

Government Publications
Registration Number

11-1051000-000802-01



2016/17

Knowledge Sharing Program

— — — (Industry & Trade)

with **Russia Primorsky Krai**

Rusky Island Development Strategy and
Investment Promotion Plan





2016/17

Knowledge Sharing Program
(Industry & Trade) with



RUSSIA PRIMORSKY KRAI

2016/17 Knowledge Sharing Program (Industry & Trade) with Russia Primorsky Krai

Project Title	Rusky Island Development Strategy and Investment Promotion Plan
Prepared by	Institute of Eurasian Studies Kookmin University
Supported by	Ministry of Strategy and Finance (MOSF), Republic of Korea Korea Trade-Investment Promotion Agency(KOTRA)
Prepared for	Government of the Russian Federation
In cooperation with	Government of Primorsky Territory, Russia Far Eastern Federal University, Russia Far East Development Fund, Russia KOTRA Vladivostok Office
Project Directors	Won Sok Yun, Executive Vice President for Biz info & Trade, KOTRA Sang Young Hong, Director General, Development Cooperation Office, KOTRA
Senior Advisor	Dong Gyu Shin, Senior Advisor and Head Delegation of KSP Consultation
Project Manager	Ji Won Lee, Manager, Development Cooperation Office, KOTRA
Project Officer	Yi Rye Kim, Researcher, Development Cooperation Office, KOTRA
Authors	Sang Joon Lee (Principal Investigator, Director of the Institute of Eurasian Studies, Kookmin University) Dong Wuk Kim (Jeju National University, Professor) Seong Hak Yoon (Korea University, Professor) Hyundeok Im (Researcher, Hankuk University of Foreign Studies) Seul Gi Park (Researcher, Hankuk University of Foreign Studies) Yoo Jin Jung (Researcher, Hankuk University of Foreign Studies) Alexander Abramov (Professor, Far Eastern Federal University) Roman Dreliuga (Professor, Far Eastern Federal University)

Government Publications Registration Number 11-1051000-000802-01

ISBN 979-11-6097-659-5 (93320)

979-11-6097-660-1 (95320)(PDF)

Copyright © 2018 by Ministry of Strategy and Finance, Republic of Korea

RUSSIA

PRIMORSKY KRAI

**2016/17 Knowledge Sharing Program
(Industry & Trade) with Russia Primorsky Krai**
Rusky Island Development Strategy and Investment
Promotion Plan

- 2016 KSP (Industry & Trade) with Primorsky Government, Russia
- Overview
- Chapter 1. Jeju's Development and Demands in Developing Rusky Island
- Chapter 2. Improving the Development Plan & Investment Promotion Model for Rusky Island



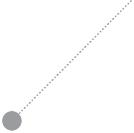
Preface

The Knowledge Sharing Program (KSP), sponsored by the Ministry of Strategy and Finance, is the representative knowledge-based development cooperation program in Korea that supports the economic and social development of partner countries and establishes a friendly economic cooperation base with Korea. KSP has been used strategically for economic cooperation and the demand for creating new growth engines in overseas markets has increased in recent years. As such, KOTRA has been participating as a joint general organization of KSP since 2014, providing advice to promising industries such as trade and investment and contributing to the project, making KSP a cornerstone of bilateral economic cooperation.

KOTRA has been carrying out nine KSP projects including KSP in the Primorsky Krai Province as a general organization of the '2016/17 KSP Industrial and Trade Investment Policy Advisory Program' and focuses on the following two aspects. First, we emphasized the importance of knowledge sharing gained during the economic development process of Korea with partner countries and provided meaningful policy advice in accordance with KSP's goals. Rather than delivering the experience of Korea to partners unilaterally, KOTRA sought to find common implications through communication and cooperation with various participants, including senior officials of partner countries. Second, we have improved the effectiveness of policy advice by upgrading the KSP project to lead to practical economic cooperation and allowing Korean companies to participate.

With the second Eastern Economic Forum in September 2016, President Putin expressed his commitment to develop Russia's Far East, including Russky Island, as an advanced science technology and education hub in the Asia-Pacific region. This led the Primorsky government to ask the Korean government for policy advice on establishing the development concept of Russky Island by benchmarking Jeju Island. In this context, KOTRA conducted an industrial and investment KSP policy consultation with Kookmin University's Institute of Eurasian Studies under the subject of "Establishing the Concept of Development of Russky Island Development Area".

This report shares the development experience of Jeju Island and contains a strategy to create an advanced science technology and international education center (MICE center) by utilizing the available resources and research capacity inside Russky Island, such as Far Eastern Federal University. In order to develop into an advanced science and innovation complex, Far Eastern Federal University created a high and advanced science cluster with the competence of IT (Information Technology), BT (Biotechnology) and MT (Marine Technology). The Korean



government also established the Korea-Russia Technical Cooperation Center and proposed the promotion of cooperation between the two countries in the science and technology field. Additionally, if Russky Island will be the Territories of Advanced Social and Economic Development (TASED), a synergy effect is expected to be created by connecting Russky Island TASED with the Vladivostok Free Port (trade), Nadezhdinsky(production), Mikhailovsky (farmhouse) and Partizansk (petrochemical). Based on the development experiences of Jeju Island, we proposed the coordination plan for providing the development fund of the Russian government and/with the entry plan of Korean companies to the Far East by the using of the Korea-Russia investments and loans platform.

The result of the Primorsky Krai KSP policy advisory based on the knowledge gained from the development experiences of Jeju Island was reflected in the development concept (report) of Russky Island prepared by the Primorsky Krai government and then submitted to the Federal government in April 2017, which was finalized by Prime Minister Dmitry Medvedev in early June. KOTRA has served as a point of contact between the two countries to assist in the recruitment of domestic investors for the establishment of the Russky Island International Cooperation Center, which was established by the Far East Development Fund as a follow-up to KSP.

Prior to the publication of this report, I would like to express my sincere appreciation to Mr. Sang-Joon Lee, principal investigator and director of the Institute of Eurasian Studies of Kookmin University; Mr. Dong-Wuk Kim, professor at Jeju National University; and Mr. Seong-Hak Yoon, professor at Korea University for sharing the experiences of Korea's economic development. I am also grateful to the former president of NH Financial Group Mr. Dong-Gyu Shin, senior advisor and head of delegation to the KSP Consultation; the Primorsky Krai government; the Far East Development Fund; Far Eastern Federal University; KOTRA's overseas office in Vladivostok and the Korean Consulate General in Vladivostok. Furthermore, I am thankful to those who have offered valuable advice for the completion of the report, including Mr. Wan-Suk Hong, Mr. Young-Kwan Jo, Mr. Young-Jin Kim, Mr. Dong-Sun Lee and Mr. Hwan-Jun Lee.

Lastly, I'd like to disclose that the contents of this report are opinions of experts who participated in the project, and are not official opinions of KOTRA.

August, 2017

Wonsok Yun

Executive Vice President for Business Information & Trade Affairs, KOTRA



Contents

2016 KSP (Industry & Trade) with Primorsky Government, Russia	1
Overview	9

Chapter 1

Jeju's Development and Demands for Developing Russky Island

1. Comparison of Russky Island and Jeju Island	20
1.1. Natural Environment & Endowment Factors	21
1.2. System & Policy Factors	23
2. Development of Jeju Island	24
2.1. Analysis of Jeju's Economic and Industrial Structure	24
2.2. Jeju International Free City Development Process	29
2.3. Jeju's Development System & Improvements in Investment Environment	35
2.4. Jeju's Major Development Projects	46
3. Demands in Developing Russky Island	60
3.1. Russky Island Economic and Industrial Structure Analysis	60
3.2. Russky Island Development Preparation Course	65
3.3. Development System and Improving Investment Environment	70
3.4. Major Development Projects	74
3.5. Development Environment Comparison of Russky Island and Jeju Island	79

Chapter 2

Improving the Development Plan & Investment Promotion Model for Russky Island

1. Improving Russky Island's Development Policy	84
1.1. Current Russky Island's Development Policy	84
1.2. Improving Russky Island's Development Policy	89
2. Investment Promotion Model for Russky Island's Development	101
2.1. Analysis of Russky Island's Foreign Investment Attractiveness	101
2.2. Improving Foreign Investment Attractiveness	105
2.3. Differentiating Investment Financing Structures by Project Type	110
2.4. Investment Promotion Plans by Projects	115
References	123

Contents | List of Tables

[Table 1] 2016/17 Primorsky Krai, Russian Knowledge Sharing Program (KSP) Consultation Advisory Structure	2
[Table 2] 2016/17 Russia KSP II Survey of Demands & Topic Selection	3
[Table 3] Russia KSP Advisory Tasks and Korean Researchers (Initial)	4
[Table 4] Russia KSP Advisory Tasks and Korean Research Team (Current)	5
[Table 5] Russia-Korea Trade Status	12
[Table 6] Korean Investment in Russia	13
[Table 7] Comparison Table of Tax Benefits for Territories of Advanced Social and Economic Development (TASED), Porto Franco (Freeport), Special Economic Zones (SEZ)	14
[Table 8] Far Eastern & Primorsky Krai Key Regional Development Organizations and Institutions	16

Chapter 1

[Table 1-1] Jeju Population Trends by Year	24
[Table 1-2] Key Indicators of Income in Jeju Special Self-Governing Province	25
[Table 1-3] Industrial Production Structure of Jeju Special Self-Governing Province	25
[Table 1-4] Visitors to Jeju Island by Nationality	26
[Table 1-5] Current Establishment of Foreign Tourism Promotion Office	27
[Table 1-6] Special Economic Zones in Korea	32
[Table 1-7] Jeju Free International City Development Governance System	36
[Table 1-8] Foreign Investment Zone Incentives	41
[Table 1-9] Jeju Investment Promotion Zone Operation Status	42
[Table 1-10] Foreign Investment Zone Eligible Business and Designation Requirements	43
[Table 1-11] Major Foreign Investor Business Status	43
[Table 1-12] Real Estate Permanent Residence Status by Region	44
[Table 1-13] JDC Core Projects Status	46
[Table 1-14] JSTP Occupancy Status (Dec. 2015)	49

[Table 1-15] NLCS/BHA International School Status	52
[Table 1-16] JDC-designated Duty-Free Shop Sales	53
[Table 1-17] ICC Jeju Facilities	53
[Table 1-18] ICC Jeju Shareholder Composition	54
[Table 1-19] Number of Accommodations/Sightseeing Spots (nearby ICC Jeju)	55
[Table 1-20] Results of Conferences and Events by Year	55
[Table 1-21] Sales/Net Loss Trends in the Last 3 years	56
[Table 1-22] Financing Methods for Major Tourist Infrastructure in Jeju	59
[Table 1-23] Primorsky Krai Tourism Statistics	62
[Table 1-24] Far Eastern Federal University Overview	66
[Table 1-25] Far Eastern Federal University Structure & Courses	66
[Table 1-26] Far Eastern Federal University Major Institutes	67
[Table 1-27] Major Events at Russky Island	68
[Table 1-28] Far Eastern Federal University Meeting Facilities and Capacity	68
[Table 1-29] Russky Island Primorsky Aquarium Overview	69
[Table 1-30] Investment Supporting System	73
[Table 1-31] The Free Port of Vladivostok – Major Benefits	76
[Table 1-32] Status of TASED	77
[Table 1-33] Companies on TASED	78
[Table 1-34] Comparison of Russky Island and Jeju Island	80



Contents

Chapter 2

[Table 2-1] Russky Island TASED Techno Valley (Advanced Science Cluster) Development Direction	95
[Table 2-2] Foreign Investment in the Far East	102
[Table 2-3] Fixed Investment Trends in the Primorsky Territory	103
[Table 2-4] Changes in the Primorsky Krai Industry Productivity Index	103
[Table 2-5] Evaluation of Business Environment by Region in Russia	104
[Table 2-6] MICE Center Development & Investment Attraction Strategies (1)	106
[Table 2-7] MICE Center Development & Investment Attraction Strategies (2)	107
[Table 2-8] Investment Attraction Strategies for an Advanced Science & Technology Innovation Complex	107
[Table 2-9] Differences on Investment Financing Structure by Project Type	111
[Table 2-10] Roles and Responsibility Sharing by PPP type	116

[Figure 1] International Oil Prices and Oil Exports	11
---	----

Chapter 1

[Figure 1-1] Classification of Development Environment Factors	21
[Figure 1-2] Structure of this Report	23
[Figure 1-3] Population and Rates of Change by year (2000-2016)	24
[Figure 1-4] Jeju International Free City Development Process, Plan, and Content	32
[Figure 1-5] Jeju Development System & Investment Environment Improvement Effort	45
[Figure 1-6] Economic Impact of Jeju Hi-Tech Science Complex Flagship Enterprise	48
[Figure 1-7] Economic Impact of ICC Jeju Flagship Enterprise	56
[Figure 1-8] Development Areas for Russky Island	63
[Figure 1-9] Development Process of Russky Island	70
[Figure 1-10] Development Areas in the Russky Island	74
[Figure 1-11] Site Plan for International Cooperation MICE Center	75



Contents

Chapter 2

[Figure 2-1] Russky Island Development Policy and Expected Effects	85
[Figure 2-2] Vladivostok New Highway (Planned)	88
[Figure 2-3] Formulating the Development Goals of Russky Island and Its Vision	91
[Figure 2-4] Integrated Implementation of Development Policy	92
[Figure 2-5] Major Facilities of an International Cooperation Center	94
[Figure 2-6] Fostering Strategy for MICE Industries	94
[Figure 2-7] Policies for the Development of an Advanced Science and Technology Complex	97
[Figure 2-8] Linking Major TASEDs in Primorsky Krai and Free Port	100
[Figure 2-9] Expansion of Russky Island's Development Areas	101
[Figure 2-10] PPP Model	112
[Figure 2-11] Financing Plan Framework	119
[Figure 2-12] Financing and Economic Effects for International Industrial-Academic Cooperation	122

2016 KSP (Industry & Trade) with Primorsky Government, Russia

Hyundeok Lim (Hankuk University of Foreign Studies)

1. Background to the KSP (Industry & Trade) with Primorsky Krai

Supported by the Ministry of Strategy and Finance of the Republic of Korea and directed by the Korea Trade-Investment Promotion Agency (KOTRA), the KSP (Industry and Trade) with the government of Primorsky territory was conducted by the Institute of Eurasian Studies of Kookmin University. The KSP team went through a series of research under the title "Russky Island Development Strategy and Investment Promotion Plan" in cooperation with the Far Eastern Federal University and the Far East Development Fund to make a practical policy recommendation for the Government of the Russian Federation.

Including Primorsky Krai, the Russian Far East is a region where the government of Russian Federation focuses on the growth potential, thus the Korea government has been actively sharing its economic development experiences with the region. Many KSP projects in the Far East region were conducted up to now: in Primorsky Krai in Russia in 2013, Primorsky Krai, Sakhalin Oblast, Khabarovsk Krai, Kamchatka Krai in 2014, and Primorsky Krai, Sakhalin Oblast, Kamchatka Krai in 2015. The 2016/17 KSP with Primorsky government is a progress of the 2015/16 KSP in terms of the research depth and scope since it encompasses spatial development of the Russky Island and focuses on sharing more practical and essential experiences for establishing a development plan.

Since 1996, the Russian federal government has pursued the development of the Far

East region for balanced national development. However, the Far East region has not demonstrated the desired results in development due to socio-economic problems such as population outflow. Because of this, the Russian government has recently carried out various plans and projects to strengthen the connection between the Russian Far East and the Asia-Pacific region. The 2012 APEC Summit was held in Vladivostok, Primorsky Krai as part of its plans, and the government also heralded the "Socio-Economic Development of the Far East and the Baikal until 2025" project in 2013. Also, the annual Eastern Economic Forum has been held in Russky Island since 2015.

Primorsky Krai is the center of the Russian Far East development strategy and a strategic point that occupies the highest GRDP share (23%) among the nine federal states in the Far East Federal District. However, the economic level of the Far East District itself is generally low, and there is little foreign investment flows into Primorsky Krai overall compared to the Far East region. Thus, new motivations are needed to strengthen the region's capacity for economic development. Therefore, the Russian federal government is attempting to strengthen its links with Asia-Pacific region countries and neighboring nations by designating Vladivostok which is the Primorsky Krai's central city as a free port and establishing Russky Island as a special zone. The 2016/17 Russian KSP Primorsky Krai project thus provides policy advice on the following topics.

[Table 1] 2016/17 Primorsky Krai, Russian Knowledge Sharing Program (KSP) Consultation Advisory Structure

Advisory Year	Policy Advisory Topics	
2016/17	Russky Island Special Zone Concept Development and Investment Attraction Plan	
	Sang Joon Lee (Principal Investigator, Kookmin University the Institute of Eurasian Studies Director)	
	Jeju's Development Experience and Demand for Russky Island Development	Dong Wuk Kim (Jeju National University) Sang Joon Lee (Kookmin University) Local Expert: Alexander Abramov (FEFU)
	Improvement of Development Plan & Investment Promotion Model for Russky Island	Sang Joon Lee (Kookmin University) Seong Hak Yoon (Korea University) Dong Wuk Kim (Jeju National University) Local Expert: Roman DREMLIUGA (FEFU)
	Project Manager / Research Assistant	Hyundeok Im (Hankuk University of Foreign Studies)/ Seul Gi Park (Hankuk University of Foreign Studies)

After preparing each topic based on surveying Russian demands, results were confirmed through a review in the initial meeting and on-site surveys. The researchers worked together with economic and industrial experts and local experts for effective research. Also, local experts in Russia were invited to facilitate smooth communication with Primorsky Krai local officials and to provide basic data on project tasks.

2. Progress and Current Status

A. Survey Results and Selection of Research Projects

In order to grasp the demands of the Russian Primorsky Krai government and plan the 2016/17KSP project, relevant departments coordinated their interests and selected their research topics according to the procedure shown in <Table 2>.

[Table 2] 2016/17 Russia KSP II Survey of Demands & Topic Selection

Project Title		2016/17 Primorsky Krai, Russia Economic Progress Knowledge Sharing Program (KSP)								
Principal Investigator		Sang Joon Lee								
I. Possible Topic	Survey Results	<input type="checkbox"/> The following topics were proposed through a survey by the 2016/17 Russian KSP <table border="1" data-bbox="512 1069 1192 1198"> <thead> <tr> <th>Department</th> <th>Proposed Topics</th> </tr> </thead> <tbody> <tr> <td>Primorsky Krai Government, Russia</td> <td>1. Develop Russky Island as a Special Zone through Benchmarking the Jeju Special Tourism Zone 2. Investment Attraction Plan on Russky Island</td> </tr> </tbody> </table>		Department	Proposed Topics	Primorsky Krai Government, Russia	1. Develop Russky Island as a Special Zone through Benchmarking the Jeju Special Tourism Zone 2. Investment Attraction Plan on Russky Island			
	Department	Proposed Topics								
	Primorsky Krai Government, Russia	1. Develop Russky Island as a Special Zone through Benchmarking the Jeju Special Tourism Zone 2. Investment Attraction Plan on Russky Island								
Additional Demands	None									
Suggested Topics by the Korean Side	None									
II. Final Topic Select ion	<input type="checkbox"/> From October 1113, 2016, the 2016/17 KSP survey and inaugural seminar were held in Vladivostok, Russia with senior advisor Shin Dong-Gyu. The relevant ministries and agencies in Primorsky Krai, including the Primorsky Krai government, Primorye Investment Promotion Agency, FEFU, the Far East Development Fund, and the KOTRA Vladivostok Office attended and discussed topics.									
	<input type="checkbox"/> Based on the results of surveying the Russian side, the following research topics were finalized with consultation from KOTRA. <table border="1" data-bbox="343 1592 1202 1771"> <thead> <tr> <th></th> <th>Before</th> <th>After</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Topics</td> <td>1. Develop Russky Island as a Special Zone through Benchmarking of Jeju Special Tourism Zone</td> <td>1. Jeju's Development Experiences and Demands for Developing Russky Island</td> </tr> <tr> <td>2. Investment Promotion Plan on Russky Island</td> <td>2. Improving Russky Island's Development Policy and Investment Attraction Model</td> </tr> </tbody> </table>				Before	After	Topics	1. Develop Russky Island as a Special Zone through Benchmarking of Jeju Special Tourism Zone	1. Jeju's Development Experiences and Demands for Developing Russky Island	2. Investment Promotion Plan on Russky Island
	Before	After								
Topics	1. Develop Russky Island as a Special Zone through Benchmarking of Jeju Special Tourism Zone	1. Jeju's Development Experiences and Demands for Developing Russky Island								
	2. Investment Promotion Plan on Russky Island	2. Improving Russky Island's Development Policy and Investment Attraction Model								

B. Selecting Researchers

The director of the Institute of Eurasian Studies, Professor Sang-Joon Lee of the School of International and Area Studies at Kookmin University, was selected as Principal Investigator and has worked closely with relevant ministries and agencies in Russia and Korea for coordinated research and high-level consultations. After the topics were presented through a survey of the Primorsky Krai government's demands, a team of researchers was created through selecting industrial and economic experts and Russian regional experts with the cooperation of relevant ministries in Korea. In addition, the researchers arranged joint research to optimize and disseminate Korea's development experiences to the Russia. The composition of participating researchers in the beginning of the project is shown in <Table 3>.

[Table 3] Russia KSP Advisory Tasks and Korean Researchers (Initial)

Advisory Task	Name	Position / Organization
Project Manager	Ji Won Lee	Project Manager / KOTRA
Project Officer	Yi Rye Kim	Researcher / KOTRA
Local Affairs	Ki Mo Yang	Director of KOTRA Representative Office in Vladivostok / KOTRA
Principal Investigator (PI)	Sang Joon Lee	Professor / Kookmin University, School of International and Area Studies
1. Develop Russky Island as a Special Zone through Benchmarking of Jeju Special Tourism Zone	Dong Wuk Kim Meang Gu Kang	Jeju National University, Dep't. of Accounting, Professor Korea Development Bank , Senior Researcher
2. Investment Promotion Plan on Russky Island	Meang Gu Kang Dong Wuk Kim	Korea Development Bank , Senior Researcher / Jeju National University, Dep't. of Accounting, Professor

Due to unexpected circumstances, the composition of the initial research team saw changes. Due to the influence of Kim Young-Ran Act, an anti-corruption law which came into force on September 28, 2016, Dr. Kang Myung-Gu (Korea Development Bank) was eliminated from the research team due to belonging to a vested institution. Professor Yoon Sung-Hak (Korea University), an expert in Russian investment, joined the research team on November 1 to replace Dr. Kang Myung-Gu. The current research topics and organization of researchers are shown in <Table 4>.

[Table 4] Russia KSP Advisory Tasks and Korean Research Team (Current)

Advisory Task	Name	Position / Organization
Project Manager	Ji Won Lee	Project Manager / KOTRA
Project Officer	Yi Rye Kim	Researcher / KOTRA
Local Affairs	Ki Mo Yang	Director of KOTRA Representative Office in Vladivostok / KOTRA
Principal Investigator (PI)	Sang Joon Lee	Kookmin University, Eurasia Studies, Professor
1. Jeju Development Experiences & Developing Russky Island	Dong Wuk Kim Sang Joon Lee	Jeju National University, Accounting, Professor Kookmin University, Eurasia Studies, Professor
2. Improving Russky Island's Development Policy and Investment Attraction Model	Sang Joon Lee Seong Hak Yoon Dong Wuk Kim	Kookmin University Department of Eurasian Studies Professor Korea University CORE Professor Jeju National University, Accounting, Professor

C. Survey of Demands and In-Depth Survey of Senior Policymakers (Oct. 11 – 13, 2016)

From October 11, 2016, the researchers surveyed the demands of senior policy makers and conducted an in-depth survey led by Senior Advisor Shin Dong-gyu for three days. A delegation consisting of seven researchers visited the Primorsky Krai government, Primorye Investment Promotion Agency, Ministry for Development of Russian Far East, Far East Development Fund, and KOTRA Representative Office and interviewed affiliated ministry personnel. Through this study, the researchers investigated the situation and problems of each department concerning the situation and development of Russky Island, and thus determined avenues of future research.

D. Interim Report and Policy Practitioner Training (Jan. 23 – 26, 2017)

Interim reporting and policy practitioner training was held from January 23 to 26, 2017. On the Russian side, a total of five policy practitioners and officials from the relevant agencies including Alexey Starichkov, Director of Department of International Cooperation of the Administration Primorsky Region and Konstantin Shestakov, the head of Tourism Department of Administration of Primorsky region, visited Korea. In the interim briefing held in Jeju on January 24, the researchers announced the results of interim studies on each subject. Affiliated organizations and companies in the province participated and shared experiences in various aspects of the development of Jeju Special Self-Governing Province. After visiting the Jeju Provincial Office, Jeju Free International City Development

Center, Jeju International Convention Center, Duty Free Shops, Myth & History Theme Park & Resort Complex, Jeju Healthcare Town, and Investment Promotion Area, Russian guests visited the Busan Harbor Corporation and BEXCO, and surveyed the actual situation of both regions' tourism and high-tech industry development.

E. Second In-Depth Survey and Local Expert Contract (Feb. 26 – Mar. 1, 2017)

The second in-depth survey was conducted for four days from February 26 to March 1, 2017. The goal was to collect the data necessary for research and to assess the development plan of Russky Island by local institutes after the interim report. In the second in-depth survey, six researchers visited Primorsky Krai, including professor Yoon Sung-Hak.

Researchers visited the Primorsky Krai government, Far East Development Fund, Primorye Investment Promotion Agency, E & Y Far East Branch, Skolkovo Foundation Far East Branch, Far East Federal University, and other affiliated institutions to hear progress on the development of Primorsky Krai and Russky Island. Also, they inspected tourism infrastructure and collected in-depth information.

In the second in-depth situation survey, discussions were held on the selection of local experts. This was supposed to be carried out by recommendations from Primorsky Krai government from surveying the demands of senior policymakers and the in-depth survey on October 11-13. However, due to the circumstances of the Primorsky Krai government at the time, this was delayed and selection postponed.

The researchers discussed the selection of local experts with KOTRA and Alexey Starichkov, director of the department of International Cooperation of the Administration of the Primorsky Region; they decided to invite two local experts, including Professor Alexander Abramov of Far Eastern Federal University. At the meeting conducted with the researchers, the vice president of the Far Eastern Federal University introduced the faculty members of the university's industrial-academic co-research team and the Russky Island development plan. Finally, Professor Alexander Abramov and Professor Roman Dremluga of FEFU were selected as local experts on March 17.

F. Consulting Senior Policymakers and Final Report Meeting (Apr. 18 – 21, 2017)

The researchers held the final report meeting at the Primorsky Krai Far East Forum on April 19 and reported their findings to senior officials of the Primorsky Krai government, including the vice governor of Primorsky Krai. The final report meeting was attended by affiliated officials from the Russian government and agencies involved in the development of the Russky Island, including the Primorsky Krai government, the Far East Development Fund, Primorye Investments Promotion Agency, the E&Y Vladivostok branch, and Far Eastern Federal University. The Consulate-General in Vladivostok and KOTRA Vladivostok representative office participated from the Korean side. After the final report, the researchers also visited Vladivostok's commercial port to disseminate the results of the KSP project and discussed plans for cooperation with Korea.

3. The Implications and Expected Benefits of the Primorsky Krai, Russia KSP Project

The Primorsky Krai KSP project in 2016/17 was initiated by surveying the demands of the Primorsky Krai government under the topic of developing Russky Island as a special economic zone. Based on surveying high-level officials and in-depth on-site surveys in Primorsky Krai, the researchers selected two main topics at a conference hosted by KOTRA: 1) Jeju's Development and Demands for Developing Russky Island, 2) Improving Russky Island's Development Policy and Investment Attraction Model.

One of the major projects of the Russian government is developing Russky Island. The research team worked together with other scholars to provide practical advice to create a development plan for Russky Island. Concurrently, the researchers collected in-depth local information through recruiting economic and legal experts from Far Eastern Federal University as consultants.

Changes in the situation of Primorsky Krai and Russky Island and increasing interest from Primorsky Krai - caused by the sharing of research results - demanded further additional efforts from the research team. The researchers strived to meet these demands while maintaining the overall structure of the project, as well as in its reports and in interviews with affiliated Primorsky Krai authorities. The researchers shared Korea's various experiences of economic development, particularly that of Jeju Island, which aided some local agencies in publishing practical policies related to their research. This report is the

result of covering all past business activities in the above-mentioned process. The key implications and expected effects of this report are as follows.

First, the report recommends government policies for developing Russky Island based on the experience of Jeju Island, as well as suggestions for solving possible problems that arise during the development process.

Second, the report also suggests developing MICE and high-tech industries to realize the potential of Russky Island and Primorsky Krai based on the experience of Jeju Island.

Third, the report also recommends methods for attracting foreign investment and Russia's business investment needed for developing Russky Island.

Fourth, the reports shares a blueprint for developing Russky Island, a major site in Far East development, and raises the possibility of Korean companies participating in the development of Russky Island.

Overview

Sang Joon Lee (Kookmin University)

As president Putin entered his third term, he chose to develop the Far East as a major geopolitical pivot for Russia. This formally began with the APEC summit held in Vladivostok in 2012 and creation of the Ministry of the Far East Development in 2013. In 2014, the regime also established a Far East Siberian Socio-Economic Plan 2025 and held the Eastern Economic Forum in 2015 and 2016.

Russia seeks to develop its Far East region due to the economic rise of East Asia and the rapid growth of regional trade. Historically, Russia has made several efforts to develop the Far East but failed to achieve meaningful results. However, Russia's recent development of the Far East is the most aggressive in its history. The most obvious example is president Putin's Far Eastern visits, which are far more frequent than that of any other Russian leaders.

Korea, China, and Japan, which are adjacent to Russia's Far East, have high energy consumption, but import most of their resources from abroad. The oil and gas fields already developed in Western Russian territory are gradually being depleted, and the EU's energy consumption of the EU, traditionally Russia's major energy consumer, has not significantly increased. Also, according to the EU's balancing of its energy consumption, the EU wants to reduce consumption of carbon-based fuels and increase its consumption of renewable energy. On the other hand, the three countries in Northeast Asia pay high energy prices due to their low self-sufficiency rates of energy. Moreover, China is promoting the use of natural gas and Japan is increasing energy imports due to reduced

production from its nuclear power plants since Fukushima. Korea also imports most of its energy resources, and is more likely to import energy from nearby Russia rather than importing from remote locations if stable prices and supply is guaranteed. If Russia increases resource exports to Northeast Asia and investment in associated infrastructure, the economic value of the region will make a huge leap. An important part of developing the Far East is the development of logistics, transportation, and ports to export the region's natural resources to the Asia-Pacific region, including the three Northeast Asian countries.

However, if the Russian Far East remains as only a natural resource export base, its Far Eastern development will not be able to solve all the social problems of the region. Because high-quality jobs provided by the energy sector are bound to be limited, its population decline cannot be resolved. In order to improve the settlement environment of the region, it is necessary to raise its population through better and competent human resources. If the economy develops along with improved social conditions, the development of the Far East will be stabilized. Only through this can Russia truly become a Euro-Pacific power.

These Russian desires are evident in Putin's keynote speech at the second Eastern Economic Forum in September 2016. In addition to building the Energy Super Ring and Eurasia logistics network, Putin emphasized building digital infrastructure in the Far East and fostering advanced science and technology complexes, starting with Russky Island.

