation should exist for simplifying customs procedures between the three countries.

In order to elaborate and implement the above six directions and to study concrete measures to improve SCC, this Joint Project suggests, as its recommendation, to establish a trilateral dialogue channel between business and academia.

This Joint Project will provide insights for the three countries on concrete measures for trilateral cooperation on supply chain improvement. The follow-up of this Joint Project will bring a significant opportunity for the three countries to expand intra-trade, deepen economic relationships, and raise economic competitiveness in the world through the achievement of an efficient and advanced logistics system as well as an upgraded logistics environment. As one of the largest economic blocs in the world, the joint efforts for the improvement of SCC among the three countries will not only boost economies in the region but also provide a great opportunity to revitalize the global economy.