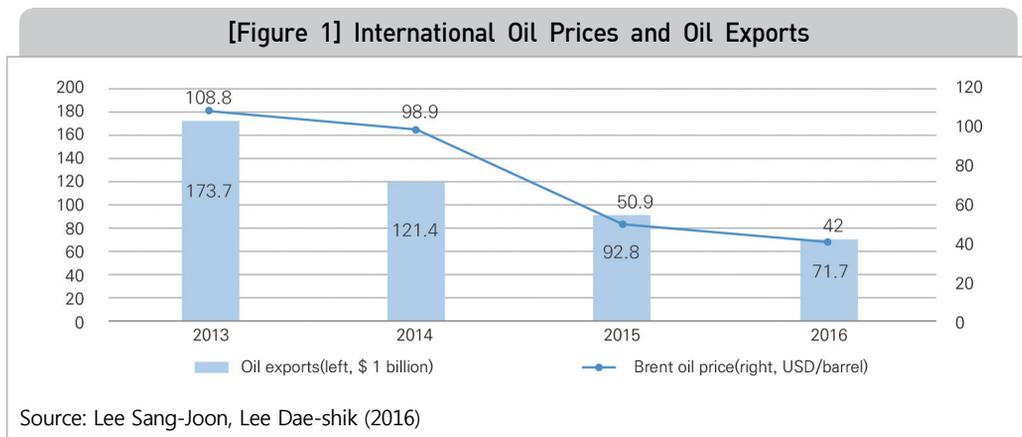
Russky Island, which hosted the APEC summit, is now home to the Far Eastern Federal University and holds the Eastern Economic Forum annually. Thus, Russky Island is a symbolic place of Far East development. Furthermore, Far East development can be carried out in various ways such as cutting-edge technology complexes and tourism, while also increasing Asia-Pacific exports by developing natural resources and related infrastructure. However, the previously proposed concept of the Special Tourism Zone for developing Russky Island has not achieved noticeable success. Therefore, Russky Island's status as a Special Tourism Zone was revised to a territory of Priority Development on September 28, 2016.

To establish a new development concept for the island, the Primorsky Krai government will make full use of the capabilities of the Far Eastern Federal University to build additional manmade attractions such as a new aquarium and international convention centers. In creating this development plan, they want to benchmark the experiences of Jeju's development in Korea. One of the most notable economic achievements Jeju has experienced over the past few years was the dramatic increase in tourism and attracting

high-tech companies. The environmental conditions associated with developing of Russky Island and Jeju Island is definitely different. However, considering the natural and manmade conditions of Russky Island, the development experiences of Jeju Island and Korea are an important experience in creating a development plan for Russky Island. The successful development of Russky Island, a symbol of Far East development, and related development experiences will also bolster Korea's image in the region.

A. Recent Trends in the Russian Economy and Korea–Russia Economic Cooperation

The Russian economy has suffered a 3.7% decline in economic growth in 2015 due to falling oil prices and Sanction. The difficulties of the Russian economy are likely to be prolonged due to falling oil prices and sluggish oil exports, the main driver of the Russian economy. In 2014, oil exports accounted for 54% of Russian exports, 51% of government finances, and 15% of GDP. International oil prices are unlikely to rebound to the average of \$50 per barrel in 2016 due China's long-term recession, the abolition of the US shale oil and oil export ban, and Iran's resumption of oil exports. International oil prices recorded \$98.9 per barrel in 2014, \$51.2 in 2015 and \$40 in 2016¹⁾ and Russia's oil exports declined 30% in 2014, 24% in 2015, and is expected to decline 23% in 2016. Oil-producing nations, including OPEC, agreed with Saudi Arabia and Russian oil ministers in February 2016 to stop oil prices from falling; however, they only agreed to reduce oil production. There is little reason to believe oil prices will rise significantly in the future. However, any major further decline also seems doubtful as international oil prices have fallen below \$30 per barrel and are recovering again.



1) KOTRA- www.kotra.or.kr/ (Ural standards)

For the time being, the Russian economy is highly likely to be affected by fluctuations in oil prices and international relations. Also, oil prices are likely to form a box pattern with both upward and downward rigidity. The reason for the limited rise in oil price is due to both the supply and demand side. Demand is likely to continue to decline due to the global economic slump and the stronger US dollar, while supplies are not expected to shrink due to increased US crude oil inventories, shale oil production, and increased production from Iran, Iraq and Libya. This is cause of upward rigidity. There is also downward rigidity caused by the control of supply between the OPEC and non-member countries. However, since currently crude oil prices are almost at their lowest ever, there is a slight possibility of maintaining a moderate rise. Recently, the fall of the Russian ruble has somewhat settled, reflecting this trend. Due to the deteriorating economic situation, Russia's external credit rating has also been downgraded, but recently it has slightly recovered. On January 26, 2015, Standard & Poor revised Russia's credit rating from 'junk' (negative investment outlook) rating BB + (negative outlook) to BB + (stable outlook) on September 16, 2016, opening the possibility of upgrading the credit rating depending on future economic improvement.²⁾ Moody's (Moody's) had also demoted Russia to Ba 1, which is a non-investment grade class, but recently revised it to Baa 3 which is an appropriate credit standing.³⁾ Fitch maintains the lowest investment grade, BBB- (negative outlook).

As the Russian economy is in trouble, Russia-Korea trade has dropped to \$16 billion in 2015 after reaching \$26 billion in 2014. It is expected to recover to \$18 billion this year.

[Table 5] Russia-Korea Trade Status

(Unit: US \$1,000)

	2012	2013	2014	2015	2016	2017(~4)
Exports	11,097.14	11,149.10	10,129.25	4,685.73	4,768.75	2,207.80
- Passenger Cars	3,118.86	3,317.16	2,405.44	911.16	925.22	423.16
- Home Appliances	576.49	550.89	578.84	292.45	259.32	50.60
- Information Communication Equipment	390.84	293.45	235.08	104.21	82.09	41.20
Imports	11,354.32	11,495.50	15,669.24	11,308.29	8,640.61	3,590.43
- Fuel	8,200.22	8,537.56	12,377.59	8,721.92	6,155.32	2,727.57
- Seafood	651.34	587.85	669.34	702.27	695.42	266.09
- Nonferrous Metals	947.89	645.28	654.58	532.94	403.99	208.73
Scale of Trade	22,451.46	22,644.6	25,798.49	15,994.02	13,409.36	5,798.23

Source: Korea Customs Service

2) <http://www.standardpoors.com> (Search date: 2016.09.19)

3) <http://www.moody.com> (Search date: 2016.07.15)

[Table 6] Korean Investment in Russia

(Unit: US \$1 Million)

	2007	2009	2011	2013	2015	2016
총투자금액	237.89	429.87	99.63	122.14	103.82	110.43
- 제조업	125.87	284.23	38.84	42.81	59.30	50.51
- 도소매업	29.20	76.04	0.95	9.86	34.47	29.56
- 광업	36.68	15.36	15.31	5.89	0.24	18.27

Source: Korea Customs Service

The biggest problem of Russia-Korea trade is that most Korean exports to Russia are focused on automobiles, IT, and home appliances, while Russian exports to Korea are focused on oil and other resources. Because of this, trade between the two countries has a high dependence on specific industries and resources, which shows a pattern of a sharp decline in trade during the economic crisis. In order to overcome these problems, both governments agreed to build a \$3 billion investment and loan platform at the Korea-Russia Summit Meeting 2013, and the Korean President's visit to Russia at the East Economic Forum in September 2016 demonstrated interest in Russia's development of the Far East by the Korean government and Korean companies. The two countries need to double their efforts to use this situation as a turning point for cooperation.

B. Russian Far East Development Trends and Russky Island Development Plan

The growth rate of the Russian economy overall is low in 2016, and the industrial growth rate in the Far East exceeds 5%. In his keynote speech at the 2nd Eastern Economic Forum, president Putin announced that this growth was possible because the amount invested in the Far East has reached about 1 trillion rubles (about \$15 billion) and over 300 investment projects were launched in one year after the 1st Eastern Economic Forum. Putin also proposed the following four initiatives for the development of the Far East: 1) establishing an Energy Super Ring in the region by linking power and energy, 2) constructing transport infrastructure and strengthening the role of Eurasia transport, 3) establishing a digital economic space, and 4) creating an international academic, educational, and technological cluster.

The investment environment in Russia's Far East continues to improve. According to a white paper in 2017, The DOING BUSINESS rankings of the World Bank ranked Russia in 124th only a few years ago, despite being in the 40th ranking currently. In the Far East,

Territories of Advancing Socio-Economic Development (TASED and the Vladivostok Free Port were introduced, providing great benefits to foreign investors.

Since May 2012, the development of the Russian Far East is focused on improving its investment environment and related tasks. Since August 2013, the plenipotentiary envoy to the Far Eastern Federal District is concurrently holding the office of deputy prime minister and strengthening the federal government's will for Far East development. In March 2014, sub-organizational units were established for the operation of Territories of Priority Development, foreign economic cooperation, and human resource development. Russky Island became a symbol for Far East development with the APEC Summit held in September 2012 and the East Economic Forum being held in there since 2015.

To further accelerate Far Eastern development, the Russian government announced federal law on the Territories of Priority Development and the Vladivostok Porto Franco. From January 1, 2017 Vladivostok Freeport began implementing the "Single Window," a 24-hour surveillance system of border checkpoints, electronic declaration of cargo, etc. The Russian government has already simplified visa issuance procedures for foreigners entering the Free port. All formal procedures can now be done through the Ministry of Foreign Affairs' website, and it is now possible to acquire electronic visas. In addition to Vladivostok Port, Freeport has been expanded to four harbors in the Far East region. The Russian government says more can be added if needed.

[Table 7] Comparison Table of Tax Benefits for Territories of Advanced Social and Economic Development (TASED), Porto Franco (Freeport), Special Economic Zones (SEZ)

	Standard tax rate	TASED	Freeport	SEZ
Corporate tax	20% - Federal tax 2% - Local tax 18%	1-5 years: Tax exemption 6-10 years: 12% - Federal tax 2% - Local tax 10%	1-5 years: Tax exemption 6-10 years: 12% - Federal tax 2% - Local tax 10%	1-5 years: 2% 6-10 years: 12% - Federal tax 2% - Local tax 10%
Property tax	2.2%	1-5 years: Tax exemption 6-10 years: 0.5%	1-5 years: Tax exemption 6-10 year: 0.5%	1-10 years: Tax exemption
Land tax	1.5%	1-3 years: Tax exemption	1-3 years: Tax exemption	1-5 years: Tax exemption
Social Security Fund	30%	1-10 years: 7.6%	1-10 years: 7.6%	12-17 years: 14% 18 years: 21% 19 years: 28%

Source: Elena Yaskevich, the first deputy director of Primorye Investment Agency (2015.12 Russian Far East Investment Forum, Seoul)

The investment environment of the development area is also improving. Discussions on the providing corporate tax benefits and prolonging the execution period reflect the nature of the project, its size, and the period of implementation. The government is actively improving this environment so foreign companies investing in this region can properly receive related benefits.

As an effort to minimize administrative control for the development of Territories of Priority Development and Free Port, the process of investor verification is simplified and the Far Eastern Development Corporation will file lawsuits from the investors' standpoint when foreign investors suffer losses. Also, investment companies have joined the investment committee to discuss issues related to investment, which the Russian government collectively summarizes and reports to the president.⁴⁾ The Russian government is acting to simplify complex and difficult procedures in the investment process by operating the Foreign Investment Attracting Working Group. Due to infrastructure constraints in the Far East, additional costs will occur. To reduce these costs, Russia is not only providing tax benefits but also cutting utility costs such as electricity. Since September 2016, Primorsky Krai charged with electricity rates below the national average in the Far East.

A new investment system, Voskhod, was also introduced to improve the financial and financing environment in the Russian Far East. This makes it easier for Russian and foreign investors to buy and sell shares and bonds in Far Eastern companies. In addition to establishing an investment and loan platform with South Korea, the Far East Investment and Export Agency and Japan Bank for International Cooperation have decided to create a joint platform to attract Japanese investors to Territories of Priority Development and Freeport. With China, Russia also has launched the Russia-China Agricultural Fund to support agriculture and food industry exports. The government also actively creates government organizations and organizations to promote Far East development.

4) From Korea, Samsung Electronics and Hyundai Heavy Industries are participating in the investment committee.

[Table 8] Far Eastern & Primorsky Krai Key Regional Development Organizations and Institutions

Organizations	Founding year & Founders	Key Activities
Primorye Investment Promotion Agency	2012 Primorsky Krai government	Corporate operations and marketing consulting, investment and legal advice, market research
Primorsky Krai Development Corporation	2013 Primorsky Krai government	Selection of development area, investment contract and support for business implementation
Ministry of the Far East Development	2013 Federal government	Implementation of the Federal Government's Russian Far East Development Policy
Far Eastern Development Corporation	2015 Ministry of Far East Development	Leading development zone and federal authority in Vladivostok free port development
Far East Zabaykalsky Development Fund	2011 The Bank for Development and Foreign Economic Affairs	Financial support for major infrastructure and innovation industries in the Far East and Baikal region
Dal'ny Vostok	2014 Federal government	Permission and operation of infrastructure development and building construction in the development zone

Source: Primorye Investment Promotion Agency (<http://www.invest.primorsky.ru>), Primorsky Krai Development Corporation (<http://www.cdprim.ru/>), Ministry of the Far East Development (<http://minvostokrazvitiya.ru>)

Russky Island has lost its status as a Special Economic Zone and is devoting efforts to establish a new development concept to be designated as a Territory of Advanced Social and Economic Development. For the development concepts, Primorsky Krai government and Vladivostok City Council are preparing a regional development strategy. The construction of an international convention center on Russky Island was conceptualized by the Far East Development Fund under the Far East Development Department. The Far Eastern Federal University (hereafter FEFU) is trying to establish a plan to maximize use of their capabilities through a Science and Innovation Complex. The university is also currently considering plans to build residential facilities to improve their living conditions, as they have the largest number of permanent residents on Russky Island.

The university has ample potential as a center of technological innovation. Various concepts are being discussed to utilize the its core competencies such as energy efficiency, renewable energy, marine biology, biochemistry, medical, and industrial waste management.

It is difficult to establish a large-scale incubator or technology park right from the start because FEFU is in the stage where an industrial-academic partnership based on

technology cooperation has begun. However, considering that the research infrastructure is fully equipped in FEFU, it would be possible to quickly establish a high-tech innovation complex if it attracts key companies in related fields. Also, if this becomes a success, international convention centers will be built in the future and the number of participants will increase significantly. This will improve the profitability of anchor hotels, which will enhance the use of convention centers. In addition, consideration for establishing an international school is needed to improve living conditions to attract more talented human resources to FEFU and the high-tech innovation complex.

C. 2016/17 Primorsky Krai Russia Knowledge Sharing Program

The Primorsky Krai KSP in Russia in 2016/17 is Korea's fourth project with Primorsky Krai. Through consultation with the Primorsky Krai government, topics such as 'Establishing the Russky Island Development Concept' and 'Establishing the Russky Island Investment Promotion Model' can present directions for developing Russky Island from the viewpoint of foreign investors. Also, it is possible to present a feasible improvement plan considering the natural, environmental, and socio-economic conditions of Russky Island through Korea's experience.

Russia's Primorsky Krai KSP on Russky Island, a symbol for Russia's Far East development, will greatly contribute to Russia – Korea economic cooperation since it can provide an opportunity for strengthening economic cooperation. Korea can also its development experience with the local government and even with the Russian federal government.

2016/17 Knowledge Sharing Program
(Industry & Trade) with Russia Primorsky Krai

Chapter 1

Jeju's Development and Demands for Developing Russky Island

1. Comparison of Russky Island and Jeju Island
2. Development of Jeju Island
3. Demands in Developing Russky Island

Jeju's Development and Demands for Developing Russky Island

Dong Wuk Kim (Jeju National University)

Sang Joon Lee (Kookmin University)

Alexander Abramov (FEFU)

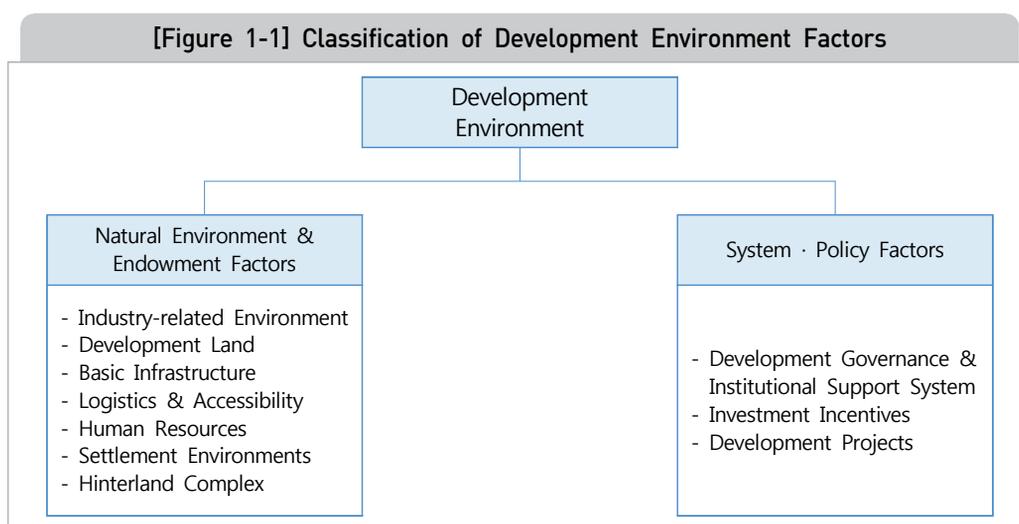
1. Comparison of Russky Island and Jeju Island

Russky Island (Русский Остров) has the opportunity to develop through an unconventional policy since it is an isolated region. The Russian government was interested in development models such as Singapore (719km²) and Dubai (4, 114km²) for Russky Island. However, these are models for national development since these areas are single nations. In this regard, Russia has shown interest in Jeju Island as a successful case of local development; in other words, Russia hopes to make Russky Island a special economic zone that receives preferential treatment in developing a specific territory. In Russia and South Korea, special economic zones already exist, but the concept of Jeju Special Self-Governing Province, which contains more progressive development policies, can be applied to the Russian Territories of Priority Development.

In order to draw lessons from the development of Jeju Island, it is necessary to understand Jeju's development and the background from which its derived its main concept for development. This experience will be necessary to minimize mishaps in developing Russky Island, which is in its beginnings.

In order to grasp the development conditions and demands of Russky Island, the following factors should be compared with the development of Jeju Island. In traditional theories, natural environment & endowment factors (resource & infrastructure, logistics, human resources, and settlement environment) are recognized as important elements of

regional development, but in recent years, system & policy factors (policies, incentives, institutional support system) are also considered as important factors. In fact, there are many cases of miraculous regional development contributed by system & policy factors, despite disadvantageous natural environment & endowment factors. Therefore, the development environment of Russky Island and Jeju Island will be classified into natural environment & endowment factors and system & policy factors. Natural environment & endowment factors include industry-related environment, development land, basic infrastructure, logistics & accessibility, settlement environments, etc. System & policy factors include development policies, incentives, development projects, etc.



1.1. Natural Environment & Endowment Factors

The industry-related environment refers to a survey and evaluation of bases that can contribute to the development of regional industries. An example is identifying the conditions for developing related industries through the scientific and technological abilities of both Far Eastern Federal University, located on Russky Island, and Jeju Science Park. It is possible to promote industry through venture and start-up training in order to pursue advanced science and technology. However, investigation is needed into what kind of industrial development bases can be built. In addition, MICE industries can be developed by the Jeju ICC, the Convention center functionality of the Far Eastern Federal University of Russky Island, and future convention centers. Looking into the capability of MICE industries being the base for the development of other industrial sectors is necessary. In addition, a survey should be conducted on whether the MICE industries can link high-tech science parks and the tourism industry.

A. Development Land

Securing the land necessary for regional development is crucial. Examining ways to solve problems in land acquisition and land development is needed for the development of Russky Island and Jeju Island. Of course, for Jeju Island, investigations on land problems that occurred during its past development and how they were resolved is needed.

B. Basic Infrastructure: Roads, Power, Water, Communication, etc.

Understand the degree of the basic infrastructural development for Russky Island, such as roads, power, water supply, and communications and then grasp methods to solve these various problems from the experiences of Jeju development.

C. Logistics & Accessibility

Since they are islands, Russky Island and Jeju Island are accessible by various ways such as air, sea, and bridge. Identify the various ways that Jeju Island has attempted to solve the accessibility problem at the time of its development and study its outcomes. Then compare with the present situation of Russky Island.

D. Human Resources

Russky Island is a remote place with an isolated environment and is difficult to access. Since it is a future development site, it must solve these problems. Thus, it is necessary to identify incentives to attract a talented workforce. A comparison is needed to determine whether the recruitment measures of Jeju Island can be applied to Russk Island.

E. Settlement Environments

A comparison of Jeju Island and Russky Island in terms of its settlement environment, convenience facilities, educational conditions, and medical services is needed to attract talented personnel.

F. Hinterland Complex

Because of its relatively small size, looking into the relevance of the development in Vladivostok and Southern Primosky Krai is inevitable for developing Russky Island. For the industrial development of Russky Island, it is necessary to analyze the attractiveness of neighboring complexes in the long-term. This needs to be compared with the overall environment of Jeju Island. This approach is needed because Jeju's development was possible since it has an airport, various ports, and its hinterland complex.

1.2. System & Policy Factors

A. Development Governance & Institutional Support System

Development governance and an institutional support system are important elements in creating a friendly development environment. We compare the development environments of both islands through the comparison of governance between Russky Island and Jeju Island.

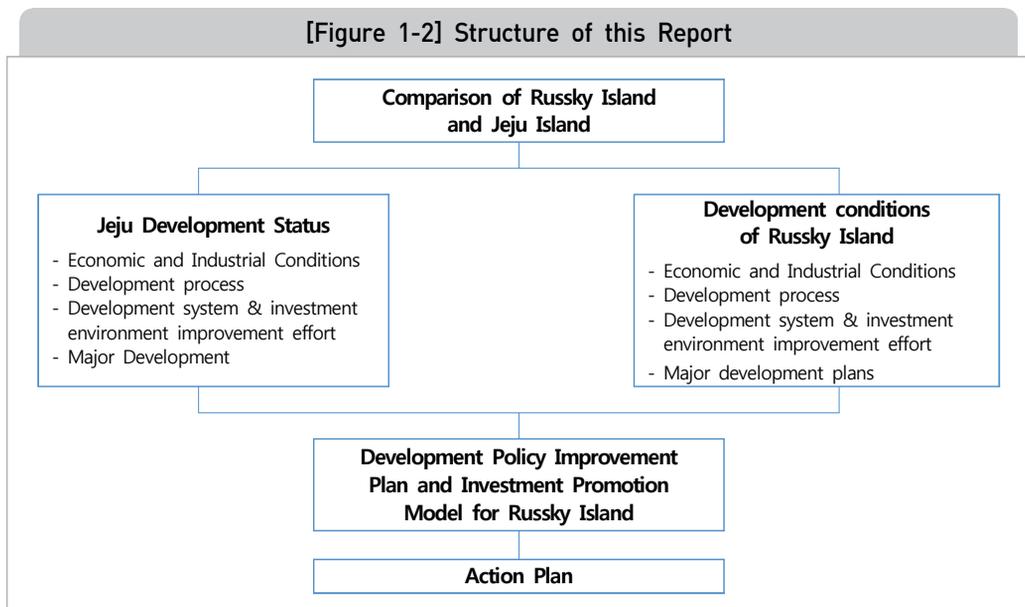
B. Investment Incentives

Natural factors cannot be changed easily, but policies and incentives are manmade factors that can be an important driving force for development if they are creatively designed. Understand the investment incentives and preferential policies of Jeju Island and compare them with the incentives which the Territory of Advanced Social and Economic Development and Freeport can employ.

C. Development Projects

Development projects also overcome the problems of natural factors and determine new forms of natural factors. Grasp the current possibilities through investigating development projects being carried out in both regions.

D. Structure of this Report



2. Development of Jeju Island

2.1. Analysis of Jeju's Economic and Industrial Structure

A. Population

The population of Jeju Special Self-Governing Province is 661,190 as of 2016, which is 3.1% more than the population of 641,355 in 2015, showing the fastest population growth rate in the nation and it is continuously increasing.

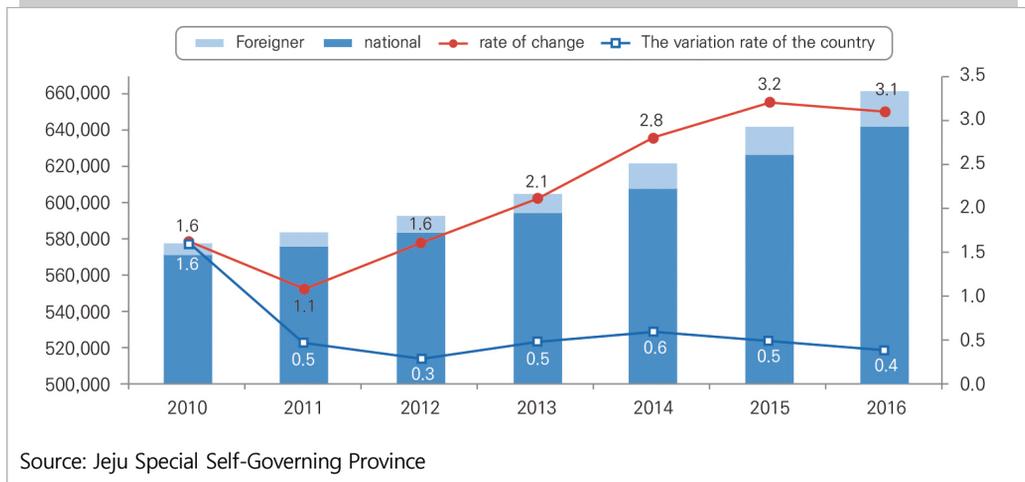
[Table 1-1] Jeju Population Trends by Year

Year	1946	1970	1980	1990	2000	2014	2015	2016	Growth (1946→2016)
Population	266	366	463	515	543	622	641	661	2.5

(Unit: thousands)

Source: Jeju Special Self-Governing Province

[Figure 1-3] Population and Rates of Change by year (2000-2016)



B. GRDP Status

The Gross Regional Domestic Product (GRDP) of Jeju Special Self-Governing Province is 15.432 trillion won by 2015, which is 1% of Korea's total GDP(Gross Domestic Product). The provisional economic growth rate of Jeju in 2015 is 4.5%, which is much higher than the nationwide average of 2.8%. The GDP growth rate of Jeju Special Self-Governing Province for the past six years is as follows.

[Table 1-2] Key Indicators of Income in Jeju Special Self-Governing Province

(Unit: KRW 1 billion, KRW 1,000 per person, %)

Key indicators	Jeju						Nationwide 2015p
	2010	2011	2012	2013	2014	2015p	
Local GDP and Expenditures (Nominal)	10,899	11,847	12,707	13,198	14,087	15,432	1,563,668
(Nationwide Proportion)	0.9	0.9	0.9	0.9	0.9	1.0	100.0
Growth Rate	Jeju	2.3	5.1	5.2	5.1	5.3	4.5
	Nation wide	6.5	3.7	2.3	2.9	3.3	2.6
Per capita Local GDP	19,934	21,433	22,692	23,172	24,243	26,280	30,892

p: Provisional

Source: Jeju Special Self-Governing Province

C. Industrial Structure

According to the industrial structure of the Jeju Special Self-Governing Province in 2015, the service industry is the highest at 71.5%, followed by agriculture, fishery and forestry at 11.6%. Based on employment by industry in 2015, Jeju Special Self-Governing Province occupies 16.5% of agriculture, fishery and forestry industries, mining and manufacturing 3.9%, construction 8.4%, service industry and others 71.2%. Compared with the nationwide average in 2015 agriculture, fishery and forestry industries are higher than the national average, and mining and manufacturing are very low.

[Table 1-3] Industrial Production Structure of Jeju Special Self-Governing Province

(unit: %)

Production		Jeju						Korea 2015p
		2010	2011	2012	2013	2014	2015p	
	Agriculture, Forestry, Fishery	16.5	16.5	16.1	14.9	12.6	11.6	2.3
	Mining and Manufacturing	3.5	3.7	3.7	2.8	3.3	3.4	29.6
	Construction	1.9	1.7	1.7	2.2	2.8	3.4	2.6
	Other Sectors	6.8	7.4	8.0	8.6	8.6	10.2	5.4
	Services	71.4	70.7	70.6	71.5	72.7	71.5	60.1

p: Provisional

Source: Jeju Special Self-Governing Province

D. Tourist Status

The number of tourists visiting Jeju Island exceeded 15 million as of the end of 2016 and has increased by more than 10% annually. As of 2016, the number of foreign tourists is 3.6 million, of whom 86%, or 3.06 million, are Chinese tourists.

[Table 1-4] Visitors to Jeju Island by Nationality

	2011	2012	2013	2014	2015	2016
Total	1,045,637	1,681,399	2,333,848	3,328,316	2,624,260	3,603,021
Japan	173,700	180,357	128,879	96,519	59,233	47,997
U.S.A	26,648	25,143	21,439	19,812	16,898	33,605
Taiwan	31,661	51,012	38,890	32,189	17,839	38,046
China	570,247	1,084,094	1,812,172	2,859,092	2,237,363	3,061,522
Hong Kong	26,601	38,980	39,761	28,405	22,732	44,757
Singapore	55,927	63,818	56,622	46,307	29,620	50,566
Malaysia	53,045	76,192	74,956	63,953	39,802	66,207
etc.	107,808	161,803	161,129	182,039	200,683	260,320

(Unit: person, %)

Source: Jeju Special Self-Governing Province

The number of tourists increased due to Jeju Special Self-Governing Province's various efforts combined with social and international conditions. For example, the Olle Trail was able to attract Korean tourists by matching the new slow - lifestyle orientation. In addition, the liberalization of overseas tourism in China has begun, and as a result, the efforts of Jeju Island have been successful.

E. Tourism Infrastructures

Bless with beautiful natural landscapes and a unique culture, Jeju Special Self-Governing Province owns a specialized facility for international conferences and various tourism and leisure facilities that can accommodate 3,500 people. Jeju Island was designated as a Biosphere Reserve in 2002, and was listed as a World Natural Heritage Site in 2007. In 2010, it was recognized as a World Geological Park, making Jeju the only UNESCO Triple Crown site in the Natural Sciences. In addition, it has infrastructure that can provide various activities such as golf, leisure sports, shopping, food, and nature trekking.

For tourist accommodations, there are currently 5,500 rooms in luxurious hotels and 30,000 rooms in various grades of accommodation. Especially, there are luxury hotels, tourist attractions, and entertainment facilities in Jungmun Tourist Complex. In addition,

2,024 rooms (121 suites) are located within a five minutes driving distance from the complex. Direct flights are operated to cities in six countries including China, Japan, Hong Kong and Taiwan. Jeju Special Self-governing Province operates overseas tourism promotion offices. Currently, there are 11 tourism promotion offices in China, Japan, Taiwan, and Malaysia.

[Table 1-5] Current Establishment of Foreign Tourism Promotion Office

Managing Office	City
Jeju Government	Beijing, Shanghai, Shenyang, Guangzhou, Chengdu, Taipei, Kuala Lumpur
Jeju Tourism Organization	Fukuoka, Osaka, Nagoya, Tokyo

Source: Jeju Special Self-Governing Province

F. Natural Environment & Endowment Factors

1) Industry-related Environment

Located on the southwestern coast of the Korean Peninsula, Jeju Island is the biggest tourist destination in Korea and is designated as a Special Self-Governing Province. Many domestic and foreign tourists visit for its unique nature and culture. It is a UNESCO Triple Crown Area in the Natural Sciences. Also listed as one of the new Seven Wonders of Nature, Jeju Island is located in a mild temperate and subtropical climate zone while the Korean mainland is characterized by temperate climates. Mount Halla, which has a height of 1950 m, is located in the middle of the island and around 350 volcanoes of various sizes called Orum represent Jeju Island's scenic beauty. In recent years, the number of visitors to the Jeju Olle Trails, the center of the nation walking boom, has increased, and Chinese tourists and investors are showing explosive interest in the clean natural environment of Jeju. The government also enacted the Jeju Special Act in 2002, which designated Jeju as an international free city, to foster it as tourism, recreation, and business central city in Northeast Asia in the 21st century.

2) Development Land

The area of Jeju Island is 1,845.88km² and the length of the coastline is 253km. Its area is 2.7 times of Singapore, 1.7 times of Hong Kong and 19 times of Russky Island. There are strict restrictions on environmental protections, and a land banking system is also implemented efficiently to supply land for development. The stockpiled land is efficiently

supplied to tourist attractions, tourism complexes, amusement parks, local culture and tourism complexes, high-tech science complexes, investment promotion complexes, special development projects, Jeju International Free City development center projects and other projects in need of public land. Land special accounts are established and operated in order to facilitate the smooth promotion of public works by securing public lands early on.

3) Basic Infrastructure

Beginning in the mid-1970s with the Jeju Island Tourism Comprehensive Development Plan, roads, electricity, waterworks, and communication facilities were all built by the government. The government also built tourism infrastructure. There are six international and domestic duty-free shops and 190 top-rated tourist accommodations. There are also 34 golf courses and 8 foreigner-only casinos. There are also various leisure activities available such as hunting, horseback riding, climbing, fishing, windsurfing, scuba diving, paragliding, and hiking.

4) Logistics & Accessibility

Jeju Island attracts more than 15 million tourists a year, including foreigners, and has an international airport that can handle 20 million tourists a year. The city is also planning a second new port, to be completed by 2025. There are ports capable of berthing four cruise ships, from the 80,000ton class and to 150,000ton class, and there are current plans for new port that can berth a 220,000ton class cruise ship. Currently, Jeju Island operates 14 domestic routes, including irregular flights, and 31 international routes to 43 cities in 6 countries.

5) Human Resources

The population of Jeju is 660,000 (as of 2016), 1.2% of Korea's population, 15% of Singapore, and 10% of Hong Kong. Jeju Island has Jeju University, which has bachelor's, master's, and doctoral degree programs of 10,000 students who major in IT, BT, and tourism. There is a certain limit in supplying high-quality manpower, but recently, high-tech companies have moved to Jeju to find a creative work environment, and high-quality manpower is also being supplied. Although the direct supply of high-quality human resources is limited in the immediate future, this problem can be solved if a plan for attracting foreign universities is implemented in the English education city.

6) Settlement Environments

Visa entry requirements have not been extended and permits for non-visa entry for sightseeing and transit purposes for up to 30 days available for most nationalities except for eleven out of 180 countries. Also, the maximum period of stay for experts in Jeju Free International City development is extended to 5 years, allowing long-term stay for foreign experts. Individuals investing in condominiums or villas of more than US\$500,000 (or KRW 500 million) can obtain a permanent residency for real estate investment. Moreover, international medical care environments are being created, and international education environments such as the creation of English education cities are also being promoted.

7) Hinterland Complex

Jeju Island is located about 90 km south of the Korean Peninsula. There is no direct hinterland complex. However, there are 60 mega cities with more than 1 million in population and 5 cities with more than 10 million, all within a 2-hour flight distance. They are the best hinterland complexes to attract tourists in Jeju Island. Construction of a new airport and new port considering future demand will be able to overcome the physical and spatial limits of Jeju Island. In addition, existing universities, high-tech science complexes, convention centers, and other tourist infrastructures in Jeju will synergize, making an organic system with the establishment of the second high-tech science complex and the second convention center.

2.2. Jeju International Free City Development Process

A. Background

To promote the regional, historical, and humanities' characteristics of Jeju Island and to ensure the realization of decentralization based on autonomy, responsibility, creativity and diversity, and to loosen the administrative regulations and apply international standards, the 'Jeju Special Act' was enacted in order to create an international free city.

'Free International City' means a local unit where regulations are relaxed and international standards are applied for the convenient international movement of human resources, goods, and capital and business activities. This is to promote key projects in tourism, education, medical care, and high-tech fields under the goal of promoting Jeju Island as the best 'free international city' in Northeast Asia and raising international competitiveness to a new level. There are many types of economic zones in Korea, including many free economic zones, but Jeju is the only region that has achieved

substantial results. One of the many success factors of Jeju Free International City is the enactment of the Jeju Special Act which provides this support.

B. Jeju Special Self-Governing Province Free International City Development history

The Jeju Special Self-Governing Province is creating the Jeju Free International City Comprehensive Plan as part of its strategy to develop the island into a Northeast Asian economic hub and enhance international competitiveness. In December 2001, the Jeju Free International City Special Act was enacted and the first Jeju Free International City Comprehensive Plan (2002-2011) was established and promoted in February 2003. Subsequently, in December 2011, the second Jeju Free International City Comprehensive Plan (2012-2021) was formulated and promoted. The Second Jeju Free International City Comprehensive Plan has been revised since the first plan was established, reflecting the rapidly changing domestic and international social and economic environment and the policy demand of the residents. In February 2006, the government enacted of the Special Act on Establishment of the Jeju Special Self-Governing Province and the Development of Free International City (hereinafter referred to as Jeju Special Act), which absorbed the existing Special Act on Jeju Free International City to supplement the centering of 4+1 core tourism (tourism, education, medical service, clean primary industry + high-tech industry).

1) Jeju Free Port Conception Plan (1963)

The establishment of the Jeju Island Construction and Development Research Committee under the prime minister's office was held to discuss the establishment of a free zone in Jeju Harbor. However, it was concluded with a negative decision because of the disadvantage in competition with Hong Kong and possibility of the loss of national security.

2) Jeju Tourist Comprehensive Development Plan (1973)

The Jeju Island Tourism Development Plan was established and implemented with the aim of creating an international-level tourist destination led by the Blue House with the goal of increasing foreign currency earnings by attracting foreign tourists.

3) Establishment of Jeju Comprehensive Development Plan (1994)

In 1994, the Jeju Island Comprehensive Development Plan ('02 -' 11) was formulated based on the Special Act on the Development of the Jeju Island. Promotion of local industry, conservation of the natural environment, maintenance of residential zones, and expansion of infrastructure were implemented. In order to respond to the changes in the new social and economic environment, existing tourist complexes and districts were remodeled. Some individual approval methods based on the district designation method were allowed.

4) Jeju Free International City Comprehensive Plan (1998–2001)

In 1998, development of the Jeju Free International City began. That same year, the Jeju Free International City Basic Plan was established to promote tourism, recreation, and high-tech business centers throughout Jeju Island. The Jeju Free International City Promotion Committee, Working Committee and Jeju Free International City Promotion Planning Office were established. However, these plans evolved into more concrete plans with the Special Act on Jeju Free International City enacted in 2002.

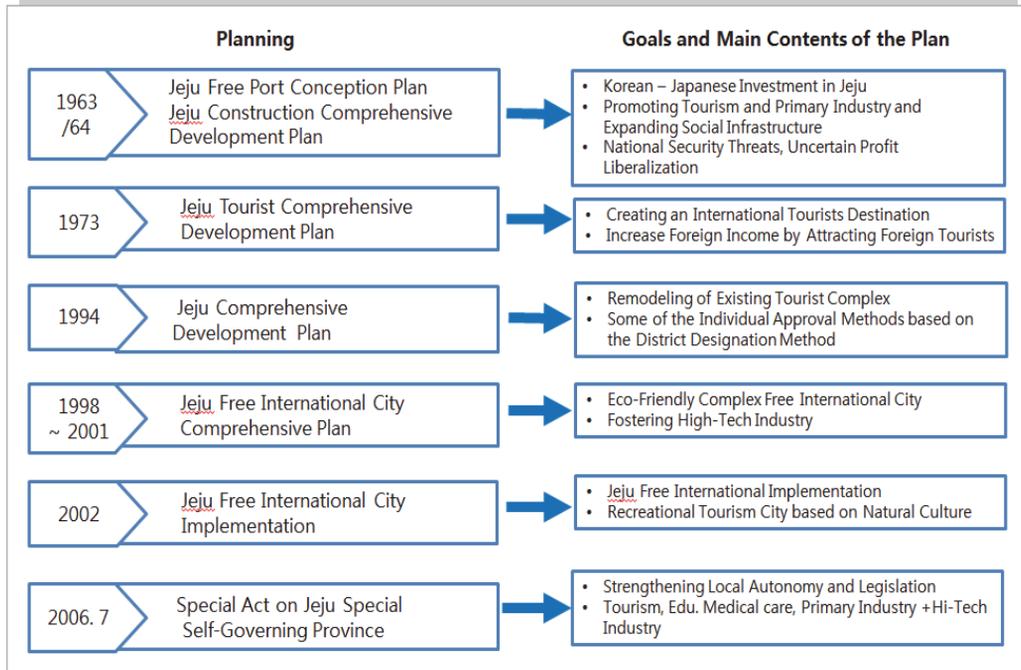
5) Jeju Free International City (2002)

Based on the Special Act on Jeju Free International City, the Jeju Free International City Comprehensive Plan (2002 - 2011) was created along with a total investment of 29.5 trillion won. The Jeju International Free City Development Center was established to implement this plan. Until now, the development of Jeju Island had lacking enforcement power. Establishment of the Jeju Free International City Development Center, a national public corporation, created a turning point in Jeju International Free City.

6) Establishment of Jeju Special Self-Governing Province (2006.7)

The Special Act on Jeju Special Self-Governing Province was enacted in 2006 by absorbing the existing Special Act on Jeju International Free City. The development of the so-called 4 + 1 regional strategic project, added IT and BT to the realization of decentralization, tourism, clean primary industries, education, and medical services. A revised plan is being prepared in 2017 to reflect the policy demand and the secondary evaluation which changed since the second Jeju International Free Cities Comprehensive Plan (2012-2021).

[Figure 1-4] Jeju International Free City Development Process, Plan, and Content



C. Jeju Island's Investment Promotion Policies

In Korea, since the 1997 financial crisis, the Foreign Investment Promotion Act was enacted in September 1998 to attract large-scale foreign investment, and various types of special economic zones⁵⁾ have been established and operated.

[Table 1-6] Special Economic Zones in Korea

Division	Related Laws	Enactment period
Jeju Investment Promotion Zone	Special Act on Establishment of Jeju Special Self-Governing Province and Creation of Free International *	2006. 2 (2002.4)
Free Trade Zone	Act on the Designation and Operation of Free Trade Zones **	2004. 3 (1970. 1)
Foreign Investment Zone	Foreign Investment Promotion Act	1998. 9

5) A Special Economic Zone (SEZ) is a collective term referring to special zones that provide special incentives from other domestic and foreign regions such as tax benefits, deregulation, and financial support to guarantee the free enterprise and the fostering of industry.

[Table 1-6] Continued

Division	Related Laws	Enactment period
Custom Free Zone	Act on the Designation and Management of Free Customs Tariff Areas for Fostering International Logistics Base	2000. 6
Free Economic Zone (EEZ)	Act on Designation and Management of Free Economic Zones	2002. 12
Area-specific development area	Act on Special Regulation for Special Zone for Regional Development	2004. 3
Corporate City	Special Act on Corporate City Development	2004. 12

* The Special Act on Jeju Free International City (2002.4) was later amended as the Act on Establishment of Jeju Special Self-Governing Province and the Creation of Free International City (2006.2).

** The Act on the Establishment of Free Trade Zones (1970. 1) was amended as the Act on the Designation and Management of Free Trade Zones, as amended by the Act on the Designation and Operation of Free Trade Zones (2000. 1).

Source: KIM Dong Wuk (2009), "A Study on the Activation Plan of Investment Promotion District", re-edited

The Jeju Special Self-Governing Province adopted the investment promotion district system in January 2002 by establishing Article 42 of the Special Act on Jeju Free International City. In accordance with Article 161 (Development and Management of Jeju High-tech Science Complex) and Article 24 (Funding Criteria for Development Centers, etc.), companies investing more than a certain amount of capital were provided preferential treatment such as tax cuts and deductions, fostering core industries in Jeju Island. Initial investment projects of more than US \$20 million consisted of tourist hotels, water tourism hotels, leisure facilities, and international conference facilities. Investment projects of over US \$10 million were conducted for Korean traditional hotels, professional leisure facilities, cruise ships, tourist theaters, and comprehensive leisure facilities. Since then, the scale of the project and the total cost of businesses have changed flexibly according to Jeju's development.

In July 2004, Article 27, titled the Designation of Investment Promotion Zone of the Enforcement Decree of the Special Act on the Development of International Free City was revised and the total project cost was set at US \$10 million to attract more investment. Also, five industries were added: culture, senior welfare, youth training facilities, ropeway and railroad tracks, and electricity generation using alternative energy.

In June 2006, the authority for reviewing Article 217 of the Jeju Special Act was transferred to the Jeju Special Self-Governing Province Support Committee under the

prime minister's office from the Jeju Free International City Promotion Committee. The total cost of the project was set at US \$5 million, and six industries (foreign educational institutions, autonomous schools, international high schools, medical institutions, educational institutes, and advanced technology industry) have been added. In November 2007, R & D services related to healthcare technology were added to the target industries. In July 2009, the tourism restaurant business, international school, and food and beverage manufacturing industry were added, expanding to 24 industries in total.

There was also a change in authority transfer and qualification standards due to the development situation of Jeju Island. In August 2007, the authority for deliberation on the designation of the investment promotion district was downgraded to the Jeju Free International City Council under the Jeju Provincial Governor. In order to prevent indiscriminate investment of the tourism industry, total standardized project cost scale of 10 industries (tourist hotels, water tourism hotels, Korean traditional hotels, leisure facilities, professional leisure industry, cruise ships, tourist theaters, international conference facilities, comprehensive leisure facilities, and tourist restaurants) was raised to more than \$20 million in 2014. Cosmetics manufacturing and marine related industries were also added. However, casinos and duty free shops in the comprehensive resort business were excluded from preferential industries. In addition, the Jeju Provincial Government established the foundation for investment by large conglomerates by allowing an exception in the limit of total investments when investing in the Jeju Investment Promotion district and Jeju Advanced Science Park by amending the second stage of Jeju Special Law in July 2007. Through the transfer of authority from the prime minister's office, the investment procedure has been streamlined and the period and costs have been reduced.

Jeju Island's successful investment promotion policies provides useful implications for Russky Island development. Jeju is the only successful case, whereas most Korean SEZs failed to attract investment. Jeju Island because it attracted investors regardless of whether they were foreigners or not. The island implemented an Investment Promotion District system to attract foreign direct investment and domestic investment, and also succeeded in inducing active investment by Chinese interested in overseas investment and permanent residence rights by utilizing the Real Estate Permanent Resident System.

2.3. Jeju's Development System & Improvements in Investment Environment

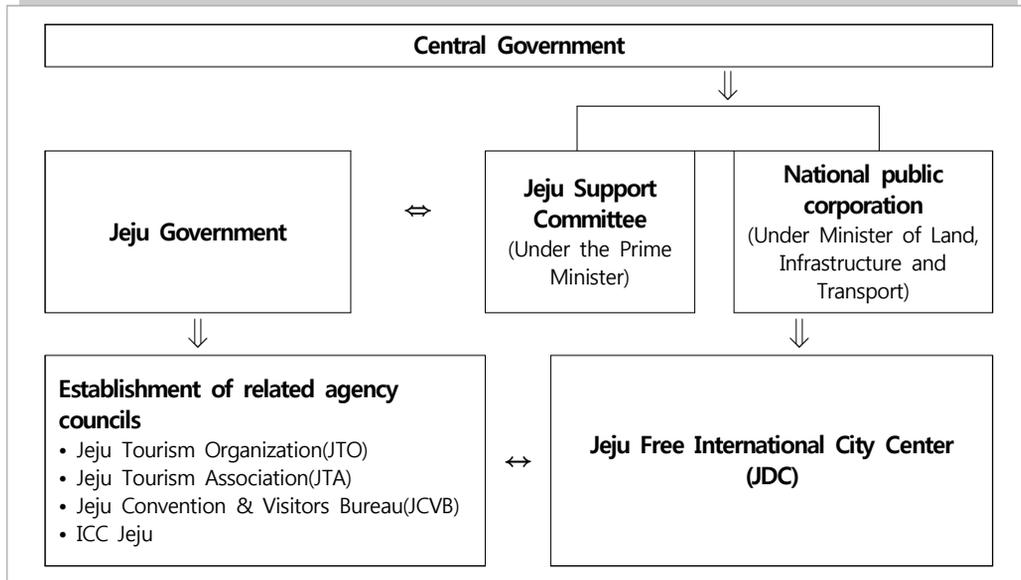
A. Jeju Free International City Development Governance System

Jeju's development has become more visible since the Special Law on Jeju Free International City was promulgated in January 2002. In May of that year, the Jeju Free International City Development Center (JDC) was founded in the form of a public corporation as the core development promotion system for supporting and promoting Jeju Free International City.

Jeju Island's development promotion system is executed by consultation between the Jeju Special Self-Governing Province government, JDC under the Ministry of Land, Infrastructure and Transport, and private organizations. The tourism policy, the core of Jeju development, is executed by Jeju Free International City through coordination and collaboration between the Jeju Island Tourism Bureau, Jeju Tourism Organization, Jeju Tourism Association, Jeju International Convention Center, and Jeju Convention & Visitors Bureau. Various agencies participated and cooperated in creating a gradual but explosive influx of tourists.

The Jeju Tourism Organization (hereafter JTO) conducts public marketing such as promoting Jeju as a tourist destination or large-scale marketing regardless of whether it is domestic or international. JTO is in charge of developing Jeju Island as a Special Zone through benchmarking the Jeju Special Tourism Zone in areas such as market research and industry statistics. The Jeju Tourism Association is responsible for the sales and marketing of Jeju tour products in overseas markets and tourism industries. It is also responsible for simple tourism statistics such as Jeju Island visitor statistics. While the JTO develops tourism products, private enterprises in Jeju Island promote the tourism industry by making and selling tourist products. As the number of tourists increased, this also promoted capital inflow to Jeju Island. The island decided to foster MICE industries to manage such inflows more effectively, and thus established ICC. In addition, JDC, which secured a steady income from duty free shops, led the creation of a high-tech science complex by taking advantage of the public corporation under the Ministry of Land, Infrastructure and Transport.

[Table 1-7] Jeju Free International City Development Governance System



1) Jeju Special Self-Governing Province

The Culture, Tourism, and Sports Bureau and Free International City Headquarters were responsible for the initial tourist administration of Jeju Special Self-governing Province. These agencies were responsible for planning, deciding and executing the tourism policy of Jeju Island, and carried out the work of overall management and supervision of the tourism industry.

The One-Stop Service department was newly established to quickly carry out the tasks related to the approval of regulations and businesses of tourism development projects, district unit planning and decision, and impact evaluation (environment, traffic, and disaster). It also supervises the promotion of Jeju tourism, both domestically and internationally. Jeju Island also invested in the Jeju Tourism Organization and Jeju ICC to support the MICE industries' basic tourism infrastructure development and tourism marketing. Jeju Special Self-Governing Province is continuously improving basic road, airport, and port infrastructure.

2) JDC

JDC was established in 2002 under the Special Act on Jeju Free International City. It is a national public corporation with the aim of building a high quality international free city. It serves as a public development company and a specialized investment promotion

agency. The competent agency is the Ministry of Land, Infrastructure and Transport, and the foundation's basis can be found in Article 166 of the Special Act for Establishment of Jeju Special Self-Governing Province and Free International City Development. It is a national public corporation for the realizing the vision of Jeju Free International City and acts as a channel for the central government to support Jeju Island and works closely with Jeju local government.

(a) JDC Establishment Background and Process

JDC was developed in May 2002 to support the development of high quality Jeju Free International City Development at the national level. It is a development task force in the form of national public corporation under the Ministry of Land, Infrastructure and Transport. JDC acts as a channel for the central government to support Jeju Island and works closely with Jeju local government. At the time of its launch, the JDC was created as a national public corporation to utilize the experiences and know-how of the central government's experience in promoting core development projects. Although Jeju Island established a concrete development plan and JDC carried out its core projects, this has drawn criticism for being financed by land sale profits acquired by from the profits and development of duty-free shop sales rather than support from the central government.

(b) JDC Major Projects

The JDC is dedicated to core and strategic projects such as tourism, education, medical care and high-tech industries for the development of Jeju Free International City. Its main business is divided into four areas: Core Projects, Management Projects, Strategic Projects and Duty-Free Projects. Core projects include the Jeju High-Tech Science, Jeju Global Education City, Jeju Health Care Town, Myth & History Theme Park, and the Jeju Aerospace Museum. Management projects include the Resort-Type Residential Complex and Jeju Gotjawal Provincial Park. Strategic projects include the High-Tech & Science Park No. 2, Ocean Marina City Development, Seogwipo Tourism Port Development Project, International Cultural Complex, and ECO Development Project. As such, JDC projects includes major projects except for infrastructure in Jeju development.

(c) JDC Financing Method

Other than receiving government funding in the early stages of developing the High-Tech Science Park, JDC secures its basic funding for the development of Jeju Free International City through the operation of Jeju International Airport's duty-free shops. All

proceeds earned by duty-free shops are used for the development of the Jeju Free International City. For example, it will be invested in development projects such as land sales of Jeju's High-Tech Science Park and English education city. The proceeds from land sales are reinvested in public business development and the community. At the early stage of implementing JDC projects, it was difficult to acquire land for the Myth & History Theme Park, the core business of the development center. However, the law was amended so that the development center was included in the designated proponents, which made it possible for JDC to have the eminent domain. The granting of the eminent domain has been controversial, but it made it possible to develop a self-sufficient, multifunctional city centering on specific industries such as the Myth & History Theme Park, a core JDC project.

3) Jeju Tourism Organization

Jeju Tourism Organization is responsible for domestic and international publicity marketing, product development, educational research and MICE industries support. It was established in July 2009 to cultivate Jeju's tourism industry. The financial resources are provided through the duty-free shops which opened in 2009 and by the Jeju Welcome Center which is supported by a local budget and provides tourist information.

4) Jeju Convention & Visitors Bureau (JCVB)

For the promotion of Jeju Island MICE industries, JCVB carries out tasks such as hosting, promoting, marketing, and supporting conferences.

5) Jeju Tourism Association

Jeju Tourism Association is a tourism administrative organization in the private sector and carries out the tasks entrusted by the province. It also plays a role in the public sector by promoting local tourism. As of 2015, about 800 companies have been registered.

B. Efforts to Improve Investment Environment

1) Jeju Special Self-Governing Province's Special Exemptions

Based on the Jeju Special Act, the island operates a system different from other local governments by promoting an industry model that uses a differentiated system to lead local specialized development. Examples include designating investment promotion districts in Jeju and implementing a real estate investment immigration system.

2) Securing Autonomous Rights in All Areas except for National Defense

To improve the efficiency of local administration, basic local governments were abolished and comprehensive negative system for de-regulation was introduced. Jeju regulates itself rather than be regulated by the central government. However, these deregulations caused some social problems due to the inflow of speculative capital rather than investment. While emphasizing incentives to attract investment, penalties against violations of the law were not well enforced.

3) Fostering a Foundation for High-Tech Industry (IT & BT)

The Jeju Special Self-governing Province has made the following efforts to attract and nurture high-tech industries such as IT and BT. Jeju High-Tech & Science Park (1,099,000m²) and Jeju Lava Sea Water Industrial Complex (197,341m²) were established. In addition, it supports the development of IT and BT specialized technology and supports subsidies and loans to encourage investment in high-tech industries. The first High-Tech & Science Park has already reached its saturation point and a second High-Tech Science Park is being planned. Jeju leans heavily towards primary and tertiary industries. The Jeju High-Tech & Science Park development project was promoted to change the industrial structure of Jeju Island to high technology and technology-oriented industries. Building a High-Tech & Science Park was an attempt to overcome the weakness of the manufacturing base and logistical costs due to its geographical isolation.

4) Strengthening Support for Tourism Industry for Investment Promotion

The Jeju Special Self-governing Province is strengthening support for the tourism industry by improving the accessibility of tourists to Jeju and by transferring the 3 Tourism Laws to Jeju from the central government. The 3 Tourism Laws are the Tourism Promotion Act, International Convention Industry Fostering Act, and Tourism Development Promotion Fund Act. As a result, Jeju Island has now attracted 15 million tourists. Today, Jeju is making an effort to attract tourists from a wider variety of countries.

5) Special Permits & Exemptions for Foreign Investors

In order to attract foreign investment, Jeju Provincial Government provides the following incentives. Investments of over US \$500 million allow for the building of foreigner-only casinos. When a foreign worker wishing to work at a foreign investment enterprise intends to receive a visa, a letter of recommendation from the governor of Jeju Island can simplify the permit process. Also, long-term residency is permitted for foreign investors.

For foreign investors who have invested more than US \$500,000 and hired more than five employees, the local government also grants F5 visas (permanent residency). Also, for foreign investors who purchase more than \$500,000 in recreational facilities, F5 visas are permitted instead of F2 visas (5 year). Foreigners who own more than \$200,000 of recreational facilities can also extend their stay from three months to one year.

6) Jeju Investment Promotion Zone Policy

(A) Goals and Incentives

In order to foster core industries, Jeju Island introduced the Investment Promotion Zone policy, which applies exemption for taxes and deductions for companies that invest above a certain amount of capital. Based on Article 217 of the former Jeju Special Act, it is the only policy that grants tax exemptions to both domestic and foreign investors.

Unlike Jeju Island, other SEZs in South Korea were required to have foreign investors to receive investment privileges. The central government of Korea has designated and operated a total of eight free economic zones throughout the country. However, the majority of special zones have failed to attract expected investments. This can be attributed to various reasons, but mainly it was due to the required condition of having only foreign investors.

On the other hand, in the case of Jeju Island, its governor has direct authority in designating investment promotion districts, which play a crucial role in attracting large-scale investment to Jeju Island. The target sectors are largely divided into the tourism industry, cultural industry, senior citizen's welfare, youth training facilities, ropeway and track industry, foreign education institutions, medical institutions, education institutes (training center), high-tech industry, medical R & D, and food and beverage industry.

In July 2007, the Jeju Special Self-governing Provincial Support Committee reviewed and approved the designation of the Jeju Investment Promotion Zone, but the authority was transferred to the Jeju Special Self-Governing Province through the second stage revision of the Jeju Special Act. As a result, this reduced the cost and process of development.

For the scale of investment, total cost of the project is at least US \$20,000,000 for newly invested tourism related business and US \$5,000,000 for other businesses. Investment project costs include land purchases, construction expenses, land surveying and research, design, equipment, etc. It was originally US \$20 million and lowered to US

\$5 million due to slow investment. Once investment increased more than expected, it was raised to US \$20 million again. Jeju Island flexibly operates these criteria. If an Investment Promotion Zone fails to perform well, it is immediately canceled. The island operates a flexible system so that other projects can proceed promptly.

Once designated as an Investment Promotion Zone, businesses are fully exempt from corporate and income taxes for the first 3 years, with a 50% deduction for the next 2 years. Customs duties are exempt from imported capital goods within the first three years. Businesses are also fully exempt from the acquisition & registration tax, and fully exempt from the property tax for 10 years since the commencement date of the business. Businesses are also fully exempt from development and public water surface usage fees, and receive a 50% deduction in the agricultural land construction fee, alternative grassland creation fee, and alternative forest creation fee. National and public property can be leased (renewable) within the scope of 50 years, and permanent facilities can be built. Resident companies in the Investment Promotion Zone are also eligible for a 75% tax deduction. Customs duties on imported capital goods are fully exempt within three years of the designated date.

[Table 1-8] Foreign Investment Zone Incentives

Division	Detail
Tax Reduction	<ul style="list-style-type: none"> • Corporate Tax and Income Tax: 100% exemptions for 3 years, 50% reduction for next 2 years • Customs: Full exemption for imported capital & goods for the first 3 years • Acquisition & Registration Tax: Full exemption • Property Tax: 100% exemption for 10 years since Business Commencement
Various Fee Reduction	<ul style="list-style-type: none"> • Full exemption: Development Fee and Public Water Surface Usage Fee • 50% Deduction: Agricultural Land Construction Fee, Alternative Grassland Creation Fee, And Alternative Forest Creation Fee • Sewer Fee (Until 2014: 50%, 2015: 25%, 2016: 15%)
National & Public Property Lease	<ul style="list-style-type: none"> • Based on Article 220 of Jeju Special Act • Lease Period: Within 50 years (renewable) & permanent structures can be built • Target & Guideline: Science & Technology Complex, Resident Companies on Investment Promotion Zone, International Organizations – Within 75% deduction
Condition	<ul style="list-style-type: none"> • Tourism, Culture, Education, Medical, and High-Tech industries • Based on industry : Total Development Cost: Minimum US \$5,000,000 to US \$20,000,000

(b) Jeju Investment Promotion Zone Designation Status

As of December 2016, 50 districts have been designated as Investment Promotion Zones, and the total projected cost is 1256.6 billion won. Recently, four zones were dismissed and now a total of 46 Jeju Investment Promotion Zones remain. There are 23 leisure facilities, 15 tour hotels, 3 training centers, 1 international school, 2 cultural businesses, and 2 medical facilities designations. 38 of them are in operation and 6 are under construction. Two places have not begun construction.

The total cost of business is 11.6 trillion won; more than 90% is related to tourism. There are many side effects. The biggest concern is about the application imbalance of the Investment Promotion Zone, focusing only on the tourism development industry with real estate investment in mind. Jeju shows a severe imbalance among industries that it wants to attract. Almost all companies are selected when applying for the Investment Promotion Zone related to tourism development. Also, there are problems in post management of the Investment Promotion Zone. In addition, there are some cases in which the investment plan is intentionally delayed considerably and later changed into a speculative project. Therefore, it is necessary to improve the system and strengthen the management and supervision system.

[Table 1-9] Jeju Investment Promotion Zone Operation Status

Area	13,714,521m ²						
Expense	11.600 Billion won						
Sectors	Total	Leisure Facilities	Tourist Hotels	Training Centers	International Schools	Culture	Medical Facilities
	48	23	15	3	1	3	3
Operation Status	Operation		Under Construction		Before Construction		
	38		6		2		

Source: Jeju Special Self-Governing Province

7) Foreign Investment Zone

(A) Eligible Business and Designation Requirements

Jeju Special Self-Governing Province provides tax benefits to investors who attract investment and employment through a Foreign Investment Zone system. The Jeju Special Self-Governing Province Governor holds the right to designate Investment Zones. The designation procedure is made through the process of notifying the governor of foreign investment in a desired area after the application of the investor, requesting deliberation

over the designation of the foreign investment zone by the governor, and deliberation of the Foreign Investment Committee of the Ministry of Industry and Commerce.

(B) Investment Incentives

Corporate and income taxes are 100% exempted for the first 3 years and deducted by 50% for the next 2 years. The property tax is 100% exempted for 15 years. The acquisition tax and customs duties on imported capital goods are exempt. The requirements for designation of Foreign Investment Zones and the investment incentives provided are as follows.

[Table 1-10] Foreign Investment Zone Eligible Business and Designation Requirements

Division	Detail
Eligible Business and Designation Requirements	<ul style="list-style-type: none"> Logistics Industry: Minimum investment of 10,000,000 USD Tourism Industry: Minimum investment of 20,000,000 USD Manufacturing Industry, High-Tech Industry: Minimum investment of 5,000,000 USD High Technology Research Institute: Requires over 5 mil USD Investment and 10 or employees
Investment Incentives	<ul style="list-style-type: none"> Corporate Tax and Income Tax: 100% exemption for 5 years, 50% deduction for 2 years Property Tax: 100% exemption for 15 years Acquisition Tax and Capital Goods Import Duties: Full exemption

Source: Jeju Special Self-Governing Province

[Table 1-11] Major Foreign Investor Business Status

(2016. 9, unit: FDI 1,000 \$ /invest Billion won)

Country	Singapore	Malaysia	Japan	Australia	China	Hong Kong	
Business	24	1	1	2	1	16	3
Total business scale	15,608	54	2,514	215	16	10,234	2,575
Direct investment (1000 \$)	FDI Report	2,546,453					
	FDI Arrival	1,494,532					

8) Support for Domestic Company Relocation

By relocating to Jeju, a qualifying metropolitan company can receive grants and subsidies for land costs and rent. In addition to subsidies for construction and equipment purchases, there are also subsidies for training employees. For relocating companies, long-term low-interest loans are available for new or expanding investment. The acquisition tax will be exempted and the property tax is fully exempted for a minimum of 5 to 15 years. In addition, corporate and income taxes are exempted or deducted.

9) Real Estate Permanent Residence System

(A) Permanent residency

Based on Article 229 of the Jeju Special Act, foreigners who purchased recreational facilities (condos) can receive a residence visa (F-2) which allows a 5 year stay. After 5 years, when maintaining certain requirements, investors can apply for permanent residency (F-5) based on the Immigrant Investor Scheme for Real Estate. Jeju Island has attracted a great deal of interest from Chinese investors because they can earn income by investing in leisure facilities (condos and villas) in designated business areas according to the Jeju Special Act and the Tourism Promotion Act. It is a sunset law operating from February 2010 to April 2018. Currently, the system has spread to many other regions including Pyeongchang, Yeosu, Incheon, and Busan. This system of permanent residency has contributed to strong foreign investment in Jeju from 2010 to the present. The number of foreign investors who acquired permanent residency was 1,742 from 2010 to May 2016. The total investment amount is 1,187.2 billion won, with an average investment of 682 million won.

[Table 1-12] Real Estate Permanent Residence Status by Region

Year	Total		Jeju		Incheon		Chuncheon	
	Cases	Amount	Cases	Amount	Cases	Amount	Cases	Amount
2010	158	976	158	976				
2011	65	544	65	544				
2012	121	733	121	733				
2013	667	4531	667	4531				
2014	509	3477	508	3472			1	5
2015	118	1058	111	1013	5		2	10
2016.5	104	608	103	603			1	5
	1,742	11,927	1,742	11,872	5		4	20

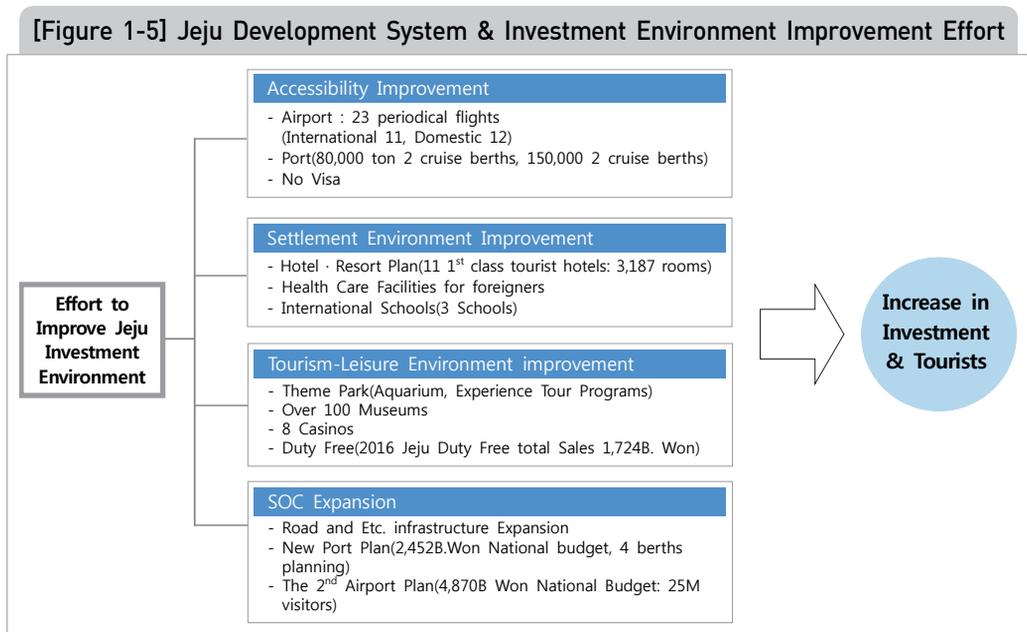
Source: Ministry of Justice

However, recently there has been strong criticism about the permanent residency system for real estate. Technically, that there is no required period for minimum stay for foreigners holding residence visas (F-2) and they only need to reenter Korea within one year after departure. Moreover, even if investors just stayed in Korea for only one day a year during the five years after investing in a real estate condominium, they can participate in local elections and apply for permanent residency permits (F-5). If investors acquire foreign nationality after acquiring permanent resident status through a real estate investment immigration system, it is unclear whether or not they lose their nationality. Therefore, supplementary legislative measures are necessary. In order to prevent disorderly land development and real estate speculation, citizen control is necessary to promote balanced development of the country in certain cases.

To eliminate the concern of the citizens from land encroachment, institutional improvements are necessary, such as setting a cap based on the ratio of the total population and total area of Jeju Island.

(B) Living Environment and Benefits

In addition, educational benefits and medical insurance benefits are also provided to foreigners. Foreigners who have been issued alien registration cards are eligible to enroll in international schools in Jeju Global Education City and receive public education, medical insurance, and benefits equivalent to those of Koreans.



2.4. Jeju's Major Development Projects

A. JDC Projects

The national public special corporation JDC carries out core projects in various sectors such as tourism, education, medical science, and advanced science in order to build Jeju into a free international city. In order to foster high-quality tourism industry from low-cost tourism industry, Jeju has been upgrading the level of tourism industry by creating the largest theme park, Myth & History Theme Park, in Seogwipo city.

[Table 1-13] JDC Core Projects Status

Division	Projects	Area (thousandm ²)	Investment Scale (Billion KRW)	Progress
6 Core Projects	Jeju Global Education City	3,790	1,781	Establishing an international education hub by absorbing demand for studying abroad by providing world-class education services. 3 Int'l Schools in operation. 1 Int'l School in Progress
	Resort-type Residential Complex	744	1,798	Construction is suspended due to change of land use during vacation resort, commercial facility, health & medical center and spa resort promotion.
	Myth & History Theme Park	4,000	2,413	Phase 1 construction completed. Preparing to open in Sep. 2017
	Seogwipo	198	143 (Public 66, Private 77)	International Marine Tourism Center
	High-Tech & Science Park	1,099	580	High-Tech & Science Park No.2 in development
	Jeju Health Care Town	1,539	1,521	Foreign Medical Recreational Complex Specializing in Health and Recreation Wellness Park Medical Park R & D Park
	Total	11,370		

In addition, JDC attracted famous international education institutions to Jeju and has absorbed study abroad expenses, contributing to the reduction of family and social problems such as goose fathers (fathers who make money abroad away from their families). In addition, foreign medical institutions are being built to facilitate medical services, which is an important settlement requirement for foreigners residing in Jeju Free International City. The High-Tech & Science Park for IT & BT industries was established in Jeju Island, the center of Korea's tourism industry, and some of the leading domestic and international venture companies such as Kakao and EST soft have settled in Jeju.

1) Jeju High-Tech & Science Park (JSTP)

(A) Background and Process

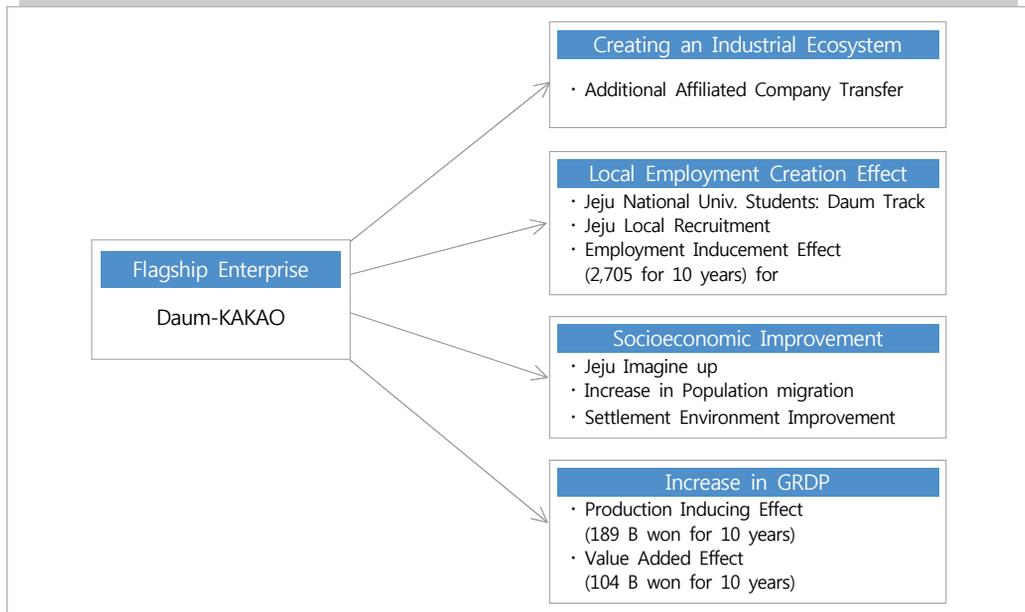
Jeju's economy heavily leans towards primary and tertiary industries and Jeju High-Tech & Science Park (JSTP) is being promoted to reorganize the industrial structure of Jeju Island into high-tech and technology-oriented industries. JSTP was built to overcome the island's weak manufacturing base and logistical costs due to Jeju's geographical isolation. JSTP was established by investing KRW 580 billion in a business site of 1,098,878.1m² with the aim of establishing a growth base for the new industry of Jeju economy through the cultivation of innovative clusters in information & communication technology (IT) and biotechnology (BT). Construction of the complex site development commenced in 2005 as a national industrial complex public development project. The first High-Tech & Science Park development project was completed in 2010. As of December 2015, 129 companies including IT & BT related companies and research institutes have moved there.

Jeju University, Jeju International University, and Jeju Research Institute are located within a radius of 2km of the Jeju High-Tech & Science Park. Therefore, it is the ideal place to build an industrial, academic & research cluster. Also, a provincial office, city hall, tax office, Jeju International Airport, Jeju Harbor, and other public offices lie within a 10 km radius. It is easy to access various public services. The surrounding road network is relatively well established, and traffic conditions are improving through renovating entry and exit roads to JSTP. Due to an explosive occupancy demand, a second High-Tech & Science Park development project is in the works. The first high-tech science park is saturated and JDC is preparing to build a second High-Tech & Science Park in order to further establish a strongpoint for Jeju's research-based advanced businesses. The second High-Tech & Science Park is planned to be built in the 848,163m² area of Yeongpyeong-dong, Jeju City from 2017 to 2019. The JDC will cover the entire project's cost of 104.4 billion won.

(B) Achievements and Lessons

Jeju High-Tech & Science Park is an IT and BT industrial complex that utilizes Jeju's clean environment. There are 129 companies and research institutes in various industries such as cosmetics, content production and brand specialty companies including domestic and international top class companies such as Kakao and EST soft. About 1,950 employees work in the complex. The total revenue in 2015 is KRW 1,221.8 billion, accounting for 8 - 9% of Jeju Island's GRDP. According to the JDC analysis, as of 2014, the construction of JSTP and construction investment by tenant companies resulted in an increase in production of KRW 645.5 billion, an increase in value of KRW 256.8 billion, and an increase in employment of 5,300 people.

[Figure 1-6] Economic Impact of Jeju Hi-Tech Science Complex Flagship Enterprise



However, plans to attract foreign companies and research institutes have met limited success. The High-Tech & Science Park project, one of the Jeju Free International City's leading projects, initially planned to attract domestic and foreign companies and to contract sales of land. In order to attract international businesses, JDC opened a business presentation, and then signed business agreements with Ulm City, Germany's advanced science & technology complex, and with UK's Welsh Development Agency.

However, among 85 domestic companies which have expressed their willingness to move, Daum Co., a leading portal company in Korea, and the semiconducting company

ELMSI were the only recognizable companies that could possibly represent the park. There have been no major successes in attracting foreign companies. However, as Daum-Kakao, Korea's leading IT company, came to Jeju, the island's IT industry ecosystem, regional employment creation, and socioeconomic conditions have improved, while regional productivity increased. Therefore, in Jeju's experience, Russky Island's high-tech science park needs a strategy to attract famous companies with stronger front and rear links in Russia rather than foreign companies as pioneers. Foreign companies are not easy to attract to Jeju Island because of differences in culture and language.

Based on the Ministry of Land, Infrastructure and Transport's business know-how and momentum on development work, JDC achieved a certain level of achievement in promoting core projects such as the establishment and operation of High-Tech & Science Park and of Global Education City. However, there are policy conflicts between Jeju Province and JDC regarding the establishment and implementation of some core projects. There are some cases where JDC independently develops new projects other than projects under the Free International City Comprehensive Plan without consulting Jeju Province. This causes business conflicts in promoting core projects. Therefore, some argue that the authority on the planning, selection and promotion of Jeju Free International City projects needs to be transferred to Jeju Province. For example, in the operation of the Investment Promotion Zone policy, there was a problem that Jeju Island exercised the right to designate and release the Investment Promotion Zone, and the JDC was exercising the management right, causing confusion in policy coordination. Management rights were not exercised properly. Since 2016, the investment promotion zone management right has been transferred to Jeju, and Jeju Province has exercised overall authority such as designation, management, and cancellation, thereby reducing some of the policy conflicts

[Table 1-14] JSTP Occupancy Status (Dec. 2015)

Business Type	Movement classification	Inside the province	Outside the province	Newly-organized	Total
		Number of companies	Number of companies	Number of companies	Number of companies
IT	Sub total	29	28	8	65
BT	Sub total	22	15	5	42
ET	Sub total	4	0	2	6
etc.	Sub total	8	5	3	16
	Total	63	48	18	129

Source: Jeju Free International City Development Center Homepage

2) Myths and History Theme Park

Myths & History Theme Park, which seeks to be a world-class tourist attraction, blends Jeju, Korea, world culture, history, and myth. Begun in 2006, the park is a multi-resort project aimed at raising the class of Jeju's tourism industry to be completed in 2018. It will be equipped with world-class theme parks, water parks, and ICC facilities. The Landing International Development Ltd of Hong Kong invested in the project, with a total project cost of 2,412.9 billion won. A large-scale tourism complex with an area of 3,986,000 m² is being built in the park to exhibit the myths and history of the East and West. The project is expected to have 5,000 new full-time employees. In this regard, there have been various employment support projects, such as dispatching Jeju's youth talent to advanced companies in Singapore and opening a career education curriculum in universities. The Myth & History Theme Park consists of four themes (a multi-resort including World Theme Park and accommodations, Oriental Resort and Myth & History Street, European Resort and Myth & History Street, and Aerospace Museum).

3) Jeju Healthcare Town

Jeju Healthcare Town aims to be the best medical complex in Asia. Healthcare Town, which is being built in an area of 1,539,013 m² in Seogwipo City, was launched in 2008 and will be completed in 2018 by China's Greenland Group (ranked 311 among the Top Fortune 500 companies). It is being planned as a leading healthcare town that leads medical tourism in Korea by providing Korea's excellent medical services and being a one stop solution for treatment, healing, leisure, and etc. It is divided into three areas.

① Wellness Park

- Recreational resort for happiness through physical and mental healthcare
- Provides various programs for preventive treatment, healthcare, and health promotion
- Facilities to enjoy various experiences such as performances, events, exhibitions, indoor and outdoor recreation spaces

② Medical Park

- Specialist hospital complex offering specialized health services
- A retirement community for retirees and clinical research activities
- Long-term care towns for middle-aged and elderly people who need long-term care

③ R&D Park

- Medical R & D centers for medical service research and product development research, clinical research centers for anti-aging, new drug development institute

4) Jeju Global Education City

Jeju Global Education City, which seeks to create an educational hub in Northeast Asia, was created to absorb the demand for studying abroad and provide educational infrastructure for Jeju Free International City. It is being built on an area of 3,792,000m² with a total project cost of about 1 trillion KRW (Public sector: 459.2 billion KRW, private sector: 1.3 trillion KRW).

Since construction began in 2009, the British North London Collegiate School Jeju and KIS Jeju, the Canadian Branksome Hall Asia School, and the English Language Education Center opened in 2011, 2012, and 2014 respectively. The American St. Johnsbury Academy Jeju Campus is scheduled to be opened in September 2017. A total of 7 international schools will be opened, and the expected number of students is approximately 9,000. In addition, the existing English Education Center, foreign educational institutions, residential and commercial facilities will become major facilities of Jeju Global Education City. The goal is making a city of 20,000 residents, including the 9,000 students mentioned above. In 2016, plans are underway to supply additional commercial land and residential land, and currently surveys are being made for the first stage site composition complementary construction work, follow-up management, and the theme-street complex development project to revitalize the city. Currently, there are three international schools, including KIS (Korea International School) which was built with government money. The other two schools are leased through Haewul Co., a subsidiary of Jeju Free International City Development Center (JDC). International schools are being carried out to improve the settlement environment of Jeju International Free City, rather than to promote profitability.

[Table 1-15] NLCS/BHA International School Status

Name	NORTH LONDON COLLEGIATE SCHOOL JEJU (NLCS)	Branksome Hall Asia
Open	2011. 9. 26	2012.10.15
Student	Kindergarten - Grade 13 (74 classes, 1,508 students)	Kindergarten - Grade 12 1,212 students (girls only)
Class	Co Ed. , Day & Boarding School	Primary-Middle-High
Curriculum	IB Diploma	IB PYP (JK-6, Kindergarten & Primary) IB MYP (7-9, Middle School), IB DP (11-12, High School)
Semesters	2 semesters (Fall & Spring)	2 semesters (Fall & Spring)
Facility Scale	Land area 104,385m ² (Building area 29,250m ² , Floor area 83,486m ²)	Land area 94,955m ² , (Building area 32,819m ² , Floor area 70,211m ²)

5) JDC Designated Duty-Free Shops

JDC Designated Duty-Free Shops aims to promote the tourism of Jeju Island by reducing travel costs to Jeju Island by granting duty-free benefits to tourists. At the same time, it funds the development of Jeju Free International City. The JDC Designated Duty-Free Shops and low admission fees of Jeju's golf courses act as incentives to travel to Jeju, rather than travel abroad.

The duty-free shops are divided into airport duty free shops in Jeju's domestic airport departure cabin, Jeju port passenger terminal, and port duty-free shops in international and domestic passenger terminal waiting room. The operating profits of the duty-free shops are designated as basic funds for business development for Jeju Free International City and are used to promote domestic and international investment in Jeju Special Self-governing Province. All proceeds from JDC duty-free shops are used for Jeju Free International City development. After the full launch, sales recorded ₩100 billion in 2003 and it reached ₩300 billion in 2010. In 2015, sales reached ₩488.2 billion, a 33.1% increase from 2014. This is because the one-time purchase limit has been raised from \$400 to \$600 since January 2015. In 2016, the company recorded sales of KRW 540.7 billion, an increase of 10.75% over the previous year. The revenue from these duty-free shops is becoming a financial resource for the Development Center, which is the center of Jeju's core business development projects, without financial aid from the central government.

[Table 1-16] JDC-designated Duty-Free Shop Sales

(Unit: KRW in billions)							
Year	'03-'10	2011	2012	2013	2014	2015	2016
Sales	1,553	338	343	345	367	488	541

Source: Jeju Free International City Development Center Homepage

B. ICC Jeju

1) ICC (International Convention Center) Overview

ICC Jeju is a 7-story building with an area of 54,876m² and a floor space of 63,477m². It is an international conference facility capable of accommodating 3,500 people (up to 4,300 people). There are international conference halls, large, medium and small meeting rooms, exhibition rooms and other related incident facilities. It was opened on March 22, 2003, and features a variety of tourism, leisure, and social programs, as well as meeting, lodging, and sightseeing in one-stop.

[Table 1-17] ICC Jeju Facilities

Sectors	Convention Hall		Number of Simultaneous Interpretation Facilities
	Area(m ²)	Capacity (persons)	
ICC Jeju	Tamra Hall	4,597	4,300
	Halla Hall	812	660
	Samda Hall	398	300
	(Small)	219/10	55-200
	Event Hall	2,503	2,450
			8 Languages

Source: Jeju ICC Homepage

2) ICC Business area

ICC Jeju's business areas can be classified into five categories: convention planning (PCO business), convention and exhibition facility rentals, event agencies, food & beverage service management, and cultural events.

- (1) Convention planning industry: Provides comprehensive PCO service for planning and execution in hosting domestic and international major conventions. Provides various services such as exhibition planning, hosting and operation.
- (2) Convention & exhibition facility rentals: Provides specialized services for facility

leasing, convention hosting and operation of international convention, domestic conferences, and exhibitions.

- (3) Event agencies: agency business for various events
- (4) Food & Beverage service: catering, food & beverage services, and restaurants & coffee shop management
- (5) Cultural event industry (planning, hosting): concerts, events, sports-related events

3) Financing Method

The investment capital of ICC Jeju is KRW166.6 billion. Among them, Jeju province invested KRW 95 billion (57.02%), the Korea Tourism Organization invested KRW 29 billion (17.42%), Jeju Islanders, and Korean-Japanese invested 42.575 billion won (25.56%) to establish ICC Jeju.

[Table 1-18] ICC Jeju Shareholder Composition

		Shares	Amount	Share Ratio (%)
Total		4,094	166,601	100.00
Jeju Government		1	95,000	57.02
Korea Tourism Organization		1	29,026	17.42
Private Shareholder	Domestic Shareholders	4,013	13,382	7.36
	Corporate Shareholders	79	29,193	18.20
	Total	4,092	42,576	25.56

Source: Jeju ICC Homepage

4) Surroundings

From ICC Jeju, there are 3,000 hotel rooms and 1,000 guest rooms within 15 minutes by car. Also there are 3 foreigner-only casinos and 10 tourist attractions. Within short distance, there are six shopping centers including hands-on experience tours, golf courses, and duty-free shops. It is expected that Jeju Convention Bureau, ICC JEJU, and the anchor hotel will be able to promote clustered marketing strategy once constructing a hotel that will serve as an anchor hotel near the convention center. In order to attract domestic and international conferences, the Jeju Special Self-Governing Province provides a variety of incentives such as rent fees, lunch & dinner parties, souvenirs, and other subsidies to domestic and international conventions with a certain number of participants.

[Table 1-19] Number of Accommodations/Sightseeing Spots (nearby ICC Jeju)

Hotels in Jungmun Tourist Complex	Tourist Destination	Foreigner-Only Casinos	Experience Tour/ Golf/Shopping(Duty Free)
9 Hotels (2,024 Rooms)	10	3	6

Source: Jeju ICC Homepage

5) Achievements and Lessons

ICC Jeju has hosted major international conferences including the 2009 Korea-ASEAN Summit and the 2010 Korea-China Summit, as well as ASTA, UNEP, PATA, ADB and WCC. In 2015, a total of 265 events were held, including 36 international events, 196 domestic events, 15 corporate events, and 18 performances & exhibitions. The impact on the regional economy is estimated at KRW 253.8 billion. In 2017, various events such as international conferences, academic conferences, exhibitions and other events will be held. In particular, the Annual Meeting of the Asian Infrastructure Investment Bank (AIIB) will be held in June.

[Table 1-20] Results of Conferences and Events by Year

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Number of Events (Int'l Conference)	194 (19)	243 (27)	282 (24)	278 (40)	297 (32)	255 (20)	258 (36)	264 (27)	265 (37)	275 (32)
Sales (KRW 1 million)	2,000	1,800	1,913	1,427	1,378	2,531	1,767	2,173	2,467	2,395
Direct Production Effect (0.1B won)	503	564	637	610	715	714	765	-	-	-
Local Economic Impact (0.1B won)	1,147	1,287	1,454	1,391	1,632	3,096	1,700	1,955	2,538	2,538
Total Participants (1000 persons)	103.8	119.7	124.1	152.5	174.8	116.5	134.0	195.4	273.1	236.5

* The direct production effect: Only the local economic impact will be used from 2014 according to the JCVB calculation formula

Source: Jeju ICC Homepage

ICC-JEJU, which opened in 2003, recently showed a surplus in cash basis performance when it excluded depreciation cost. However, including depreciation cost, it recorded a deficit of of KRW 7.115 billion in the first year of operation, KRW 4,757 million in 2010, KRW 3,649 million in 2011, KRW 1,547 million in 2012, KRW 1,900 in 2013, KRW 1,399

million in 2014, and KRW 774.4 million in 2015, showing continuous deficit. However, ICC Jeju has successfully held 2,611 ICC events, including 294 international conferences, since the opening in 2016. According to the Korea Culture & Tourism Institute's analysis, the total local economic impact is estimated to be KRW 1.454 trillion as of 2013. Also, it estimated that there was a local economic impact of KRW 173.3 billion in 2014, KRW 253.8 billion in 2015, and KRW 253.8 billion in 2016.

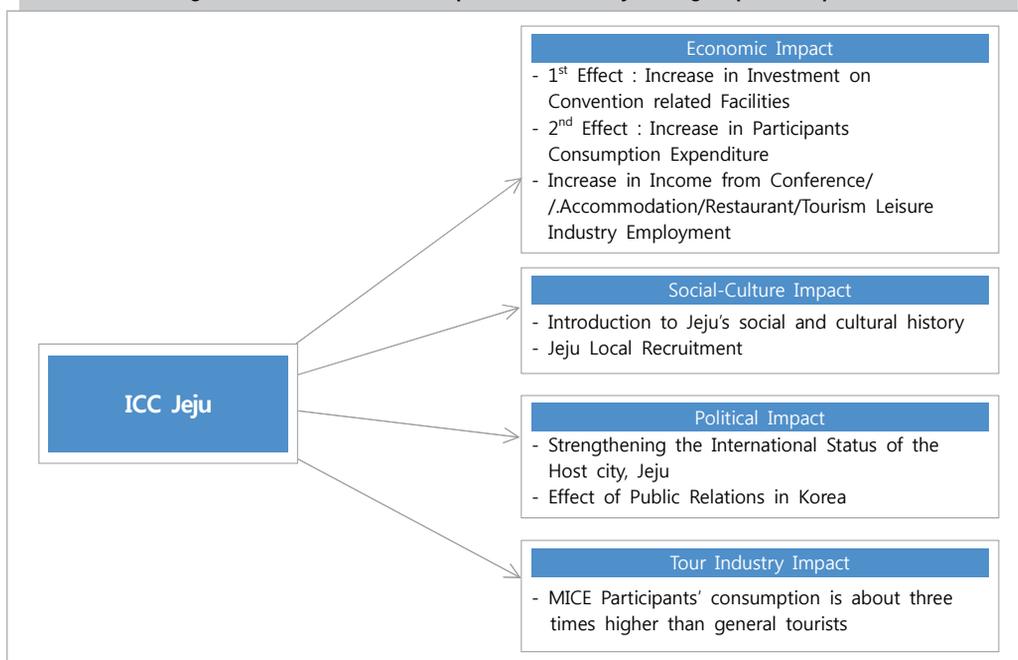
Looking at the sales by business sectors in 2015, the sales of the convention organization business (PCO business) increased by 32% compared to 2014. Next, sales performance increased in the order of conference events and duty-free shop leasing business. On the other hand, sales of subsidiary businesses showed a slight decrease.

[Table 1-21] Sales/Net Loss Trends in the Last 3 years

	Sales Performance (Unit: KRW 1 Million)				Remarks
	2015	2014	2013	Growth Rate ('14 - '15)	
New Loss	774	1,398	1,921		
Sales	11,942	10,902	10,054	9%	

Source: Jeju ICC Homepage

[Figure 1-7] Economic Impact of ICC Jeju Flagship Enterprise



In the income statement, there is no loss in terms of cash flow except for depreciation after the establishment of ICC Jeju, but there is a net loss in accounting. ICC Jeju, which is still operating at a deficit, receives about 1.5 billion won in operating funds from Jeju Special Self-Governing Province every year. However, this still cannot make up for the losses in business. The convention center has missed out on hosting big events due to the shortage of exhibition space and limited facilities. Therefore, a project for a MICE multi-purpose complex facility expansion is expected to be carried out. A new building with a total floor area of 28,000 m² and 4 above-ground floors and 1 underground floor will be built near the current convention center at a cost of KRW 7.0 billion – 2.8 billion from government funds, 2.8 billion from the Jeju Tourism Promotion Fund, and 1.4 billion from ICC Jeju.

C. Aqua-Planet Jeju

Aqua Planet Jeju was the largest aquarium in Asia, with a reservoir volume of 18,000 tons at the time of its opening. It is a huge marine cultural facility, exhibiting approximately 450 species and 45,000 animals and plants. In particular, it has a water tank capable of accommodating up to 6,000 tons of seawater that can display 27,000 fish. These aquarium facilities in Jeju are twice as large as Aqua Planet Yeosu, three times as big as Pusan Sea Life, and 3.6 times larger than the Samsung Coex Aquarium.

Aqua Planet Jeju, which was implemented as a national project, started construction in December 2009 and was completed in 30 months. The total cost of the project was KRW 122.6 billion, including KRW 19.5 billion from the central government and KRW 103.1 billion from private capital. This project was promoted as a "BOT system" in which private operators financed and built the facility, operated it for 30 years, and transferred the facility to the competent authority free of charge. The Jeju Maritime Science Museum, which was jointly established by seven companies, has been in charge of the business. The marine ecological aquarium and performance hall are operated by Hanwha Hotel & Resort. Currently, the number of cumulative visitors is 4 million, making it one of Jeju Island's major tourist attractions.

D. Major Social Infrastructure Expansion Plan

1) Jeju New Airport Plan

In busy season, takeoff and landing takes place in every minute and a half in Jeju International Airport. Jeju Airport's total number of passengers arriving at Jeju is 29.1 million in 2016, up by 3.37 million (13.2%) from 26.24 million in 2015. Therefore, the need for a new airport or expansion of Jeju airport has been continuously raised because of the

already saturated runway and rapidly increasing tourists. Initially there was a review of expanding the Jeju airport, but the existing Jeju airport site expansion was too small. Reclaiming coastline for the expansion was too costly due to the depth of the sea. Also, Jeju airport had a few problems with its flight environment, so plans for a new airport were launched.

The Jeju Airport No. 2 is planned to be on the scale of 5 million m² in Sinsan-ri, Seongsan-eup, Seogwipo-si, Jeju. One runway (3,200m in length, 60m in width) is capable of handling 25 million passengers a year, and moorings and terminals will be constructed. The Ministry of Land, Infrastructure and Transport will make preliminary preparations by the end of the year as Jeju Airport No. 2 passes the preliminary feasibility survey, and plans to implement basic planning in January 2017. After implementing basic design and implementation design from 2018 to 2019, land compensation and construction will begin in 2020. Construction starts in 2021 and is scheduled to be completed in 2024. Comprehensive trial operations and opening of ports are in 2025. A total of KRW 487 billion will be spent on the Jeju Airport No. 2.

2) Jeju New Port (Cruise Terminal) Plan

The current berth capability of Jeju Harbor is two 80,000-ton cruise ships, which means it can only moor them for up to 8 hours due to lack of space. Thus Jeju plans to build a new harbor in anticipation of the rise in Jeju cruises. By the end of 2017, it is expected to complete a Jeju Civilian-Military Complex Port capable of simultaneously berthing 20 vessels and two 150,000-ton vessels at Seogwipo City. However, the government expanded and developed the new port of Jeju with 50,000 people (50 times) in 2010, 622,000 people (285 times) in 2015, 1.2 million people (512 times) in 2016 and 166 million people (638 times). It is also launching the 'Basic Plan for New Port Construction', which is a medium & long-term development plan for fostering tourism. With a new port, the government is fostering Jeju port into the center of international marine tourism in Northeast Asia. By 2030, a total of KRW 2.452 trillion of government funds will be spent to secure 4 berths for 220,000-ton cruise ships and 9 berths for passenger docks.

E. Major Project Financing Method Comparison

The funding methods of major projects related to the Jeju Island's High-Tech & Science Park and MICE industries are different from project to project. The basic infrastructure investment was provided by the central government and Jeju Province, and projects carried out on the basic infrastructure were provided through private capital or foreign capital.

[Table 1-22] Financing Methods for Major Tourist Infrastructure in Jeju

Management Agency	Projects	Total cost (0.1 Billion won)	Financing (0.1 Billion won)
JDC	High-Tech & Science Park	5,800	National Industrial Complex, Public Development, National Budget, Land Sale after Completion of Complex
	High-Tech & Science Park No. 2plan	1,044	JDC Full charge
	Myths and History Theme Park	24,129	(Private capital) Hong Kong, Landing Group
	Jeju Health Care Town	15,214	(Private capital) China, Greenland Holding Group
	Jeju Global Education City	17,810	Public (JDC+Govt): 4,592, Private (Subsidiary company) 13,218 Two private schools are leased after establishment of the JDC, and one is a public school (government-funded)
	Resort-type Residential Complex	22849	Joint venture Berjaya (81% share) JDC (19% share)
ICC Jeju	ICC Jeju	1,666	Corporation Jeju Government 950, Jeju Citizens 426, Korea Tourism Organization 290
	ICC Jeju No. 2 Plan	700	National budget 280, ICC Jeju 14, Jeju Tourism Promotion Fund 280
Jeju Marine Science Museum/ Hanhwa Hotel & Resort	Aqua-Planet Jeju	1,226	BOT (30ys) National Budget 195, Private Capital 1,031
Central government	New Airport No. 2 Plan	48,700	National Budget (2021-2025)
Central government	New Port plan	24,520	National Budget (-2030)

3. Demands in Developing Russky Island

3.1. Russky Island Economic and Industrial Structure Analysis

A. Russky Island

Russky Island is the symbolic space of the Far East development and is the place where the APEC summit was held in 2012. It is attracting attention as a place to cultivate a cutting-edge innovation complex and tourism industry beyond the scope of economic and industrial structure of Primorsky Krai.

Russky Island is about 800m from Vladivostok and has an area of 97.6km² which is slightly larger than Ulleungdo. This island is called Kronstadt of the Far East (Дальневосточный Кронштадт) because it has been used as a military base of the Russian Far East fleet after the Russo-Japanese War. Since 2012, Russky Island has been open to the public. The APEC Summit has led to the construction of the Russky Bridge, which is linked to the mainland.

Russky Island currently houses Far Eastern Federal University, an aquarium, small thermal power plant, and military bases for The Ministry of Emergency Situation and Ministry of Defense. The area is 97.6 km², which is 1/19 of Jeju Island. As of 2016, there are 5,60 permanent residents and about 37,000 students. A detailed map of Russky Island is shown below. The area marked in red and orange is the Saperny Peninsula, which occupies 26% of the Russky Island area, a core area for Russky Island development.

In 2010, Russia designated the island as a special economic zone with the aim of developing a tourism and leisure industry zone. However, the concept of the proposed tourism special zone has not been able to show visible results. After establishing a new development concept, it lost status as a tourism special zone on September 28, 2016 in order to be designated as a Territory of advancing socio-economic development.

In order to promote the Far East development in earnest, the Russian government has enacted a law to designate Territories of Priority Development, which is an upgraded SEZ, in December 2014. In July 2015, it adopted a statute to make Vladivostok, the back city of Russky Island, a 'free port.'

Russia is preparing to designate Russky Island as a Territory advancing socio-economic development in 2017. Russian President Vladimir Putin expressed his will to develop Russky Island in 2017 and instructed related organizations to develop development concepts. A deadline of June 2017 was set for the submission of Russky Island development plan through the in-depth local survey. Each related department prepared reports to the

Minister of the Development of the Russian Far East by April 2017.

President Putin views Russky Island development as a symbol of Far East development. In order to strengthen economic cooperation with the Asia-Pacific economy through Far Eastern development, an area larger than the current scale of Vladivostok is needed. However, due to the hilly topography, there is not enough space for new development. Thus the development of Russky Island can promote Far Eastern development and spread its economic effect to neighboring areas. The Russian government plans to foster new growth industries through the development of Russky Island, and to spread the achievement not only to Vladivostok but also all over Far East Russia. For this reason, the Russian government is considering various options for the development of Russky Island.

B. Natural and Endowed Factors of Russky Island

1) Industry-Related Environment

After the APEC summit on Russky Island on 2012, Russia held the first and second Eastern Economic Forum on Russky Island in 2015 and 2016, and the third forum was already scheduled for September 12, 2017. In addition to holding the Eastern Economic Forum in September every year, many forums and conferences are being held. In 2017, six international conferences will be held from April to September. Currently, such a large event is being held at Far Eastern Federal University.

The Far Eastern Federal University, consisting of 124 departments, has 33,000 students, including 2,500 international students, and 3,300 faculty members. The campus population is 10,500. Far Eastern Federal University has high research capabilities in biological resources & marine technology, new materials, energy, energy saving, nuclear power, bio-medicine, and food technology. Therefore, by utilizing the Far East Federal University, there is potential to develop Russky Island into an advanced science innovation cluster.

The Russian government is also preparing to build the MICE Convention Center at the government level. Through this, synergy effects can be expected between MICE industries and high-tech innovation cluster. Also, for the development of Russky Island, various developments are promoted, including an aquarium (Океанариум) in 2015.

Russky Island has the potential to combine the future-oriented, value-added MICE and the high-tech industry with the tourism industry. Russky Island is considered as a favorite picnic spot for the citizens of Vladivostok with its stunning forests and seas. The tallest mountains in Russky Island are Mt. Russky (Русских, 279m), Mt. Glavanaya (279m), and Mt. Chestralaya (255 meters) located in the central region. They all contain the beauty of the

vast wilderness of the forests. Russky Island is blessed with many bays, unique rocks and beautiful scenery. There are trekking courses along the coast, and recreational facilities can be built along the coast. In addition to natural landscapes, it also has many historical sites such as the Russian Orthodox Cathedral and forts. However, during the winter, the fog is so severe that the islands are not visible and the nearby sea can be frozen. According to the Ernst & Young Report (2017, pp123-124), the main hotels in Vladivostok are total 16, mostly of 3 to 4 stars, and a total number of rooms only 2,500.

[Table 1-23] Primorsky Krai Tourism Statistics

Index	Unit	2015	2016	2017*	2018*	2019*	2020*
Total Tourists	1000 person	2199.1	3138.2	4094.2	4500.3	7448.4	7254.0
-Russians	1000 person	1999.9	2657.8	3520.7	3877.2	6462	5767.3
-Foreigners	1000 person	199.2	480.4	573.5	623.1	986.4	1487.6
Number of Beds	room	15305	18604	21889	23153	28539	29751
Tourism Industry Employees	1000 person	86.5	89.4	90.7	92.4	95.8	96.1

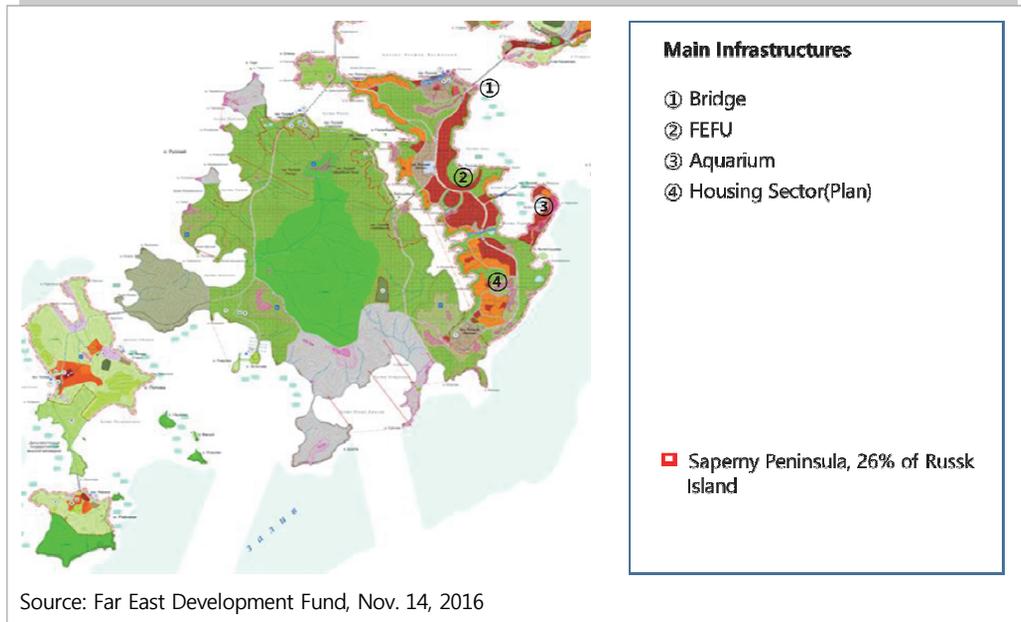
2) Development Site

Russky Island was used as a military base before the Far East Federal University was established. Currently the majority of the island belongs to the Russian Federation government. Therefore, there is difficulty in securing a site necessary for development.

Currently, a specific blueprint is being prepared over the division of roles between landowners, developers, and partners in relation to the land development plan. This Russky Island land development plan will be related to the MICE project, including the tourism and leisure industry projects and the establishment of a high-tech science cluster. In order to attract MICE industries, a consumption space like duty-free shop is necessary in Russky Island.

However, if the development strategy of Russky Island is established and the development plan is specified, there is a possibility that the development site problem can be solved at once under the leadership of president Putin. Currently, the Far East Development Fund, which is under the Ministry of the Far East Development, is preparing the development of Saperny Peninsula, which accounts for 26% of the island's total area.

[Figure 1-8] Development Areas for Russky Island



3) Basic Infrastructure

Since the APEC summit in 2012, the Saperny Peninsula of Russky Island has been equipped with basic infrastructure such as water, power, gas and roads. A cogeneration power plant was built at the entrance to the island from Vladivostok. In 2012, infrastructure utilization was less than 10%. However, as universities were integrated into Far Eastern Federal University and their professors, students, and facilities moved into the island, additional improvement of infrastructure is needed. Road pavement has only been to the aquarium in the Saperny Peninsula. The road into the island is unpaved.

The road connecting the bridge from Saperny Bay to Vladivostok changes into a parking lot when it approaches the Far Eastern Federal University. The aquarium has already been built and if the MICE center is opened and the facility is expanded, current roads will likely cause traffic congestion in Russky Island. Therefore, once the Russian government's plan on Russky Island development is completed and promoted, the lack of basic facilities could be a problem.

4) Logistics and Accessibility

Russky Island is 60 km from Vladivostok International Airport in Artyom and connected to Vladivostok by a bridge. In 2012, Russia decided on Russky Island as the meeting point

for the Asia-Pacific Economic Cooperation (APEC). Prime Minister Vladimir of the time designated the island as a special economic zone for the tourism and leisure industry. As a result, the campus of the Far East Federal University was newly built on Russky Island for the APEC Summit, and the Russky Bridge, which connects to the city of Vladivostok, was also opened. The Russky Bridge is a cable-stayed bridge, with a 1,104 m long central span. Previously one had to take a 30-minute ferry ride from downtown Vladivostok to Russky Island, but Russky Island can be visited easily through the Russky Bridge.

For tourists to Russky Island, there may be physical constraints as there is only one bridge leading to the island. Currently, the Russian government plans to expand the road to Russky Island and put another bridge.

5) Human Capital

Russky Island has a population of about 50,000 residents, including the Far Eastern Federal University. In the back city, Vladivostok, there are 633,000 residents, about one third of the total population of Primorsky Krai. Higher education institutions such as Maritime State University and Vladivostok State University of Economics and Service are located in Vladivostok, so there is no difficulty in getting high quality human resources, but there are not enough high quality jobs available. Many people are leaving the Far East to look for a job after graduation.

6) Living Environment

Russky Island has a dormitory and an in-house hotel form of guesthouse for students of Far Eastern Federal University, but there is no facility available for living in family units. Lack of amenities such as large retail stores causes huge inconveniences for long-term residents in Russky Island. Hence many students are looking for a place in the city. In order to attract qualified personnel to Russky Island, it is necessary to have facilities such as living convenience facilities, medical centers, kindergartens, elementary schools, junior-high schools, and high schools. Otherwise, as development continues, time will be wasted in the daily commute.

7) Hinterland Complex

Russky Island is adjacent to Vladivostok. Vladivostok is designated as a free port, and Nadezhdinsky, Mikhailovsky and Partizansk areas near Vladivostok are designated as Territories of Advanced Social and Economic Development (TASED). The capitalist market economy has been evolved through a series of processes, beginning with trade,

developing the market, producing the goods needed for trade, and supplying better products through technological innovation. Vladivostok and the southern part of Primorsky Krai have a well-established base for developing the capitalist market economy. Vladivostok Free Port is the optimal place for international trade and can potentially become a logistic hub in the Asia-Pacific region of Russia. In addition, products produced in Mikhailovsky's agricultural industry, Nadezhdinsky's light industry, and Partizansk petrochemical industry will trade from the Freeport to the Asia-Pacific region. Trade and manufacturing industries in the southern part of Primorsky Krai will create great synergies when linked with innovation & MICE complexes on Russky Island.

3.2. Russky Island Development Preparation Course

A. Changes from Military Bases to Special Economic Zones

Russky Island is located at the bottom of Vladivostok, belonging to Vladivostok Frunzensky District. It is a fortress built to protect the Pacific Fleet in Vladivostok, on the way to the Vladivostok from the East Sea. Thus it was used as a military base where artillery was located from the Soviet period. Because it was used only for military purposes, civilian access to the island was controlled. Until the completion of Russky Bridge in 2012, the island was only accessible by sea.

Russky Island, not too far from the center of Vladivostok, but inconvenient because of the lack of access, has been the focus of attention in Russia since the 2012 APEC summit. Russia, after the APEC summit, tried to move from the Eurasian country to the Euro-Pacific country. At the same time, Russia was trying to secure a new growth engine through Far East development. However, in the city of Vladivostok, there was not enough space to host large-scale international events such as the APEC summit, and traffic became a problem in the city.

Hence the Russian government decided to develop Russky Island, which remained an undeveloped territory. Russky Island, blessed with its untouched natural beauty, has been designated as a tourist-oriented economic special zone and prepared necessary space for large-scale international events. After hosting huge international events, the area became a home of Far Eastern Federal University which grew after merging with the Far Eastern State Technical University, Pacific State University of Economics, and the Ussuriisk State Pedagogical Institute. By doing this, the problem of post-management of large-scale international event space was solved and concentrated the research ability of the university. As of 2016, Far Eastern Federal University ranked 37th among Russian universities.⁶⁾ Far Eastern Federal University aims to increase the ratio of international students to 25% by 2019.

[Table 1-24] Far Eastern Federal University Overview

	Statistics
Total Area of FEFU	800,000m ²
Building Areas of FEFU	650,000m ²
Number of Dormitory Rooms	5500 rooms
Capacity of Dormitory	10,500 beds
International Students	2,000 from 35 countries
Number of Cooperation University	94 university from 19 countries
Total Students	33,000
Number of Doctors	347
Number of PhDs	1,590
Special Education Programs	468
Educational Programs	300

Source: Far Eastern Federal University

[Table 1-25] Far Eastern Federal University Structure & Courses

Schools	Number of Courses	Major Courses
School of Humanities	10	Society, Advertising, Dispute, Publication, History, etc.
School of Natural Sciences	21	Physics, Software, Ecology, Computer Engineering, Information Systems, Information Security, Electronic Nano, Nuclear Physics, Energy Resource Engineering, etc.
School of Arts, Culture and Sports	3	Design, Physical Education, Culture
School of Education	1	Special Education
School of Economics and Management	10	Economy, management, trade, human resource development, etc.
School of Law	1	Law
School of Engineering	28	Geology, architecture, information and communication technology, electronic technology, machinery, nuclear power, automobiles, mechatronics, materials, firefighting materials, transportation, marine structures, etc.
Oriental Institute - School of Regional and International Studies	9	Politics, Local, International Relations, Language, Linguistics
School of Biomedicine	7	Medicine, pharmacy, medical biochemistry, medical physics, biotechnology, etc.

Source: Far Eastern Federal University

[http://raexpert.ru/rankings/vuz/vuz_2016/#2\(RA_expert\)](http://raexpert.ru/rankings/vuz/vuz_2016/#2(RA_expert))

[Table 1-26] Far Eastern Federal University Major Institutes

Fields	Institutes
Engineering	Research and Education Center for Nanotechnologies Research, Education and Manufacturing Center for Tire Recycling Research, Education and Manufacturing Center for Plastic Recycling "Construction and New Materials" Research and Education Center Research and Education Center for Engineering and Social Ecology "Innovative Timber Construction" Research and Education Center "Ocean" Test Center
Natural Sciences	Research and Education Center for Nanotechnologies "Satellite Technology" Research, Education and Manufacturing Center Interdisciplinary Laboratory of Electron Microscopy and Image Processing (Center of Microstructural Physics) Far Eastern Regional Education and Research Center for Information Security Technical Support Division of Marine Research («COMANCHE» Long-distance Underwater Device) Ecological Analytical Center Research and Education Center for Supercomputing Technologies of FEFU
Biomedicine	Laboratory of Food Technology and Biosafety
Economics and Management	Center for Economic Research Research Center for Quality and Safety of Products Innovative Technologies Center
Humanities	"Bohai" Center for Archaeological Research Far Eastern Research Center for the USA and Canada
Art, Culture and Sports	Center for Studies of Russian Art and Culture of the Far East

Source: Far Eastern Federal University

The major events at Russky Island where Far Eastern Federal University is located are as follows.

[Table 1-27] Major Events at Russky Island

Events	Participants (person)
Russian Student Spring National Festival	2,500
The Russky Summer International Festival	3,000
Pacific International Tourism Expo	15,000
The military-historical panorama "Paratroopers land on Shumshu. The Last Island of War"	6,000
Forum of investment cooperation: Primorsky Krai (the Russian Federation) – Heilongjiang (the People's Republic of China)	600
Far Eastern Media Summit	600
Eastern Economic Forum	3,500, *Over 1,000 international participants
All-Russia Science Festival	2,200
The International Student Unity Day	2,000

Source: Alexander Abramov (2017), 'Convention Center Planning in Russky Island Conference' unpublished.

[Table 1-28] Far Eastern Federal University Meeting Facilities and Capacity

Name	Capacity (person)
Sea Hall	920
Blue Hall	920
Middle Hall	100-500
Sopka Hall	40-300
Column Hall	10-70
Total	1990-2710

Source: Alexander Abramov (2017), 'Convention Center Planning in Russky Island Conference,' unpublished.

As the relocation to the Far Eastern Federal University progressed gradually, the settlement population of Russky Island increased, but the university space alone did not create new tourist attractions. Hence the aquarium was completed in September 2016, which has both research and tourism purposes.

[Table 1-29] Russky Island Primorsky Aquarium Overview

	Related Data
Size	Width: 150m Total Area: 35,000 m ² Tank Size: 10,000m ³ / 25,000t (World biggest Tank: Atlanta USA 30,000t) / 7000 t class water tank : 2 Exhibition of about 500 marine and freshwater creatures
Major Facilities	Undersea tunnel: width 2.5m / length 70m Dolphinarium: water tank: 800m ² / depth 10m, seats: 800 6 large water tank: 60cm thick acryl panel (applied to 6 large tanks, cf. Same as Hanwha Aqua Planet Jeje) Research Center: Research and planning, quarantine, etc., including about 400 tanks, including frozen food storage facilities
Accessibility	No access to private vehicles (vehicles for disabled only) Vladivostok city buses № 15, 63, 74, 76, 77 Shuttle bus, free of charge, from gate house to the ticket office (every 20 minutes)
Current Status	Possibility of student group education program for local schools (2017. 1. 3 - 9 Summer break, Khabarovsk & Primosky Krai region 13,700 students visited) Operation of Aquarium from December 20, 2016

Source: Primorsky Oceanarium Website (2017.03.28.)

The development of Russky Island became more important as president Putin began to regularly host the Eastern Economic Forum on Russky Island to promote the development of the Far East. Among other things, after the Far Eastern Federal University settled in and operated normally, the lack of accommodation and facilities became a serious problem for large international events. During the event, which attracted more than 3,000 businessmen, accommodation facilities in the Far Eastern Federal University were insufficient, and traffic congestion during the event period became even more intense as event participants stayed around the city. Therefore, efforts to solve these problems were needed, but it became difficult to secure development sites, and a development plan with a further upgrade was needed.

B. Releasing from SEZ and preparing for designation for TASED

In September 2016, Russky Island was removed from the Special Economic Zones (SEZ). The Russian government has evaluated the existing special economic zones and removed the special economic zones that failed to achieve results. However, Russky Island was released from the SEZ to develop more aggressively.

In his keynote address at the 2nd Eastern Economic Forum in September 2016,

president Putin remarked on major joint projects related to the Far East development. These were establishing a reliable energy infrastructure, transport infrastructure and the formation of new, competitive trans-Eurasian and regional transport routes, a common digital economic space, and an international science, education and technology cluster on Russky Island. To realize President Putin's strong will to develop Russky Island into a symbolic place for Far East development, the Ministry of the Far East Development, the Primorsky Krai provincial government and the Far Eastern Federal University are now developing the Russky Island development plan according to their respective roles.

Due to the island's limited space, an insufficient plan can harm the value of Russky Island development. To prevent this from happening, all various ideas related to the development will be collected and finally reported to the president. Once the report is approved, the development of Russky Island will proceed faster.



3.3. Development System and Improving Investment Environment

A. Development of Russky Island

The development of Russky Island is now centered on the Deputy Prime Minister of Russia and Presidential Envoy to the Far Eastern Federal District, and the development plan is being prepared by the Ministry of the Far East Development, Primorsky Krai government, Far Eastern Federal University, Russian Academy of Science Far East Division,

and Skolkovo Foundation Far East Branch.

The Ministry of the Far East Development is preparing to build the MICE center through the Far East Development Fund. The Primorsky Krai government intends to improve access to Russky Island through the construction of the Vladivostok Ring Road. The Far Eastern Federal University has built an advanced research center on the campus and is preparing for a suburban residential area for science and medical centers and school faculty in nearby areas.

The Far East Development Fund intends to actively promote government-level support and private-sector capital attraction for the establishment of the MICE Center. The goal is building a MICE center by leasing land from the government after securing necessary funds through a special purpose company (SPC), which will be established with the Far East Development Fund and foreign investment. Currently, an effort is being made to attract investors, and the intended fund participation rate of Far East Development Fund is 30%.

The Primorsky Krai government also conducted a feasibility study on construction of Vladivostok Ring Road with Korean companies to construct a road leading to Russky Island. Likewise, securing investment resources is the most important task.

The Far Eastern Federal University is also one of the major stakeholders in Russky Island development. Far Eastern Federal University is making an effort to construct advanced innovation complexes and promote investment to related field by making full use of its assets. Recently the Far East branch of Skolkovo Foundation settled on Far Eastern Federal University and started supporting venture and start-up companies with a supporting plan for industrial-academic cooperation program linking Far Eastern Federal University and local companies in Primorsky Krai. Its future role is expected to become even bigger.

Also, the Primorye Investment Promotion Agency under the Primorsky Krai government is actively promoting investment from foreign companies. Several investment letters of intent from amusement park related companies and medical companies were received but failed to secure necessary sites in Russky Island, as they are waiting for the Russky Island development master plan to be formulated.

It is important to have a promotion system that can attract private capital for Russky Island's development. The MICE Center, which is currently promoting the most visible form of business, is being prepared by the Far East Development Fund's specific plan. Ultimately, stakeholders of the Russky Island developments, Primorsky Krai government, the Far East Development Fund under Ministry of the Far East Development, and Far Eastern Federal University, share and understand the concept of the development and

should create a promotion and operating system that can maximize the result of the development. The case of Jeju Island shows that the establishment of a single decision-making body or a consultative body enhances the effectiveness of development and the efficiency of the project promotion, so that the Primorsky Krai government should be given more autonomy for development of Russky Island. In other words, the development experience of Jeju Island points out that a promotion system should be made to establish and enforce the development plan in order to effectively establish the development plan and efficiently execute it.

B. Improvement for Innovation Cluster and MICE Center Established Investment Environment

1) Far Eastern Federal University as Innovation Hub in Russky Island

Far Eastern Federal University is a university established by integrating the four universities of Vladivostok and has the best research and development capacity in the area of BT, IT, and MT. It is necessary to make efforts to quickly make Russky Island become an innovation cluster by making this innovation capability function as a primer to attract major research and development facilities. Especially, efforts to attract flagship companies from Russia's central states and foreign countries should be actively pursued.

For this reason, improvement is necessary so that Far Eastern Federal University, which currently conducts research mainly on national programs, can keep pace with private enterprises' demand. Although Cheju National University is a public national university, it is actively introducing a system for industrial-academic joint research. For example, many Korean universities are aiming to provide power to transform local industrial complexes into high value-added parts & components industry, and are implementing industrial-academic cooperation centered university development project to meet local industries' demand. For this reason, specialized courses are offered during semesters and a Capstone Design course is required for all science and engineering department students. Also, an on-site training credit program is offered. In addition, a separate team of industrial-academic research cluster is being operated to support these activities. By reflecting industrial-academic joint activities in professor performance evaluations, active participation from lecturers is encouraged. In addition, by free leasing university sites to research institutes, this attracts research institutes of major companies of related industries and national policy research institutes, resulting in a synergy effect.

By utilizing its best research capacity in the region, Far Eastern Federal University also needs to provide incentives to attract companies and research institutes. Implementing an

industrial-academic joint system which generates synergy effects on Russky Island's entire innovation industry progress is needed.

2) Establish Infrastructure, Provide Investor Incentives, and Prepare Financial Procurement Plan

Infrastructure development is not enough except for the Saperny Peninsula, where Far Eastern Federal University and the aquarium are located, among Russky Island's sites. To attract more tourists to the aquarium, its accessibility has to be improved. The construction of the relevant infrastructure is an important prerequisite for stimulating private sector participation. Recent efforts to improve the accessibility of Russky Island, including the construction of the ring road on the outskirts of Vladivostok, are encouraging. However, prior to the development plan, it is necessary to ensure how to solve the land problem, and infrastructure such as basic housing and education for priming the local economy should be prioritized and the related government budget should be prepared. Appropriate incentives and financial procurement plans related to Russky Island's development should be provided.

[Table 1-30] Investment Supporting System

Supporting Measures	Description
Territory of Advanced Socio-Economic Development (TASED)	Far East Development Corporation provides Basic Infrastructures
Supporting Investors	Ministry for the Development of the Russian Far East & Primorsky Government will support Investment by constructing infrastructure (Now under review)
Financial Support	Far East Development Fund provides a long-term loan up to 30% of total amount of investment budget at a 5% interest rate (ruble)
Residential Support	Moving HQ of State enterprises or Research Institutes
One – Stop Service	Coordinating both the Private and Public sectors through establishing Project Management Company
Tourism Promotion Plan	Visa Exemption, DFS, Cruise Terminal, Expanding Flights

Source: The Far East Development Fund, Feb. 26, 2017

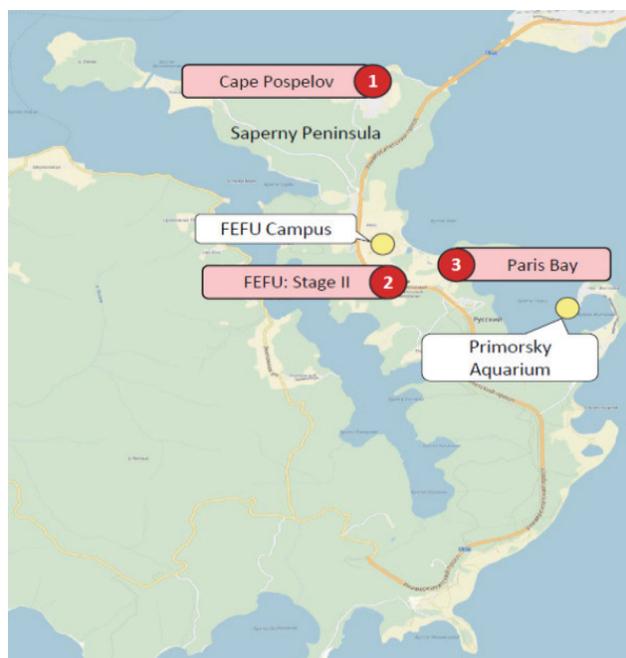
3.4. Major Development Projects

A. Russky Island's Development

The plan to develop Russky Island development is not to develop the whole island once, but to develop around the Saperny Peninsula where basic infrastructure already exists.

In order to construct the International Cooperation Convention Center, a multifaceted evaluation to select a better place between the integrated leisure complex Primorsky Krai and Russky Island was conducted. In the final result, Russky Island was highly evaluated for its proximity to government buildings and downtown, the construction of basic engineering infrastructure, cooperation with the Far Eastern Federal University, hosting of the Eastern Economic Forum, and possibility of construction of new cruise terminal. It was also selected as the most suitable place for International Cooperation MICE center. In addition, considering the three best places in Russky Island, the best place to consider is Paris Bay, which was highly evaluated for its connection with various means of transportation such as cruise terminals and cooperation with Far Eastern Federal University.

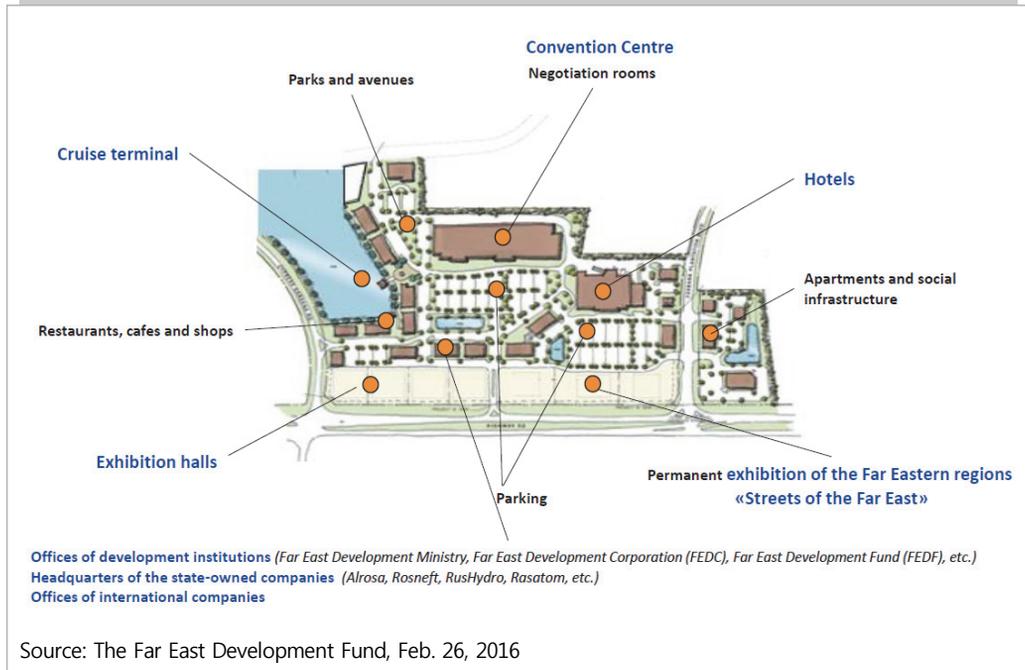
[Figure 1-10] Development Areas in the Russky Island



Source: The Far East Development Fund, Feb. 26, 201

The area around round International Cooperation MICE Center will be divided and developed into an anchor hotel, an exhibition area named 'Street of the Far East', a residential area, parking areas, and a commercial area for restaurants, cafes, and shops.

[Figure 1-11] Site Plan for International Cooperation MICE Center



The development concept of Russky Island begins with the establishment of an innovative site with Far Eastern Federal University, which has scientific potential, as the core. In the figure above, the advanced science and technology complex and an additional residential area will be constructed in the space for the second stage development of Far Eastern Federal University. A residential area near the university will be prepared to attract talented research personnel.

B. Related Business for Russky Island's Development

In the long run, the development of Russky Island can be secured in connection with the free port of Vladivostok and Territory of Advanced Socio-Economic Development of Primorsky Krai southern region. The International Cooperation MICE Center and the Advanced Innovative Complex will ultimately benefit from increased investment in foreign companies and cooperation with Russian companies to ensure sustainable growth. Russky Island's progress will be ensured with cooperation with Russian companies and foreign

companies in the Vladivostok free port, Nadezhdinsky (construction / light industry), Mikhailovsky (Agricultural industry), Partizansk (Petrochemical industry), and Bolshoi Kamen (Ship building).

The Free Port of Vladivostok began on July 13, 2015, when president Putin signed it into federal law,⁷⁾ which came into effect on October 12, 2015. The Free Port of Vladivostok is a concept that includes 16 municipalities, not just Vladivostok.⁸⁾ The areas included in Vladivostok Free Port are Vladivostok city, Artyom city, Bolshoi Kamen, Lazovsky district, Nakhodka city, Partizansk city, Spassk-Dalny city, Ussuriysk city, Nadezhdinsky district, Shkotovsky district, Yakovlevsky district, Olginsky district, Partizansk district, Pogranichny district, Khasansky district, and Khankaysky district.

According to the Consulate General of Vladivostok⁹⁾, 10 foreign companies are in the free port of Vladivostok as of February 2017, and their total investment is estimated to be 205.3 billion rubles (\$3.48 billion). Two Korean companies, Urban Transport System (Vladivostok, Transportation Card), Vostok Polykor (Artyom, Life Chemical), and RusKor (Building Materials) have filed applications for moving in. The Freeport offers major benefits as shown in the following table to foster local industry and attract investment.

[Table 1-31] The Free Port of Vladivostok – Major Benefits

Categories	Main Incentives
Tax benefits	<ul style="list-style-type: none"> • Federal Profit Tax <ul style="list-style-type: none"> - First 5 years : Exempted / - Second 5 years : 2% • Regional Profit Tax <ul style="list-style-type: none"> - First 5 years – Up to 5% / - Second 5 years – up to 10% • Residents in the Free Port will be exempt from regional income tax for the first 5 years. Afterwards, the tax rate will be no more than 1% for the second 5 years (By a law enacted by the Primorsky Parliament) • They are also exempt from land tax and property tax • Social Insurance Contribution: Reduced from 30% to 7.6%
Employment Procedures	<ul style="list-style-type: none"> • Simplified procedure for the employment of foreign staff • Quotas for employment of foreign citizens do not apply

7) Федеральный закон "о Свободном порте Владивосток" от 13.07.2015 N 212-ФЗ

8) Федеральный закон от 13.07.2015 N 212-ФЗ (ред. от 07.03.2017) "О свободном порте Владивосток" 'Статья 4. Территория свободного порта Владивосток' reference

9) Consulate General of the State of Vladivostok, "Leading Development Zone and Vladivostok Free Port Policy Trend", May 15, 2017.

[Table 1-31] Continued

Categories	Main Incentives
Improving Customs Service	<ul style="list-style-type: none"> • Regulations on tariffs, quarantine, immigration control, etc. are relaxed for transit points of seaports, airports and border-crossing checkpoints (However, export / import duties or customs duties are not exempted) • Simplifying procedures for ship's entry, including fishing vessels, and reduce unloading time • Various tasks related to border crossings are performed unilaterally or 24 hours a day, seven days a week (customs officers will be required to pass import and export goods) • Visas (simplified) will be issued automatically to foreigners entering Russia from Vladivostok free port for 8 days
Other measures	<ul style="list-style-type: none"> • Creation of a permanent center in a limited area for luxury articles, artwork, and antiques to sell to potential buyers

Source: Choi Tae-gang (2015), "Response Strategies for the Free Port of Primorsky Krai, Russia", Siberia Far East ISSUE PAPER, No. 13, pp.8-9

The Territories of Advanced Socio-Economic Development in Primorsky Krai are Nadezhdinsky and Mikhailovsky. In March 2017, Partizansk 'Petrochemical industry' TASED was newly designated. As a result, light industry (Nadezhdinsky), agricultural industry (Mikhailovsky), petrochemical industry (Partizansk), and ship building (Bolshoi Kamen) complexes are located in Primorsky Krai. If these industrial complexes are linked with Vladivostok Freeport, which has logistics functions, and with Russky Island's innovation & tourism industry, they will harmoniously synergize.

[Table 1-32] Status of TASED

TASED	Industry Fields	Investment (1 billion rubles)	
		Private (Initial settlement)	Public (Total)
Nadezhdinsky	construction / light industry, Food	67.3	39.72
Mikhailovsky	Agriculture (pork, feed mill)	390.3	44.38
Bolshoi Kamen	Shipbuilding	148.5	3.2
Partizansk	Petrochemical industry	n.a.	n.a.

Source: Kang Myung-gu (2016), "Designation and Implications of Russia's Territory of Advanced Socio-Economic Development (TASED)", Weekly KDB Report, 2016. 8. 22.

[Table 1-33] Companies on TASED

TASED	Companies	Industry
Nadezhdi nsky	Europlast (ЕВРОПЛАСТ)	Plastic Goods
	Inkom FE Logistics (Инком ДВ Лоджистик)	Transportation
	PEB-Stroiprom (PEB-СтройПром)	Nonmetallic Mineral
	EchoStar Factory (ЭкоСтар Фэктори)	Waste Treatment
	Production-Logistics Complex "Roisvostov" (Производственно-логистический комплекс «логистический кондитерч»)	Food Processing
	SATO (САТО)	Textiles & Clothing
	Innovatika (Инноватика)	Nonmetallic Mineral
	Distribution Center «Primorye» (Опково-распределительный центр «Приморье»)	Food & Beverage
	Inmaeks Logistics (Инмаекс Логистик)	Shipping
	Nevada-Nadezhdinskaya (Невада-Надеждинская)	Food & Beverage
	Svyatogor FE (Святогор ДВ)	Nonmetallic Mineral
	Aptamil Far East Rus (Аптамил Дальний Восток Рус)	Paper
	ARNICA (АРНИКА)	Chemical
	LedStroy (ЛедСтрой)	Electrical Technology
	LAORUS PRODUCT (ЛАОРУС ПРОДУКТ)	Food & Beverage
	House-building factory Primorye (Домостроительный комбинат Приморье)	Nonmetallic Mineral
	Premier GAZ AUTO (Премьер ГАЗ АВТО)	Power & Gas
INTERTRAST (ИНТЕРТРАСТ)	Crops, Transportation	
Mikhailov sky	Architect (Зодчий)	Food & Crops
	Mercy trade (Мерси трейд)	Livestock & Food
	Seacoast bacon (Приморский бекон)	Livestock & Food
	RUSAGRO-PRIMORYE (РУСАГРО-ПРИМОРЬЕ)	Livestock & Food
	HoroAgroHolding (ХорольАгроХолдинг)	Crops
	Far Eastern Agricultural Company (Дальневосточная сельскохозяйственная компания)	Livestock & Food
	Chernihiv Agro-Holding (Черниговский Агрохолдинг)	Livestock & Food

Source: <http://erdc.ru/>

Observing at the federal law¹⁰⁾ on Territory of Advanced Socio-Economic Development (TASED), the deadline of TASED is basically set to 70 years and the government can extend it as necessary. In addition, the budget of the federal and local government will be used to build the infrastructure. However, the Act states that it can be leased from TASED if 1) it is inevitable to protect the health and life of the people, protect the cultural heritage of the Russian Federation, and protect the environment and national security; or 2) it failed to make any contract in 3 years after designation or all previous agreements have been terminated.

On the other hand, the development of the MICE center is bound to be related to the number of tourists entering Vladivostok in the long term. The total number of tourists visiting Primorsky Krai in 2016 is about 300 million, of which about 570,000 are foreign tourists. This figure has increased seven times over the past five years. Among foreign tourists, the proportion of Chinese and Korean is very high. The number of Chinese tourists is 420,000, 30% higher than 2015, with Koreans at 51,000 and rapidly growing by 55% compared to 2015 thanks to the visa exemption agreement.¹¹⁾ Currently the airline services at Vladivostok Artyom International Airport are connected to 20 major cities in Russia, 3 in Korea, 7 in China, 1 in Japan, 3 in Thailand, 1 in North Korea, 1 in Vietnam, 1 in Uzbekistan, a total 37 cities in 8 countries. By recently allowing low-cost carrier service, the island is preparing to receive more tourists.¹²⁾

3.5. Development Environment Comparison of Russky Island and Jeju Island

Comparing the development environments of Jeju Island and Russky Island, Russky Island's natural and endowed factors are not so bad compared to Jeju Island. However, there are noticeable differences in development policy, investment incentives, and development projects that can improve the investment environment at government and private levels.

The biggest difficulty lies in some regulations in Russian laws that can conflict with Russky Island's development. The first is the designation of development restricted areas for Russky Island. Military and forest protection areas, which are extensively designated on Russky Island, are legally restricted from the construction, renovation and operation of

10) Федеральный закон "О территориях опережающего социально-экономического развития в Российской Федерации" от 29.12.2014 N 473-ФЗ (ред. от 03.07.2016) (с изм. и доп., вступ. в силу с 01.01.2017)

11) <http://www.news1.ru>, <http://www.ruseconomic.kr/>, <http://russiafocus.co.kr>

12) http://www.primorsky.ru/news/117855/?sphrase_id=4312845

commercial buildings in the area. The second is regulations related to foreign investment in certain sectors. 'Federal law on the procedure of making foreign investments in business companies that have strategic importance for the national security of the Russian Federation' restricts foreign investment in some strategic industries that may affect national security or national defense. The areas of IT, food production, space engineering, transportation, etc., which are regulated by this law, are closely related to the advanced science and technology complex that will be established in the future. If these issues are not resolved, these can act as constraints in fully developing Russky Island and attracting foreign investment in high-tech industry.

[Table 1-34] Comparison of Russky Island and Jeju Island

	Factors	Jeju Island	Russky Island
Natural Environment & Endowment Factors	Industry-related Environment	<ul style="list-style-type: none"> - Triple Crown Winner in UNESCO's natural and science field - Avg. Temperature: 15.5°C - Clean Image - Healing Trailing & Trekking Tourism: Jeju Olle (422Km) ⇒ MICE tourism - Heavily imbalanced towards primary and tertiary industries - Geographical isolation. ⇒ Hi-Tech Science Park 	<ul style="list-style-type: none"> - Avg. Temperature: -23°C to 27°C - Military city (Vladivostok) behind - International Conference <ul style="list-style-type: none"> • APEC (2012) • Eastern Economic Forum (2015-) - Hiking trails in Russky Island - FEFU
	Land Development	<ul style="list-style-type: none"> - Total Land Area: 1,848.5km² (1.9% of Korea) <ul style="list-style-type: none"> • Hong Kong (1.7T) • Singapore (2.7T) • Seoul (3T) • Russky Island (19T) - Land Banking System 	<ul style="list-style-type: none"> - Land Area (97.6km²) <ul style="list-style-type: none"> • 26% of site will be developed • Owned by the Russian Federation.
	Basic Infrastructure	<ul style="list-style-type: none"> - Building Infrastructure since 1970s <ul style="list-style-type: none"> • Airport, Port, Roads • Various Tourism·Leisure Facilities - Convention Center - High-quality accommodations - 7 duty-free shops, 8 casinos - 73 museums and art galleries 	<ul style="list-style-type: none"> - Airport, Old Military Port in Vladivostok - Aquarium (No operation) - Casino (Vladivostok) - Accommodation: Accessibility to outside of the Island - FEFU

[Table 1-34] Continued

	Factors	Jeju Island	Rusky Island
Natural Environment & Endowment Factors	Logistics & Accessibility	<ul style="list-style-type: none"> - Capacity of Airport: 11.14M ⇒ 25.5M • The Airport No. 2 in development • 14 domestics, 31 international routes (43 cities in 6 countries) - Port accommodates up to 80,000 tons of ships up to 220,000tons • New Port in development 	<ul style="list-style-type: none"> - 1,100m bridge (Vladivostok-Rusky Island) - Airport in Vladivostok - Port in Vladivostok
	Manpower	<ul style="list-style-type: none"> - Population: 660,000 (Dec. 2016) • 10% of Hong Kong, 15% of Singapore, 1.2% of Korea, Rusky Island(19T) - JNU (12,000 students, 700 faculties) and etc. 	<ul style="list-style-type: none"> - 5,360 Population in Rusky Island - 0.61M Population in Vladivostok (2016) - FEFU (33,000 students & 3,300 faculties)
	Settlement Environments	<ul style="list-style-type: none"> - No Visa for (180 countries) - Permanent residency: over \$0.5M investment - Medical Facility Environment for Foreigners - English Education City for Foreigners 	<ul style="list-style-type: none"> - University Dormitory - Plan for Residential Area Construction
	Hinterland Complex	<ul style="list-style-type: none"> - 60 cities with over 1 m in population are within 2 hours of flight distance. • Expansion of Airport & Port 	<ul style="list-style-type: none"> -Vladivostok Free Port -Primorsky Krai TASED
System & Policy Factors	Development Governance & Institutional Support System	<ul style="list-style-type: none"> - Organized & Governance • Jeju Support Committee • JDC - Act on Jeju Special Self-Governing Province('06) 	<ul style="list-style-type: none"> -Process of Organizing -Develop and submit development plans
	Investment Incentives	<ul style="list-style-type: none"> - Special Permits & Exemptions for Foreign Investors • Jeju Investment Promotion Zone, • Foreign Investment Zone 	<ul style="list-style-type: none"> - Submit Related Proposals
	Development Projects	<ul style="list-style-type: none"> - Core Projects by JDC 	<ul style="list-style-type: none"> - Preparation for MICE Development

2016/17 Knowledge Sharing Program
(Industry & Trade) with Russia Primorsky Krai

Chapter 2

Improving the Development Plan & Investment Promotion Model for Russky Island

1. Improving Russky Island's Development Policy
2. Investment Promotion Model for Russky Island's Development

Improving the Development Plan & Investment Promotion Model for Russky Island

Sang Joon Lee (Kookmin University)

Seong Hak Yoon (Korea University)

Dong Wuk Kim (Jeju National University)

Roman Dremluga (FEFU)

1. Improving Russky Island's Development Policy

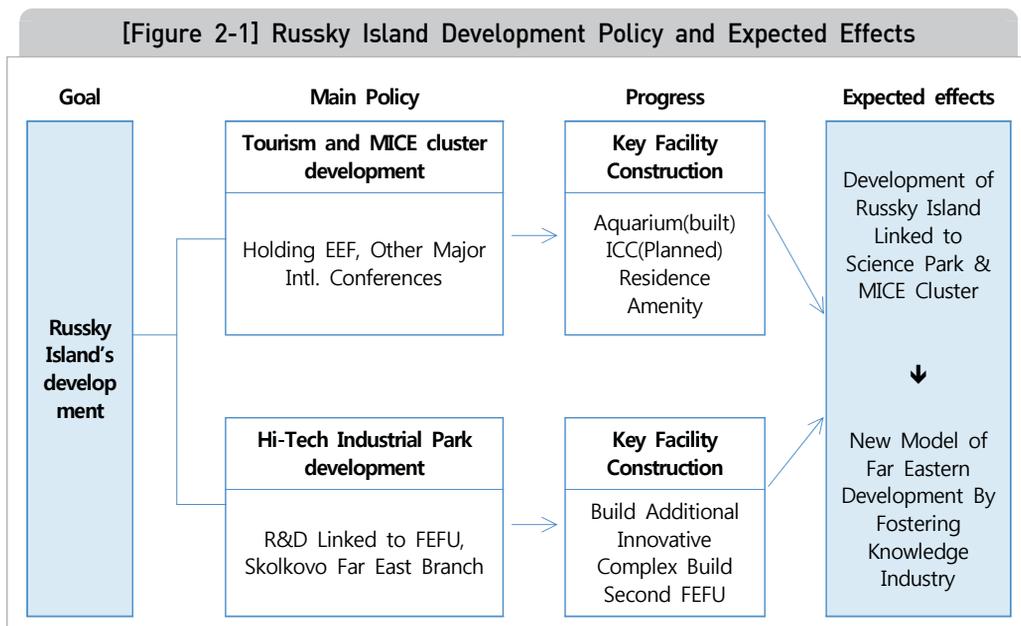
1.1. Current Russky Island's Development Policy

Russia has been pushing for the development of the Far East as a top strategic issue with the 'New East Asia Policy' since 2012, when president Putin's third term began. President Putin's New East Asian Policy was announced at the APEC summit in Vladivostok in September 2012. In December 2014, a law on Territory of Advanced Socio-Economic Development was introduced that provided more benefits to the Far East than from traditional Special Economic Zones. In July 2015, Russia adopted a statute that makes Vladivostok a 'free port', and in September it launched the 'Eastern Economic Forum', a large-scale forum for Far Eastern development.

Since the 'Eastern Economic Forum' in 2015, the Russian government has proposed a strategy to develop Russky Island as a tourism & MICE cluster and advanced science and technology complex. Considering that the Russian Far East development has mainly been carried out in terms of resource development, development of resource export infrastructure, development of transportation logistics infrastructure such as railway repair, harbor development, airport modernization, processing of agricultural and marine products, and industrial complexes centered on manufacturing, Russky Island's

development is the most futuristic form of development in the Far East.

The development area on Russky Island is the Saperny Peninsula, across the Russky Bridge, which accounts for 26% of the total area of Russky Island. The site currently has a land area of 1.1 million square meters, but when the second phase of the development of Russky Island is completed, 120,000 residents will inhabit the island and a variety of facilities will be built on 3 million square meters.¹³⁾



A. Tourism and MICE Cluster Development Policy

Several organizations are planning to turn Russky Island into a tourism & MICE industries and advanced science and technology cluster. Organizations are taking various roles differently and formulating plans simultaneously. Major participating organizations include the Ministry of the Far East Development, Primorsky Krai government, Far Eastern Federal University, Skolkovo Foundation, Russian Academy of Science Far East Division and so on. The Ministry of the Far East Development is preparing to establish a MICE center, while the Primorsky Krai government is working to improve accessibility through the creation of Vladivostok Ring Road. Far Eastern Federal University, Skolkovo Foundation, and Russian Academy of Science Far East Division are attempting to create an advanced science and innovation complex.

13) Far East Development Fund, Far East, Vladivostok, Russky Island Development, November 14, 2016

The Russian government has a strong will to develop Russky Island into a tourism & MICE cluster. The reason for this is to promote the Far East development through various international conferences, including the Eastern Economic Forum held around September every year.

The development of MICE facilities in Russky Island also began in preparation for the APEC summit. This is also related to the establishment of Far Eastern Federal University, which was created by integrating the four Primorsky universities (Far Eastern State University, the Far Eastern State Technical University, Pacific State University of Economics, and the Ussuriisk State Pedagogical Institute) in 2010. Russia created a new university campus on Russky Island, which was first used for APEC summit meetings and then relocated Far Eastern Federal University.

However, while holding the Eastern Economic Forum, the MICE infrastructure on Russky Island showed limitations in holding large scale international events periodically. First, the campus of Far Eastern Federal University has limited accessibility as an international convention center, and has limited use of space because of the university's own functions. Moreover, since participants share dormitories with students, the economic impact of the international events is deteriorating. In addition, due to the lack of convenient and relaxation facilities, there are many complaints by international participants. However, due to the nature of educational institutions, it is also a problem to make entertainment venues on campus. Therefore, construction of MICE centers with commercial functions is expediting for the annual Eastern Economic Forum.

B. Policies for the Development of an Advanced Science and Technology Complex

The Russian government is actively promoting innovation clusters that use Far Eastern Federal University in Russky Island. To promote innovation clusters, industrial-academic joint research is being promoted. This aims for a synergy effect by forming a network of university, research institutes, and corporate research institutes. A development and tourism synergy effect is expected once recreational facilities, water parks, and resorts are built on Russky Island.

Far Eastern Federal University will provide space for the development of an additional 285ha on Russky Island, in addition to the 96ha site currently on the campus. Most of this space is located across from the main gate of Far Eastern Federal University and the university plans to develop medical centers and innovative complexes there. In addition, a

35ha site is planned as a university town for a student dormitory across from the aquarium. MICE center and international schools will be established behind the university town and developed by the Far East Development Fund.

The Russian government hopes to attract research institutes in Russia and foreign companies to the advanced science and technology innovation complex. To attract research institutes of companies in TASED on Nadezhdinsky and Mikhailovsky to Russky Island, international industrial-academic cooperation will be promoted by cooperating with foreign companies and foreign universities.

Far Eastern Federal University has also launched a policy called International Scientific-Educational Cluster (ISEC) in keeping up with government policy. ISECs are expected to lead the company's innovation as a kind of techno-valley associated with the university. Their aim is to expand research, development and commercialization of advanced technology not only in Russia but also in the world market. For this reason, the ISEC policy plans to make full use of the Vladivostok Free Port Act and actively attract foreign investment.

C. Russky Island's Basic Infrastructure Development Policy

The Primorsky Krai Government is supporting Russky Island's development through the creation of infrastructure such as construction of a ring road. The Primorsky Krai government has completed a preliminary feasibility study for the construction of a 22.6km 4 lane highway on Vladivostok. Once road construction is completed, accessing Saperny Peninsula on Russky Island is possible and will bypass the urban traffic jams in Vladivostok (see <Picture 2-4>). The road transport infrastructure budget of the Primorsky Krai government over the next three years is 1 billion rubles. In addition, the Primorsky Krai government plans to construct an international business center in the city.

[Figure 2-2] Vladivostok New Highway (Planned)



Source: Yoo Shin Co., 2016, Vladivostok New Highway preliminary feasibility study

D. Main Development Issues for Russky Island's Development

The main development issues for Russky Island development can be summarized as fragmentation of key development stakeholders, difficulty in land acquisition, lack of related infrastructure, and no establishment of an R & D cooperation system.

First, the institute for creating Russky Island's development plan is divided over the Primorsky Krai government, the Far East Development Fund under the Ministry of Far East Development, and Far Eastern Federal University. However, because there is no control tower that integrates the three institutions, it can be difficult to proceed with a long-term development plan. For example, the Primorye Investment Promotion Agency under the Primorsky Krai government has received a letter of intent from a foreign investor related to the medical center, but it is difficult to carry out the project immediately because the necessary land has not been secured. In addition, the medical center received by Primorye Investment Promotion Agency is a separate project from the medical center of Far Eastern

Federal University, so a master plan related to medical clusters is needed.

Second, the real problem facing Russky Island development is that it is not possible to acquire land necessary for development properly. Much of the land is now owned by the Russian Federation (Ministry of Defense). Government policies on how land should be used when private business operators develop Russky Island have not yet formulated. Some commercial facilities on Russky Island are solving problems through land leases, but when large investments are made, a clear legal interpretation of land ownership and usage rights should be given.

Third, Russky Island still lacks the necessary infrastructure for development even if the development subject is clear and the land problem is resolved. As of 2017, the Russky Island site has not been developed except for Far Eastern Federal University and aquariums and some related infrastructure. In order to improve the accessibility of Russky Island, a plan for the construction of Vladivostok ring road is being created, but for the time being it is impossible to avoid situations where access is inconvenient. Prior to the development plan, development subjects and land issues should be sorted out, and establishment of infrastructure like basic housing and education to vitalize local economy is needed.

Fourth, it is expected that the advanced technology innovation complex development plan of Far Eastern Federal University will be able to produce considerable synergistic effects when cooperating with Far East Division of Russian Academy of Science and Far East branch of Skolkova Foundation. However, so far there is no more synergy effect other than relocation of the Skolkovo Foundation Far East branch to Far Eastern Federal University. The biggest difficulty is that S. Ivanets, the former president of Far Eastern Federal University, has stepped down and selection of his successor has been delayed.

1.2. Improving Russky Island's Development Policy

A. Specification and Quantification of Russky Island's Development Goals

The Russian government is committed to the development of Russky Island, but discussions on how to present it as a concrete goal are ongoing. Russky Island's development is limited in scale of development, inefficiency in scale, financing arrangements, lack of relevance of related companies, etc., which have to be solved in the long term. However, these problems would be clearly addressed from the start in order to realize development.

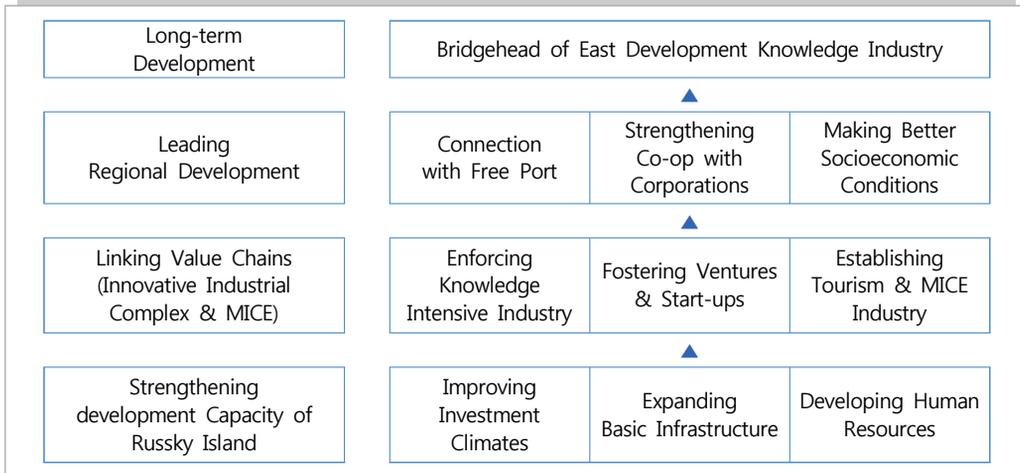
The current development vision of Russky Island is the construction of a knowledge-based

city that creates a human, environment & knowledge centered future, and an eco-tourism city that shares a unique culture. To this end, the basic direction of Russky Island's development is to build an 'Environmentally-Friendly Knowledge-Based City', and to develop it as the hub city of Far East Asia, including the Primorsky Krai region. In budget execution and policy formulation, Russky Island's development should be approached with a long-term perspective rather than as a short-term one. It is necessary to establish advanced science and technology innovation clusters based on bio-technology (BT), information technology (IT), and marine technology (MT) that can take full use of the advantages of Russky Island in current conditions. In addition, it is necessary to develop the research and development facilities of related industries in a concentrated manner. In particular, it should be able to attract the investment of related companies through attracting high-tech and top class enterprises in Russia. Far Eastern Federal University should attract R & D functions in cooperation with leading companies and universities both domestic and international and carry out the role of global R & D base.

In addition, it is necessary to establish infrastructures (hotels, residential spaces, schools, medical facilities, convenience facilities, etc.) linked to MICE industries to attract various international events. International events on Russky Island not only increase Russky Island's status, but also have a great economic effect. In the case of the Eastern Economic Forum, since the number of its participants reaches couple of thousands, the economic benefits will reach millions of dollars if the necessary infrastructures are established. If the Russian government implements the visa exemptions for individuals visiting the Russky Island MICE, the tourism effect will be significant.

As mentioned above, the development goal of Russky Island is to become a Far East hub of the advanced science technology and the MICE industries. In order to achieve these goals, the goal should be specified and quantified so that it can be easily managed. Through the successful development of the Russky Island, Primorsky Krai will be able to raise the status of Russia as a Far East Asia base, and by creating a new growth engine, will contribute Russia's national wealth.

[Figure 2-3] Formulating the Development Goals of Russky Island and Its Vision



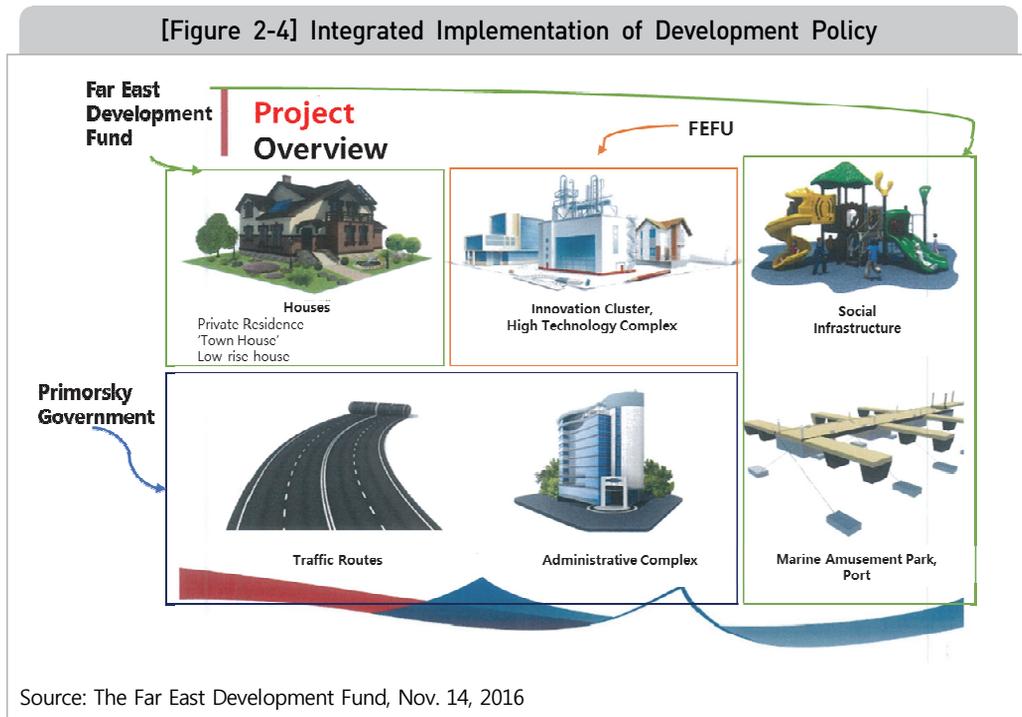
B. Integrated Execution of Russky Island’s Development Policies

Another reason why Russky Island’s development policies are ineffective is that development is segmented and promoted by various agencies as shown in <Picture 2-4>. Currently, the development of Russky Island is being promoted by the Far East Development Fund, Far Eastern Federal University, and Primorsky Krai government. Although these institutions participate in development with clear areas respectively, there is no organization or governance to coordinate and integrate them. For example, Far Eastern Federal University is attracting nuclear medical facilities, while the Far East Development Fund is promoting an advanced medical complex. The Primorsky Krai government is in the process of developing infrastructure such as roads, but it has not been able to make an accurate plan on where and what will be established.

It is necessary to integrate organizations that started development of Russky Island to maximize synergy effects or at least to formulate a consultative body and coordinate them in an integrated manner. For companies that want to invest for economic benefits, there may be problems such as receiving double permits if related businesses are segmented for the development of Russky Island or if the use of space is used exclusively.

It is necessary to organize a ‘One-Stop Service’ for Russky Island’s development and organically coordinate various related organizations and establish a smooth cooperation system for investment related departments. Also, a system has to be established to support the entire process of investment consultation, permits, and launching business start-ups. Additionally, an administrative support system should be established to handle the problems that arise in the process.

In order to integrate Russky Island's development, the island's development should be linked with the Vladivostok free port in the long run. R & D projects should be jointly developed in response to technological development demand and market expansion of companies residing in TASED located in the southern part of Primorsky Krai, such as Nadezhdinsky, Mikhailovsky, and so on.



Currently, the development strategy of new technology industries such as IT and BT is part a global trend to integrate companies and related organizations within a certain area. Russky Island should also be the hub of the Far East economic development based on Far Eastern Federal University. By offering exceptional conditions to domestic and foreign companies and research institutes, it can attract them to the complexes. Since the advanced science park serves as an incubator for industrialization of basic science as seen in the development experience of Jeju Free International City, the central government's financial support should be fundamental. In addition, due to the nature of the IT and BT industries, it is necessary to establish government- funding for the venture companies, since the cost of attracting initial enterprises will require significant operational and fixed costs.

There is little reason for global companies to advance on their own in the Far East, where the basic infrastructure for tourism is lacking, and the MICE industries, which has

low market share. Thus it is necessary to prioritize strategies to attract companies with exceptional conditions. MICE industries based on Russky Island's natural environment, the conference facilities of Far Eastern Federal University, and the building of its nearby aquarium, can be efficiently developed by attracting foreign companies with specialized know-how and capital in all areas, rather than attracting individual companies.

C. Development Strategy Differentiation of MICE Center and Advanced Science Complex

1) MICE Center

Since Russky Island held a large international conference such as the Eastern Economic Forum (EEF) following the Asia-Pacific Economic Cooperation Summit (APEC) in 2012, Far Eastern Federal University has basic facilities for international conferences. However, while currently the campus of Far Eastern Federal University is equipped with conference facilities while promoting APEC and the Eastern Economic Forum, full-scale exhibition facilities are not provided.

Today's international conferences have a tendency to combine exhibitions, conferences, and recreation. In addition, the current trend is to build sightseeing, food, and cultural facilities to support the MICE industries. It is necessary to consider the creation of a multipurpose function complex convention center like Seoul COEX (Convention & Exhibition) which has the function of a shopping and trade center to increase commerce by linking export and import companies in Russia and Asia-Pacific region with international buyers, not like Jeju ICC which aims at professional conferences and exhibition-oriented management.

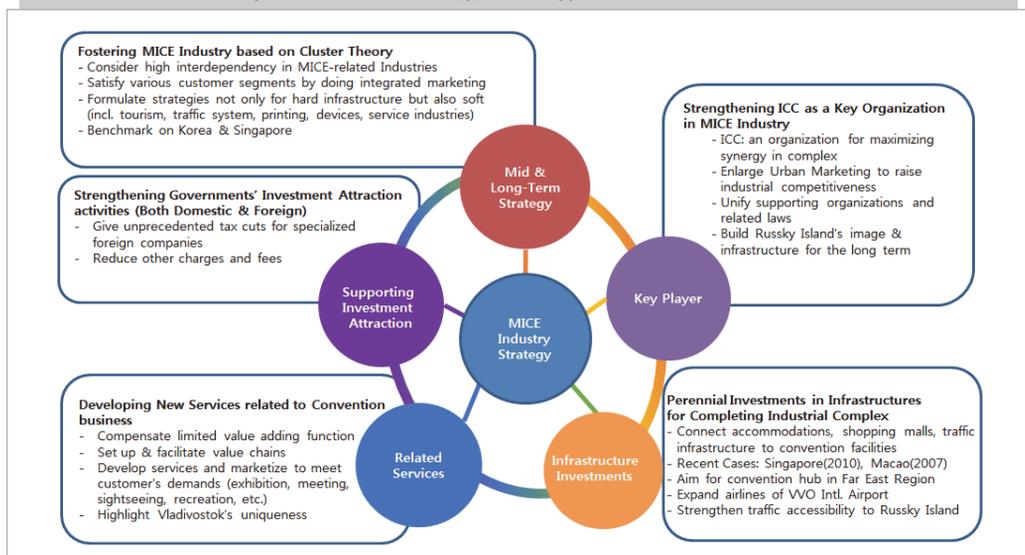
If an exhibition function is added at the MICE center on Russky Island, research institutions and companies seeking to cooperate and collaborate with Far Eastern Federal University can simultaneously utilize Russky Island's convention and exhibition facilities. Therefore, the convention center planned by the Far East Development Fund should be a resort type of exhibition and convention center where the exhibition space is secured. In addition, if a trade center is separately prepared in the MICE center, or if an anchor hotel is used as multipurpose space for a trade center, many companies trying to trade with the Far East will visit the trade center and increase the utilization of the MICE space.

[Figure 2-5] Major Facilities of an International Cooperation Center



The MICE center must be combined with the tourism industry to create synergy. Participants of the exhibition prefer a tourist destination where they can relax. Las Vegas is a typical example of this, and Singapore and Shanghai have recently operated the MICE center with this concept. Russky Island, however, lacks the space required for the development of large-scale tourist attractions. It should be considered that the available area is too small to attract large tourist complexes such as theme parks combined with MICE because Far Eastern Federal University is already located on Russky Island.

[Figure 2-6] Fostering Strategy for MICE Industries



2) Advanced Science & International Education Clusters

Rusky Island's advanced science park must form a horizontal partnership with Vladivostok Freeport and the production and marketing value chain of the southern Primorsky region to make a synergy effect. At the same time, manpower supply and financing for the Rusky Island advanced science complex should be prepared. In this context, Jeju's development experience has some aspects to consider, but not all of them should be applied.

Because of the fact that Jeju Island was a non-manufacturing region without factories and has created an advanced science complex for specialized technology development in the region, there are many points of reference for Rusky Island's development. However, Jeju Island's development model cannot be applied as it is. This is because the university was not the actor for the creation of advanced science complexes. JDC contributed greatly to the construction of the Jeju Advanced Science Park. JDC secured the financial income through the sale of land and the operation of duty free shops after the development of the land, which made it easier to construct Jeju Advanced Science Park.

However, the majority of the land in Rusky Island is a development-restricted area, which makes it difficult to secure development funding through land development. In addition, there is no stable source of income such as duty-free operation, which makes it difficult to induce private participation. Therefore, while considering the development model of Jeju Island in advanced science park development as a long-term development model, it is necessary to prepare a plan that enables Rusky Island to develop into an advanced science cluster in the short term. The following is a proposed development direction of Rusky Island TASED Techno Valley.

[Table 2-1] Rusky Island TASED Techno Valley (Advanced Science Cluster) Development Direction

Major competencies & fields	Ocean Resource Research And Development
	Energy Efficiency And Energy Saving Technology
	Oil And Gas Industry (mainly related to the temperate and Arctic continental shelf)
	Nuclear, Radiation, Environmental Safety, Medicine, Nuclear Medicine, DNA Testing, Genetic Research, Diamond & Solid State Physics
	Engineering Center for Shipbuilding and Ship Repair
	Military and Defense Technology

In this context, it is necessary to consider the experiences of Daedeok Innopolis which is based on KAIST (Korea Advanced Institute of Science and Technology). Daedeok Innopolis revitalized a voluntary community between venture and start-up by creating a forum focusing on core research capacity with KASIT as a center. It is necessary to take active measures to enable Far Eastern Federal University to carry out this role. Also, it is necessary to actively review and adopt Jeju's experience of securing a stable supply of manpower and finance in the long term.

In addition, an industrial ecosystem should be considered in the construction of an advanced science and technology complex. Unlike the case of Jeju Island or the industrial complex of Silicon Valley in the United States, which is backed by many industrial ecosystems such as California's many engineering colleges, including Stanford, there is currently only the Far East Federal University on Russky Island. Of course the Far Eastern Federal University has produced various specialized talents, but there is absolutely a shortage of related human resources that can be received locally.

Even without the relevant universities, the potential of Vladivostok has not been sufficiently developed as an area rich in educational facilities, cultural facilities, and social safety net. The geographical location of the Far East does not provide incentives to attract highly qualified professionals. High-quality personnel are particularly concerned about the educational environment for their children, and Russky Island has no associated infrastructure other than an elementary school (Shukola).

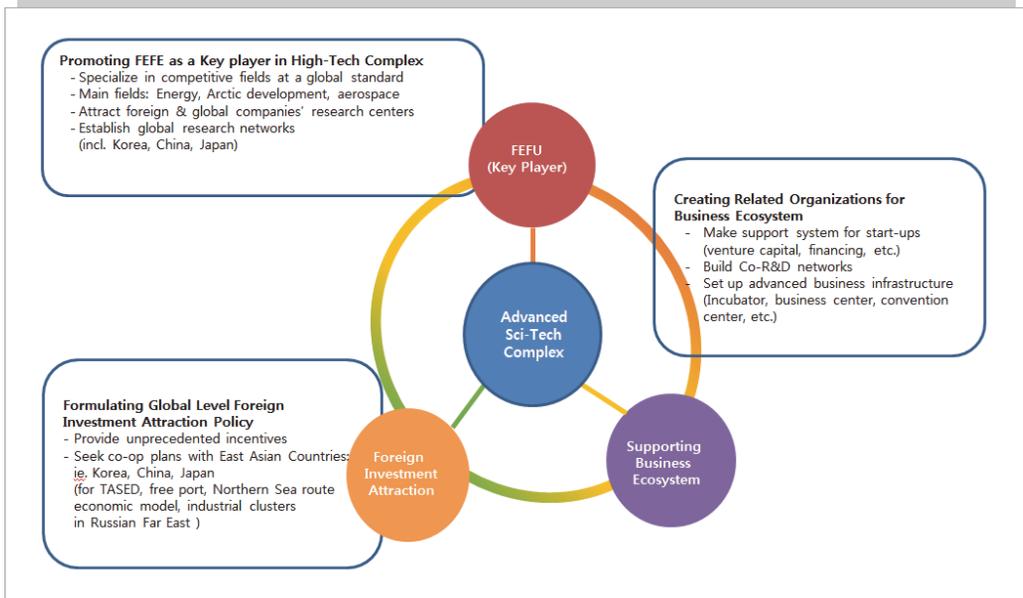
The government should also actively seek support for attracting highly qualified professionals. The city of Daegu in Korea wanted to become a medical tour city by attracting a medical center like the Cleveland Clinic, but in order to attract it, it would need to build a facility worth about KRW 10 trillion won and needs KRW 200 billion over 10 years to finance operation costs. Abu Dhabi of UAE actually invested at this scale and attracted advanced medical complexes. However, despite the enormous investment, only about 10 American doctors were dispatched, and the remaining positions were filled by local and European employees after education. Daegu was aware of these problems and promoted specific areas rather than covering the entire medical field.

Daegu attracted medium-sized hospitals and clinics specializing in the field of hair transplantation where Daegu-Gyeongbuk province has technical dominance. In addition, it has become a medical cluster in a specific field by supporting easy clustering of companies using strong ICT manpower, and by creating an environment of affordable research facilities.

Based on this experience in Korea, Far Eastern Federal University should form a cluster

centered on the technical competencies that the region has as its strengths, rather than covering all high-tech industries. For example, one way is to attract technology research centers from Russian natural resource development companies or Vostochny Cosmodrome (spaceport), and provide relaxation facilities and educational institutions for their children. If these institutes remain stable, it is possible to cooperate with foreign companies interested in Russia's advanced technology or with research institutes of other universities.

[Figure 2-7] Policies for the Development of an Advanced Science and Technology Complex



On the other hand, one of the important implications of the Jeju development experience is that sufficient preparation is needed in case of expanding the development zone all over. If the development boom develops in the process of developing the limited space of the island, it may lead to reckless development and suffer from aftereffects. It is necessary to gradually and systematically expand development areas in consideration of the environment.

D. Providing Non-Discriminatory Investment Incentives to Foreign & Domestic Investors

Foreign investment, as well as procurement of investment resources, plays an important role in developing Russky Island as an international center. In order to attract

foreign investment, it is necessary to strengthen investment incentives and improve the management environment of foreign-invested enterprises. In addition, residents' settlement conditions should be improved for foreigners. The Investment Promotion Zone implemented in Jeju Island can be distinguished from other domestic special economic zones since it provides incentives without discriminating domestic investors.

Jeju Island provides tax benefits to both domestic and foreign companies in order to overcome its geographical weakness in attracting the investment to the island and to foster key industries needed for growth. On the other hand, Korea's other free economic zone system has the effect of reverse discriminating against domestic companies by imposing tax benefits only to foreign companies. In many studies¹⁴⁾ on the performance of the Special Economic Zone in Korea, it has been pointed out that the reverse discrimination of domestic enterprises is a factor that hinders the investment of major domestic companies in the special zones.

Rusky Island has geographical disadvantages that are located far away from western regions such as Moscow and St. Petersburg where major corporations are located, so it is necessary to provide incentives for major domestic companies that can become an anchor in key industry development besides foreign investment. Therefore, as in Jeju's experience, it is essential to provide non-discriminatory benefits for domestic and foreign investment.

Since foreign companies feel an institutional uneasiness when they invest, one effective method is to give presidential invitations to CEOs of negotiating or attracting companies, and to link the president's domestic and overseas events with attracting foreign investment. This is not only passive investment attraction, but is also necessary to systematize customer-oriented investment attraction marketing activities, provide customized information required by investment companies, and make various efforts to immediately reform Rusky Island's investment environment.

E. Improving Investment Attractiveness in Vladivostok and Major TASEDs of Primorsky Territory

In order to successfully attract investment to Rusky Island, the government must improve the investment attractiveness of Vladivostok and Primorsky Krai. One of the success factors for attracting investment to Jeju and Korea was the adjacent major market. In Korea, the reason why the special zones of Incheon and Busan were successful compared to the other special zones was not only the incentives of the special zones, but

14) Korea Development Institute (2010), Federation of Korean Industries (2011), Korea Economic Research Institute (2015), National Assembly Budget Office (2016) referencing

also the attractiveness of the neighboring areas.

These experiences also exist in Russia. Russia's most successfully established special zone is Lyudinovo (Людиново) special zone in Kaluga Oblast near Moscow. Kaluga has various industrial potential based on its developed agriculture. Its abundant low-wage labor force and foreign investments are due to the accessibility to Moscow city. Kaluga's transportation infrastructure is in the top 20 and its telecommunication infrastructure is in the top 10 in Russia respectively.¹⁵⁾ With such infrastructure and accessibility to Moscow, Korean companies such as Samsung Electronics, LG Electronics, and Korea Tobacco & Ginseng Corporation have settled in Kaluga, along with assembly plants such as Volkswagen and Volvo in automobile manufacturing.

Another successful special economic zone in Russia is the Alabuga Special Zone, located in the city of Alabuga in the Republic of Tatarstan. It is located in the downtown of Alabuga, which has about 25ha of logistics automation facilities, a 30,980m² container yard, and a railway terminal.¹⁶⁾ The advantage of the Alabuga special zone is that customs clearances are performed quickly and accurately by the computer system, and introduction of the equipment is mostly exempt from tariffs and taxes.¹⁷⁾ In addition, the Alabuga special economic zone has a policy to fully subsidize electricity for its tenants. In 2012, Alabuga attracted \$1 billion in private investment, totaling \$2.5 billion.

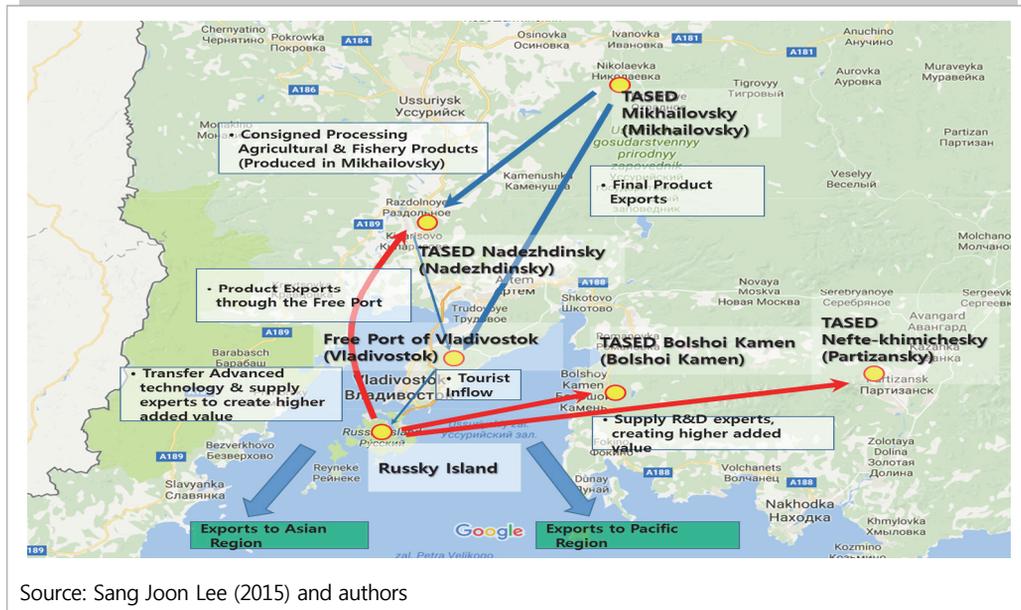
Therefore, in order to increase the attractiveness of Russky Island, efforts to increase the attractiveness of Vladivostok and Primorsky Krai must be carried out together. Since Vladivostok is designated as a free port and there are many attractive TASEDs in the southern part of Primorsky Krai, the investment attraction of Russky Island will further increase if Primorsky Krai develops as the center of processing, manufacturing, advanced technology, and logistics. If a policy to improve the attractiveness of Primorsky Krai and link high-tech industries to the industries in the neighboring region is implemented, Russky Island will become a hub of knowledge industry in the Far East and TASED and attract various investments. In addition, through international industry-academic cooperation on Russky Island, the role of the Far Eastern Federal University becomes more important by developing and teaching necessary techniques and playing a major role in procuring various funds needed for the development of Russky Island.

15) KOTRA, "Kaluga investment environment in Russia", 2011.6.30.

16) <https://russiafocus.co.kr/business/2013/06/28/42377>

17) <https://russiafocus.co.kr/business/2013/06/28/42377>

[Figure 2-8] Linking Major TASEDs in Primorsky Krai and Free Port

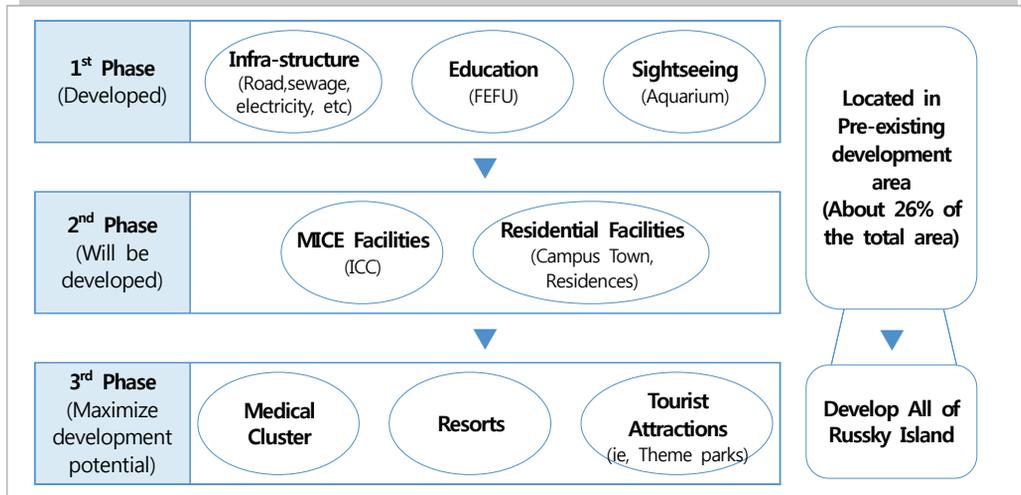


Considering Jeju's experience, it will be difficult for MICE Center in Russky Island to make profits in a short period. Most international MICE centers are located near cities with large population inflow. MICE industries are possible in Las Vegas, Singapore, Seoul and Tokyo because these cities support floating populations in the millions. Seoul alone can have a population inflow of 20 million, but the population of Vladivostok hardly exceeds 1 million including that of the nearby area. Therefore, it is necessary to make Russky Island easily accessible not only from Vladivostok and Primorsky Krai but also from neighboring countries. In order for the MICE center to operate normally in a city with a population of 70000 people, efforts are needed to maximize the potential demand of the region. It is necessary to provide convenient modes of transportation from the airport or station to Russky Island to potential customers who can visit this area without visas.

F. Expansion of Russky Island's Development Areas

Russky Island's development has progressed on only 26% of its total area. In order to maximize the utilization of the MICE center and advanced science and technology innovation complex, the development area should be extended to the entire island of Russky Island so the island can fully develop into an environmentally friendly city.

[Figure 2-9] Expansion of Russky Island's Development Areas



2. Investment Promotion Model for Russky Island's Development

2.1. Analysis of Russky Island's Foreign Investment Attractiveness

The Russian government intends to actively attract foreign investment as well as use federal government funds to finance development of Russky Island. The Russian government's revision of the budget announced after the fall of oil prices in 2009 also emphasizes attracting private investment. The Russian government has set the internal principle of Far East development as '25% from the government budget and 75% from the private sector.' Therefore it is important to present projects that attract foreign investment and foreigners in developing Russky Island.

Korea's Songdo Economic Special Economic Zone is recognized as an international complex in Korea despite only 3 - 4% of all companies being foreign. This effect has also enabled Songdo to attract domestic capital investment. In the case of Jeju, relocation of the flagship Korean IT companies enabled the building of an advanced science and technology complex. Therefore, Russky Island also needs to actively attract foreign investment. Attracting foreign investment is essential to attracting Russian investors as well. With the inflow of funds through foreign investment, Russky Island can become an important symbolic space for Far Eastern development by promoting employment, securing advanced technology, and expanding an overseas network.

Improvement of the investment environment is necessary because foreign companies do not easily invest early on when a development environment is not in place. Furthermore, the investment environment Russia's Far East should be considered as less favorable than in Moscow and elsewhere. As shown in <Table 2-2>, foreign investment in Primorsky Krai is only 17.5 billion rubles in 2014, 1.8% of Russia's total foreign investment (975.8 billion rubles). Far Eastern Russia has attracted 110.1 billion rubles in the Sakhalin Oblast, where 'Sakhalin 1' and 'Sakhalin 2' oil fields are being developed, which accounts for 55% of the Far East's total foreign investment. Therefore, efforts to attract foreign investment to Primorsky Krai and Russky Island need to be further improved.

[Table 2-2] Foreign Investment in the Far East

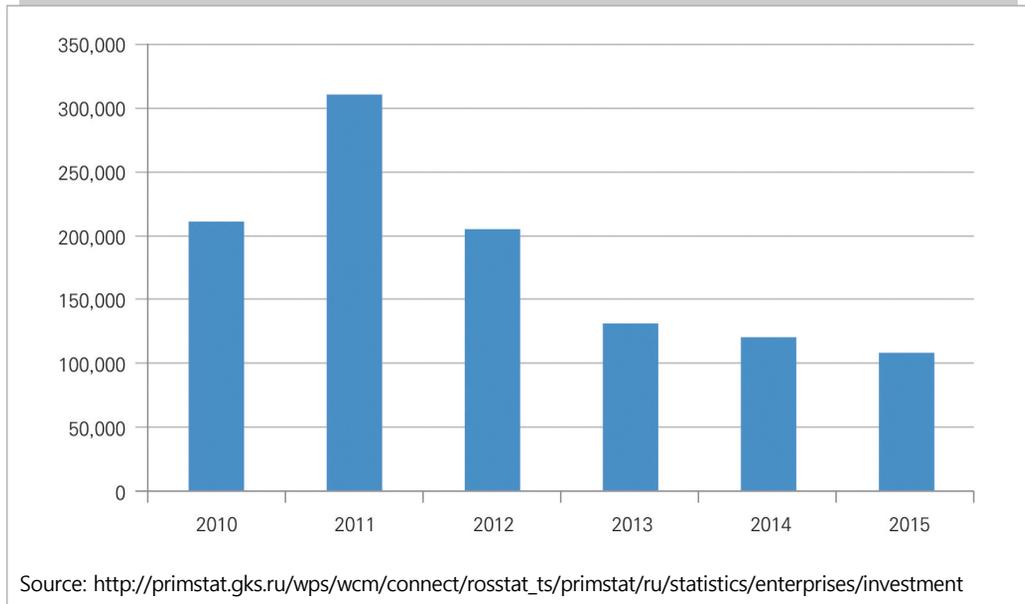
(Unit: 1 Billion rubles)

Federal Subjects	2012	2013	2014
Far Eastern FO	176.7	187.9	201.8
Sakha Republic	42.8	44.4	33.1
Kamchatka Territory	1.8	0.4	0.9
Primorsky Territory	12.0	16.5	17.5
Khabarovsk Territory	25.6	36.8	26.1
Amur Region	18.2	11.5	2.1
Magadan	1.9	3.0	6.5
Sakhalin	65.4	69.1	110.1
Jewish AO	1.8	2.2	2.8
Chukotka AO	7.3	4.1	2.7

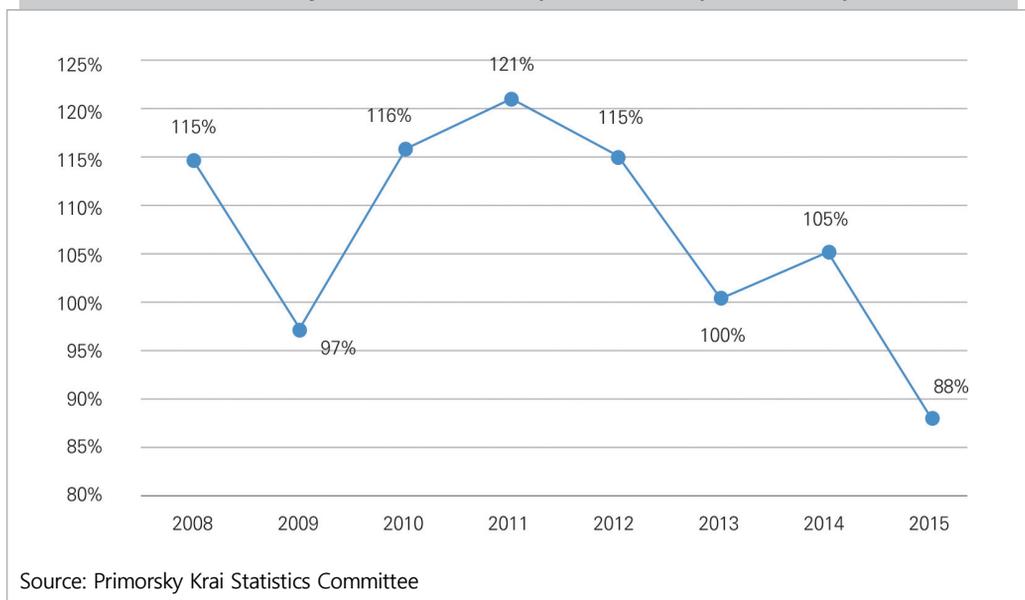
Source: Statistical Annual Report 2016, Statistical Collection

The Far East Primorsky Krai has an advantageous investment environment because it neighbors North Korea and China and is easily connected to Korea by sea. However, as shown in <Table 2-3> below, the fixed investment in Primorsky Krai has declined after 2011, just before the opening of APEC. The growth rate in 2015 fell to 50.48% compared to 2010.

[Table 2-3] Fixed Investment Trends in the Primorsky Territory



[Table 2-4] Changes in the Primorsky Krai Industry Productivity Index



At the St. Petersburg International Economic Forum in 2016, Primorsky Krai ranked 58th among the Russian regions with a very low investment environment.¹⁸⁾ As a result of

18) <http://www.primorsky.ru/news/112468/>

a national assessment consisting of 45 indicators, Primorsky Krai received a low rating due to construction permits, power grid connection, company registration procedure, bank loans, and insufficient investment insurance. Regions belonging to the fifth lowest group like the Primorsky region are Sverdlovsk Oblast, Stavropol Krai, etc. As shown in Table 2-5 below, Primorsky Krai has the lowest investment environment among all regions of Russia. Primorsky Krai belongs to the lowest E group among the whole regions, and records the lowest ranking in the regulatory environment, business research, infrastructure and resources, small size enterprises, etc. The St. Petersburg Forum has recommended the Primorsky Krai government to develop a public-private partnership (PPP), to increase the attractiveness of investment and to create favorable conditions for investors, to solve this problem.

[Table 2-5] Evaluation of Business Environment by Region in Russia

Region	Total Group	Regulatory Environment	Business Institutes	Infrastructure & Resources	Support for small business
Kaluga Oblast	A	1	1	1	1
Ulyanovsk Oblast	A	2	1	4	1
Krasnoyarsk Krai	A	1	2	1	3
Tatarstan	A	2	3	2	1
Kostroma Oblast	A	2	2	3	2
Tulskaya Oblast	B	2	2	3	3
Krasnodarskiy Krai	B	1	4	2	4
Tomsk Oblast	B	3	4	3	2
Altai Krai	B	3	1	4	5
Vladimir Oblast	C	4	3	3	4
Rostov Oblast	C	3	4	2	5
Chelyabinsk Oblast	C	4	4	3	2
Leningrad Oblast	C	5	1	2	5
Sakha Republic	D	5	4	3	1
Samara Oblast	D	4	4	5	1
Khabarovsk Krai	D	5	3	3	3
Moscow	D	5	3	2	4
Sverdlovsk Oblast	E	4	5	2	4
Stavropol Krai	E	4	5	4	2
Saint Petersburg	E	5	5	2	3
Primorsky Krai	E	5	5	5	5

Source: <http://www.doc22.ru/information/expert/5079-9->.

Of course, once Russky Island's new development concept is established, the investment environment for Russky Island is likely to improve significantly. Primorsky Krai government needs to emphasize that such environmental change can differentiate the investment environment of Russky Island. In addition, it is necessary to actively promote the rapid improvement of the investment environment due to the development of Vladivostok and its surrounding hinterland complexes.

2.2. Improving Foreign Investment Attractiveness

A. Introduction of Integrated Governance

For the purpose of promoting foreign investment attraction, the role of a control tower organization is important. If foreign investment related work is managed and administered by each relevant department, it is highly likely that the efficiency of attracting investment will be reduced, resulting in confusion. Russky Island also has various stakeholders, so if the related work is not coordinated, consultations will be prolonged, causing difficulties in attracting investment. Russky Island is likely to change its legal status from being a Special Economic Zone to a Territory of Advanced Socio-Economic Development. This proposal makes intensive development difficult since the development-related authorizations are widely spread. It is difficult for foreigners to be interested if the development and authorization procedures are complex and integrated governance for investment is not in place.

In fact, the major investment-attracting countries in Asia are advancing investment promotion policies around an agency specializing in special economic zones. In other words, by delegating all the authorities related to business promotion to a special agency, it is possible to establish and implement consistent foreign investment policies over a long period. For example, Korea is providing a one stop service to foreign investors through 'Invest Korea.' The Singapore Economic Development Board is a member of Ministry of Trade & Industry. Under the Prime Minister's support, it provides one-stop services such as authorizations, administrative procedures, follow-up services, and etc. In the case of the Committee of Shanghai Pudong New Area, it is a lower administrative agency of Shanghai's municipal government but enjoys a high degree of autonomy, providing a One-Door Service by combining 10-20 authorization windows into one.

When Russky Island is included in a special zone or a Territory of Advanced Socio-Economic Development, businesses with similar characteristics can be duplicated, creating a substitute effect. In addition, it is estimated that investment incentives, tax rates and high costs are incurred because it is subject to a number of domestic regulations.

Above all, there is no control tower organization in special economic zones; permits and licenses related to development are distributed among the government departments, and the authority delegation of the government administrative organizations for investment is weak, making it difficult to attract foreign investment.

In the case of Jeju development, it is difficult to have concentrated administrative support just as one of many special economic zones. Therefore, Russky Island development should also consider a special act for development of Russky Island and establish a single administrative organization. For this, a special self-governing agency for Russky Island development should be considered.

B. Customized Attraction Strategy for Each Development Phase

Attracting investments to Russky Island as an MICE center and in its high-tech science and technology complexes must go through a series of phases. Therefore, it is necessary to prepare strategies to attract investment in accordance with the characteristics of each phase. The following is an example of an investment strategy for developing a MICE center and attracting investment. Currently, since it is in the environment creating phase of attracting investment, first contents related to specific businesses need to be prioritized and then followed by contacting individual entrepreneurs. However, in case of MICE center, the phases need not be differentiated since the first and second phases are advancing simultaneously. Still, if such a strategy for attracting investment is provided at each phase, investment attraction will be effective.

[Table 2-6] MICE Center Development & Investment Attraction Strategies (1)

	Investment attraction strategies
Phase 1 Creating an Attractive Environment	<ul style="list-style-type: none"> • Identify economic and non-economic incentives and specifying conditions (incentive packages) • Establish a consultative body (MICE attracting TF) between local governments, project developers and related institutions • Determine scope and scale of MICE facility • Determine tax exemptions or deductions • Promote a system related to attracting MICE facility developers • Conduct and implement measures to improve the system from investor interviews
Phase 2 MICE Developer Attracting Activates	<ul style="list-style-type: none"> • Identify in-depth needs through individual contacts • Survey second supplier intentions and implement incentives to attract them • Select intended investors & decide priorities • Conduct negotiations to attract specific investment

[Table 2-7] MICE Center Development & Investment Attraction Strategies [2]

MICE Developer Attraction Strategies	
Phase 1	<ul style="list-style-type: none"> • Target MICE developers selection • Determine priority according to evaluation criteria such as the expertise of the developer on MICE project, reliability, and globalization level • Select key MICE developers by re-evaluating potential and wide viewpoint
Phase 2	<ul style="list-style-type: none"> • Establish a system to develop efficient attracting activities • Distribute distinct roles among participants in the MICE development project • Build a prompt and responsible decision-making system
Phase 3	<ul style="list-style-type: none"> • Concentrate resources for attracting developers and developing excellent MICE facilities • Actively develop incentives to attract investors

[Table 2-8] Investment Attraction Strategies for an Advanced Science & Technology Innovation Complex

Attraction Strategies	
Phase 1 Creating an Attractive Environment	<ul style="list-style-type: none"> • Establish an Industrial-academic Cooperation Center in FEFU • Build a consultation body to support tenant companies • Determine the scope and scale of the facility for advanced science & technology innovation complex • Determine various tax exemptions & deductions • Launch promotion system for attracting developers and development of advanced science & technology innovation complex • Realization and promotion of system improvement plan based on interviews with tenant companies
Phase 2 Attracting Companies to Advanced Science Complex	<ul style="list-style-type: none"> • Identify in-depth needs through individual contacts • Affiliated companies develop intention surveys and attraction activities • Select and prioritize the intention holder • Specific negotiations to attract tenants

C. Introduce Investment Incentives

Michael Porter (1990) used the diamond strategy model to derive the need for private capacity utilization in investment attraction.¹⁹⁾ His diamond strategy model has been developed as a means of analyzing the competitiveness of certain industries as four exogenous variables: factor conditions, demand conditions, strategy, structure and rivalry, and related and supporting industries and the two endogenous variables: opportunities and government. It is important to utilize the private sector's competence in factor

19) Porter, M. E. The Competitive Advantage of Nations. New York: Free Press, 1990. p.135.

conditions to attract investment. If Russians or foreigners are offered sufficient incentives to attract investment, they will be more aggressive in attracting investment than Russian officials.

China, which succeeded in developing Special Economic Zones, also succeeded in attracting investment by actively utilizing the incentive system despite the dominance of the state-owned sector. In case of investments in agriculture, stock-farming, fishery and fixed assets, 0.5% of the actual investment amount was paid as a reward to those who attracted investment. When a joint venture proceeded, Chinese companies paid the corresponding rewards, and when foreigners invested, the central government paid rewards.²⁰⁾ In the case of foreigners or foreign companies' investment in acquiring domestic state-owned enterprises, the government finance department or the department related to property rights calculated the actual revenue of the acquisition amount and paid 0.5% of the revenue to the person of merit.²¹⁾

In case of new processing and assembly related projects, 3% of the company's actual one year income after the execution of a contract is rewarded. In case of plant facilities rented by foreigners, 3% of the rental income for one year from the date of production is paid as a reward. A broker who introduced a foreign contracting project including Hong Kong and Macao received about 0.2% ²²⁾of the total amount of the contract from the relevant company as a reward.

It is not easy to introduce Chinese models as it is in Far East Russia. Far East Russia is not suitable for product manufacturing and the market in Far East Russia is not large enough to create an economy of scale. Nevertheless, it is necessary to introduce appropriate incentives for investment promotion personnel in attracting investment. There will be no need to distinguish between Russians and foreigners. In order to attract capital from neighboring countries such as Korea, China, and Japan, it is necessary to consider introducing a system that provides reasonable incentives to companies and individuals that attract investment.

D. Introduction of Special System for Land Development

It is necessary to give special benefits to investors for land development on Russky Island. Jeju Island grants permanent residency to two people at the time of purchase of recreational accommodation facilities of over 1 million dollars in the development project

20) Jeong Jin-Sup (2011), "Utilization of private capacity to attract investment", p19

21) KOTRA(2013), 『Major countries' Investment incentives and case studies』, p.8.

22) Jeong Jin-Sup (2011), "Utilization of private capacity to attract investment", p19

area. In case of establishing a business employing more than 100 people, two permanent residencies are also granted. Korea has the same system in Yeongjongdo and Yeosu as well, and it entitles investors who meet the investment requirements the right to live in Korea (F-2, 3 years). Also, their spouses and children under 20 are granted a two-year residency status (F-1, 2 years). Due to the Jeju's real estate permanent residency system, the number of investments was 158 in 2010, slowing down to 65 in 2011, 155 in 2012, and surging to 662 in 2013 and 516 in 2014. As of 2015, sales of condominiums and investment for 5 years recorded 1519 cases and total investment reached KRW 1.258 trillion.

Foreign investment through real estate permanent residency is actively utilized in developed countries. According to the US federal government's EB-5 visa program implemented during the Obama administration, investing at least \$500,000 gives a foreigner a two-year visa and if the investor meets certain requirements such as creating at least 10 jobs within two years, permanent residency is granted. U.S. real estate development firms have attracted foreign investors using the EB-5 visa program when the 2008 financial crisis lacked funds. About 80% of foreigners who applied for the EB-5 visa program were reported to be Chinese. They invested billions of dollars in various real estate projects in US such as hotels, office buildings, and condominiums, and in return received a green card.

It is necessary to consider exceptional benefits such as permanent residency for foreigners who purchase residential space for Russky Island's development. Giving these benefits to foreign investors can maximize the long-term performance of Russky Island's development. To increase the value of permanent residency, it is possible to provide the power to develop the level of primary and secondary schools built in the region to international levels. There are many affluent Chinese who seek Russian permanent residency in the three northeastern provinces adjacent to Russia. Koreans are also interested in permanent residency on the geographically close Russky Island. They are interested in permanent residency of overseas real estate for various reasons, such as avoiding complicated political situations and taxation. Private demand for resorts and recreational facilities for Russky Island development is not high in Russia itself. It is possible to encourage attracting foreign investment through real estate permanent residency.

In addition, it is necessary to lease the property of Russky Island for long periods and to improve lease conditions to actively promote private development. NOVIK Country Club is a hotel and restaurant leisure facility built by private investors on government property in Russky Island. Since it is possible to create a single leisure space by bundling

various private projects, it is necessary to provide investors with the benefits related to land use and maintain the basic infrastructure constantly.

2.3. Differentiating Investment Financing Structures by Project Type

A. Diversifying the Investment Promotion Plan by Major Projects

Projects for developing Russky Island are largely divided into infrastructure, MICE center, advanced science complex, duty free shop, and aquarium. Each of these projects has a different commercial / non-commercial nature and the interests of private capital are very different. In the case of duty-free shops, they are commercial projects with active interest from private capital, while infrastructure and high-tech science complexes are non-commercial projects.

As each project is different in nature, each requires a different investment financing structure. The following Table 2-9 distinguishes investment attraction according to the nature of each project. Infrastructure projects such as roads should be based on government budgets and should attract private investment by combining PPP (Private-Public-Partnership).

Since an MICE center cannot make profit in a short period of time, it proceeds with government finance and PPP, but can attract private investment on the condition of a duty-free shop. Since the advanced science complex is not intended for short-term profit, it is desirable to attract investment through government funding and international cooperation. The Russian Academy of Science Far East Division, Skolkovo Foundation, foreign companies, and school research institutes can be centers in attracting investment. On the other hand, duty-free shops are projects where commercial investment is sufficiently possible. While attracting private investment, they can investing in the MICE center can be a required condition.

The current aquarium in Russky Island is a project with high commercial potential. However, it has not gained much popularity due to the lack of management experience and insufficient investment. If there is an operation period guarantee for a private aquarium management company, it will not have a problem in attracting foreign investment.

The various projects needed for Russky Island development should be actively sought for customized investments that fit their own characteristics. For this reason, an integrated discussion structure and governance for the entire development of Russky Island is required. The government will be able to finance the necessary resources through budget

support, the necessary governance for the development of Russky Island, and the introduction of various legislative measures.

When considering characteristics of projects that are promoted in Russky Island by the Russian government, it is desirable to proceed through public-private cooperation rather than proceeding only with government fund or only with private investments.

[Table 2-9] Differences on Investment Financing Structure by Project Type

Project	Government Budget	PPP	Private Investments	Alternatives (examples)
Infrastructures (ex. Roads)	◎	○	X	Government budget + PPP
ICC	◎	◎	○	Private Investment is possible when combining DFS business
Advanced Science & Tech Complex	○	X	△	Government budget + Research Fund Consider Intl. Industry-University cooperation
DFS	○	X	◎	Attract Investments in combination with ICC
Aquarium	△	◎	○	Consider attracting related companies first

◎ highly possible; ○ possible; △ possible, with supporting measures; X inappropriate.

B. Advantages and Disadvantages of Each Investment Promotion Plan

1) Role of Government and Private Sector: Public-Private Partnership Project (PPP) vs. Private Commercial Investment

Recently, PPP has become more active due to government budget constraints and other reasons.²³⁾ In the 1980s, PPP first concentrated on the transportation sector, but later was extended to various fields and its proportion of investment in each country has increased.²⁴⁾ Currently, airports, railways, roads, bridges and tunnels are the majority of PPPs, and water treatment, education and medical facilities, welfare facilities for the elderly, and correctional facilities are also funded through PPPs. In the case of the UK, the needs of social overhead capital and public service improvement without budget constraints have seen PPPs make up 10-15% of public investment.²⁵⁾

PPP generally refers to "a project in which the government and the private sector share joint responsibility for the public". The World Bank defines PPP as "a long-term

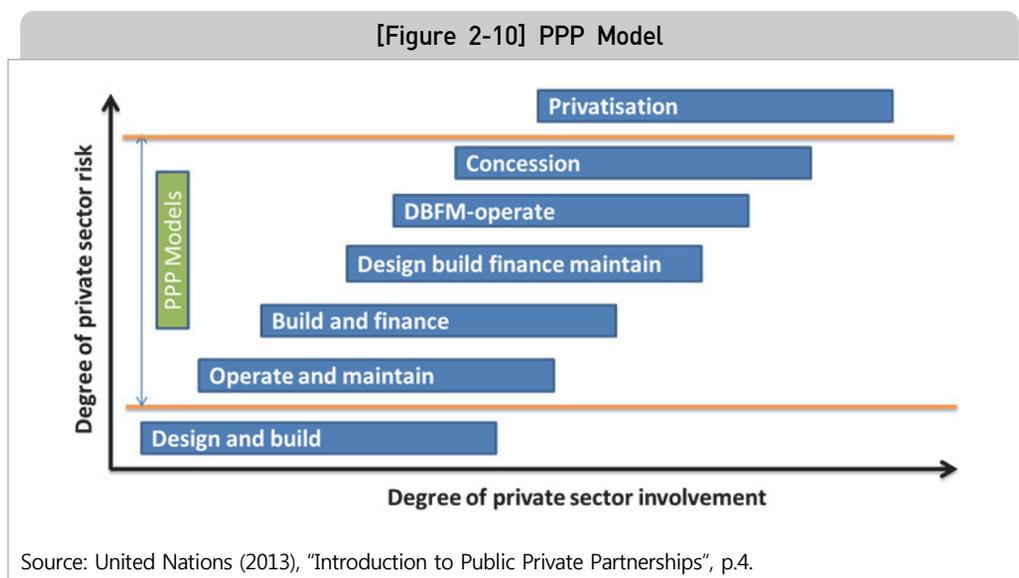
23) Deborrah A. Demasi & Kennech B. Weiner, *International Project Financing*, 4th edition. Juris, 2012, p. 350.

24) OECD. "Public-Private Partnership: In Pursuit of Risk Sharing and Value for Money", 2008, p. 28.

25) UNECE, "Introduction to Public-Private Partnerships", 2012. p. 5.

contract between a private party and a government entity, for providing a public asset or service, in which the private party bears significant risk and management responsibility, and remuneration is linked to performance".²⁶⁾ According to the World Bank, PPPs typically do not include service contracts or turnkey construction contracts, which are categorized as public procurement projects, or the privatization of utilities where there is a limited ongoing role for the public sector. The Organization for Economic Co-operation and Development (OECD) defines PPP as an agreement between the government and one or more private partners. Within the agreement, the private partners deliver the service so that the service delivery objectives of the government are aligned with the profit objectives of the private partners. Furthermore, the effectiveness of the alignment depends on a sufficient transfer of risk to the private partners.

The contract period of the PPP contract is at least 3 years and is determined in consideration of the construction period, the investment amount, the recovery period of the investment, and the period of receiving the profit of the private enterprise defined in the contract. A financial investor is the one who finances business capital to a private enterprise where a single firm or consortium can be possible. The subjects of the PPP contract include roads, public transportations (except the subway), railways, underground pipelines, ports, airports, ships & aircrafts, power plants, underwater & underground facilities, health facilities, educational facilities, sports facilities, recreational facilities, waste facilities, and others.



26) Worldbank PPPIR(<http://ppp.worldbank.org/Public-Private Partnership>)

Russia enacted PPP laws at the federal level to improve the legal stability of large-scale private finance initiatives, and control the business interests among the federal government agencies, interests between the federal government and the federal subjects of Russia, interests among the federal subjects of Russia, and interests between regional municipalities and upper agencies. They implemented their own PPP laws around 60 regions of the federation under the control of one unified system. At the same time, investors welcomed the law since it protected the contractual rights of private business regardless of the laws' abolition (unless in special circumstances) and allowed private business to directly propose projects.

According to Russia's Public-Private Partnership Development Center, 131 public-private cooperation projects were held in 60 regions of Russia as of 2013. Until now, the major large private financing projects in Russia were promoted on the institutional basis of the Act on Concession Agreements, or have been promoted by regional PPP laws of the 60 federal regions of Russia. However, the Act on Public-Private Partnership which the Russian Ministry of Economic Development proposed as government legislation passed the upper and lower houses after several years of review in 2016 and now is carried out as a single program at the federal level.²⁷⁾ The average execution time of the PPP project was 12.7 years, 53% as concessions, 35% operating according to regional law, and 12% operating in the form of a joint venture. Russia's foreign investment in the last 10 years was 4.71 trillion dollars, or 3.3% of GDP. According to the Ernst & Young, 56% of the infrastructure projects were made by the government alone and 44% by either the public-private partnership (PPP) (34%) or private commercial investment (10%) in Russia.²⁸⁾

A representative success case of Russian PPP is the WHSD (Western High Speed Diameter) business project. The WHSD project is part of the Pan-European Transport Corridor IX, which links Helsinki in Finland to cities in southern Europe. Initially, this project was stranded due to the difficulty of raising funds in excess of business scale, uncertainty of estimated costs, uncertainty of risk sharing such as demand and cost, and foreign-exchange risks in foreign investment procurement.

27) The PPP Act is not limited to the in-depth information to be included in the project disclosure, but includes specific conditions and content to be included in the PPP contract, the conditions that can be agreed between the parties, the terms and conditions of the conclusion, modification, cancellation (termination), termination of the contract, the transfer of rights and obligations of private operators, and the requirements and procedures for the replacement of private operators. Unlike the existing Act on Concession Agreements, the newly introduced PPP laws recognize ownership of infrastructure for private companies for a specific period of time and can transfer ownership to a public operator after the term of the contract. This is beneficial to investors as it ensures legal certainty concerning private capital investment.

28) Ernst & Young (2014), "The road to 2030: a survey of infrastructure development in Russia".

In 2012, the Russian government re-promoted business in the PPP system. In the whole project, the southern and northern parts were constructed by the government and only the central part was constructed by PPP, but the entire project was managed by an integrated operation. 30% of the Moscow-St Petersburg highway (38 km, 320 billion rubles) was covered by the government and the remaining 30% was procured from private capital. Also, private business bore the burden of demand risks by directly collecting tolls. To share demand risk, the highway project guaranteed an operating income and shared excess revenue. The Russian government reduced the risk burden of private enterprises, and private businesses actively participated in the project and succeeded in constructing the road.

All new Russky Island projects are possible for public-private partnerships. For example, the already completed aquarium's land development, financing, and ownership are owned by the government, but it can leave maintenance and management to the private sector. In addition, the planned MICE center can appropriately share roles and responsibilities between the government and the private sector, depending on how they include profitable businesses (e.g. duty free shops).

The PPP project basically has the advantage of transferring the government's risk of public projects to the private sector and reducing private competitiveness and business risk. PPP may result in the cost of replacing government risks with the private sector and side effects from the private sector pursuing profit.²⁹⁾

On the other hand, it is not easy to attract private commercial investments because they do not participate unless the project's profitability is certain. Private companies invest only when profitability is secured. In the current Russky Island situation, commercial investment of private enterprises can be somewhat difficult.

2) Financing Plan: Government Development Fund (or Fund Platform) vs. Borrowing

It is also possible to consider how the Russian government guarantees payment and issues development funds or issues bonds in financial markets. Public invitations for development funds can be advantageous for long-term investment projects, but may not be possible because there are not enough funding sources in Russia. Also, if the profitability of development is not sufficient, it may not attract investment.

In the case of borrowing, major state-owned banks in Russia cannot issue long-term bonds in the international financial market due to economic sanctions. However, the issue

29) Korea Institute of Public Finance, 「International comparative study of taxation system of public-private partnership projects」, 2015.12., p. 12-13.

needs to be examined for its feasibility when Russia-US relations improve.

Meanwhile, it is necessary to consider the ways to utilize Russia-Korea investment and financing platform which was agreed in 2013 Russia Korea Summit currently. In the case of establishing the MICE center, it is also necessary to facilitate the financing of companies participating in the project through subsidies.

In the case of advanced science complexes, it is important to secure funds for research and development. Since Russian companies have a low proportion of R & D investment, it is necessary to consider establishing research centers in the Far East where both countries' research institutes can participate. An example is the Korea Science Technology Cooperation Center (KORUSTEC) co-managed by the Russian Foundation for Basic Research and National Research Foundation of Korea. Then, it is also necessary to consider how to encourage collaborative research between both countries' universities, encouraging them to commercialize their achievements, and funding them through the Skolkovo Foundation.

In promoting commercialization through international industrial-academic cooperation, it is very important to form an investment community to improve accessibility to funds. As of 2015, the list of venture capital funds sponsored by the Skolkovo foundation includes 46 companies with a commitment of 35 billion rubles. The Skolkovo Business Angel Club maintains a mutual platform with the initial investors and holds more than 200 members.

The Skolkovo Foundation connects with companies and supports about 80 companies' projects. It actively cooperates with universities and research institutes, and runs a "start-up tour" for college students. Tours to support Russian start-up companies should take place in the Far East every year and receive start-up support. It is necessary to actively create innovative clusters through 'micro-grants' of up to 1.5 million rubles supported by the Skolkovo Foundation. The role and function of the Scorpio Foundation Far East branch should be expanded as it is important to the development of Russky Island.

2.4. Investment Promotion Plans by Projects

A. International Cooperation MICE Center

1) Plan 1: PPP model for Russky Island's development

The PPP system should be promoted for Russky Island's development due to the Russian government's lack of financial resources and sustainable management. The Russian government's fiscal deficit has worsened due to plummeting oil prices since 2014,

and thus the overall budget, including military spending, has been greatly reduced. Government funding for the Far East development has also slowed significantly, leading to private investment in the development of Russky Island.³⁰⁾ If private capital participates in the development of Russky Island, it can secure management efficiency and enable sustainable management. Thus, the Russian government is actively promoting PPP for the development of Russky Island.

An International Convention Center (ICC) for the MICE industries financed by PPP is needed immediately for Russky Island's development. As experienced in the construction and operation of the Jeju Convention Center, it is difficult for the convention business to earn profits. The initial capital investment and sustained financial support from government or public institutions are important, and the Russian government cannot afford this without help from the private sector.

Private investors are reluctant to invest because they are skeptical of Russia's low sovereign credit rating and demand for MICE industries. In order to successfully promote this project, the Russian government has to reduce the investment risk through promoting a PPP business model and attract investment funds from private companies.

The BTL project is suitable for investment in infrastructure in PPP projects because it is difficult to recover investment costs by imposing a royalty on end users. On the other hand, the MICE industries have a relatively high business risk, but can recover investment cost by imposing a royalty on end users and the BTO model, which has a relatively high profit return, is suitable.

[Table 2-10] Roles and Responsibility Sharing by PPP type

Type	Description	Role and Responsibility			
		Financing	Developing	Ownership	Operating
Consignment Management	A model that entrusts some public operated or developed facilities or systems to the private sector	Public	Public	Public	Private
DBO	Private sector manages design, development, and operation. Public sector manages budget and owns result of the project.	Public	Private	Public	Private

30) The private investment project is a method in which the private sector finances, constructs, and donates the facilities to the government and receives management operation rights, thus recovering the investment cost through operating income. Therefore, it is necessary to establish a business execution corporation (SPC) separately to manage the entire business of design, construction, finance, operation, and maintenance.

[Table 2-10] Continued

Type	Description	Role and Responsibility			
		Financing	Developing	Ownership	Operating
BTO	Private sector manages budget, design, development, and operations. Ownership of the project will be transferred to the public after the completion of development.	Private	Private	Public	Private
BOT	Private sector manages budget, design, development, and operations. Ownership of the project will be taken over to the public after the completion of development.	Private	Private	Private (Public)	Private
BOO	The private sector manages the budget, design, development, and operation and retains ownership over the project	Private	Private	Private	Private

Source: An Byeong-Hak (2016)

However, the traditional BTO-based business is stagnating globally. Accordingly, many countries are taking measures to participate in private profit-making projects such as the government's profit guarantee. It is necessary to consider a risk sharing system through the Minimum Revenue Guarantee (MRG). If the future demand and royalties of the project cannot be determined in advance, a minimum investment cost recovery device should be provided.

If the Russian government guarantees a minimum MRG, it will not be difficult to find a company that will make a PPP investment on Russky Island. If MRG is difficult, the Russian government may grant duty-free shop operation privileges to convention operators. For companies interested in maritime marketability, duty free shops will be sufficient merit. In investing in hotels and resorts near the International Convention Center, it will be possible to induce PPP investment through the ownership of land and buildings.

2) Plan 2: Attracting Foreign Investment through Private Commercial Capital

Foreign investors can invest in the construction and operation of the International Convention Center to create a commercial base in the development of Russky Island. The Russian government intends to attract foreign companies with abundant experience in

relevant fields in the development and operation of the International Convention Center. However, commercial operation of the International Convention Center will be difficult because the basic location is poor due to the low density of the industry and low population of the Primorsky Krai region. If foreign investors participate in the development of the International Convention Center, it may be the case that other mutually beneficial businesses such as duty free shop business should be granted.

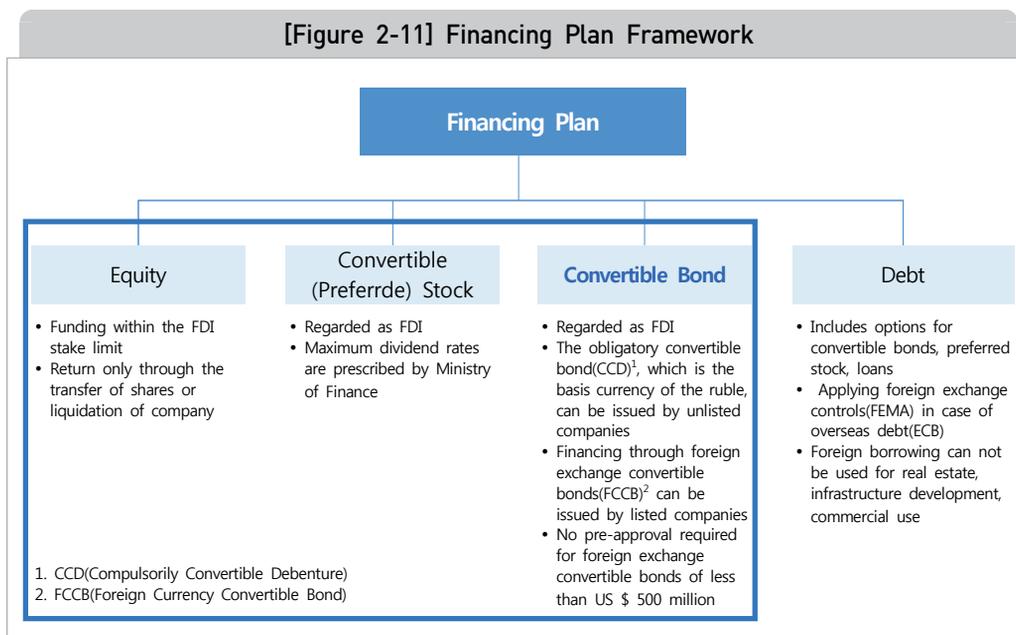
A general real estate development project involving the private sector has many constraints. Regarding real estate-related business, working capital, and general business activities, foreign investment is usually permitted only in the form of equities to prevent speculative capital. In this case, the Russian government can reduce the risk of reimbursement for changes in foreign fund markets. In the case of overseas firms that have entered the market, borrowing is based on the creditworthiness of the parent company, which has the advantage of reducing the repayment sensitivity to the uncertainty of the host country's economy. The success or failure of attracting foreign investment depends on basic infrastructure demand, the predictability of government policy (long-term sustainability), tax benefits, and so on.

Once foreign investment begins, the following investment promotion measures are possible. First, the joint venture or special purpose corporation for development must secure minimum capital. Equity capital can be financed within the limits of the shareholding ratio of FDI, and can only be recovered through equity transfer or liquidation. In the case of convertible preferred stock, it can be regarded as FDI, and the dividend rate should be in accordance with the Company Statute and the Russian Government Act.

Second, convertible bonds are also considered to be FDI, and unlisted companies can issue compulsory convertible debenture (CCD) with the ruble as the base currency. Financing through foreign currency convertible bond (FCCB) can be issued by listed companies. Convertible bonds may be converted into shares of the issuing company according to predetermined conditions at the request of the bondholder after a certain period of time. In other words, unlike bonds paying simple interest, prices fluctuate like stocks, so bond holders can benefit from price increases in addition to interest. The success of issuing a convertible bond means the commercial success of the business.

Third, options should be included for convertible bonds, preferred stock, and loans in case of debt. A foreign exchange management act (FEMA) should be enacted for overseas debt (ECB). The biggest problem with the construction and operation of the Russky Island International Convention Center is that it is difficult to ensure commercial viability.

Therefore, convertible preferred stock, convertible debt, and debt borrowing are not easy to introduce commercially but should be actively pursued.



It is necessary to receive active support from the governments of Korea, China, and Japan by upgrading the MICE center construction into a government project to attract investment. The public interest of this project should be highlighted to attract investment from investors' governments. For example, an EDCF loan can be obtained from the Export-Import Bank of Korea if the Eastern Economic Forum's public interest is highlighted. In order to attract companies participating in the International Convention Center, conditions such as donating the convention center to the government after a certain period of operation (recovery of construction cost) should be granted, or benefits should be given, such as the duty-free shop in conjunction with the International Convention Center, or ownership of commercial real estate facilities, such as related hotels.

Korea's H Group can be considered as a potential candidate for the construction and operator of the Russky Island International Convention Center. The H Group has various affiliates such as construction, convention, and aquarium, and has solid financial resources. The owner also has an active interest in overseas business and has experience in operating a successful business in Kazakhstan.

B. Utilizing an International Industrial–Academic Cooperative Program to Attract Investment for an Advanced Innovation Complex

The predecessor of Far Eastern Federal University is the Institute of Oriental Studies, founded in October 1899. The school was closed in 1939, re-opened in 1956, and promoted to Federal University in 2010. Far Eastern Federal University has 124 departments, 35,000 students, 4,000 faculty members, 77 laboratories, and operates 585 educational programs. The facilities include a science museum, super computer center, marine bio station, publisher, and TV center.

Far Eastern Federal University is carrying out various cooperation projects with the United States, Japan, China, and Korea, as well as over 80 partnership projects and over 100 credit exchange programs as of 2016. Far Eastern Federal University has a high research capacity in biological and marine technology, new materials, energy and energy conservation, nuclear energy, biomedicine, and food technology. Major colleges include the School of Regional and International Studies, School of Arts, Culture and Sports, School of Economics and Management, School of Engineering, School of Natural Sciences School of Biomedicine, and so on.

Nowadays, global advanced companies have recognized the limitations of internal research and development and are introducing 'open innovation'³¹⁾ that actively utilize knowledge and technology from outside the company. The need for mutual cooperation between enterprises and universities is emphasized in terms of sharing knowledge and research resources and linking demand and supply of high-quality human resources. It is possible for companies to connect the college's human resources with the latest technology knowledge and information.³²⁾ From the standpoint of universities, it is possible to acquire scientific and technical information and problem-solving skills possessed by industries, secure government support funds, and expand employment opportunities.

Companies want to develop technology that can be commercialized through collaborative research with universities, but universities concentrating on academic achievements and companies have difficulty in using the research results.³³⁾ Also, it is also difficult for companies to obtain information on universities that are capable of

31) Open innovation is an emerging R & D method that takes advantage of external ideas and technologies and opens up new markets by exporting internally developed technologies to the outside world.

32) The Federation of Korean Industries, 「Status of Industrial-academic Cooperation from the Viewpoint of Industries and Tasks for Improvement」, 2010.10.04.

33) The Federation of Korean Industries, 「Status of Industrial-academic Cooperation from the Viewpoint of Industries and Tasks for Improvement」, 2010.10.04.

developing target technologies at the partner selecting stage. Global industrial-academic cooperation can overcome these problems and provides new market opportunities. For example, a Korean energy company can cooperate with the Far Eastern Federal University to develop new technologies and enter the Russian market. Likewise, Korean IT departments may provide effective technical alternatives to Russian IT companies. Global industrial-academic cooperation will be the core of Russky Island's cluster development strategy.

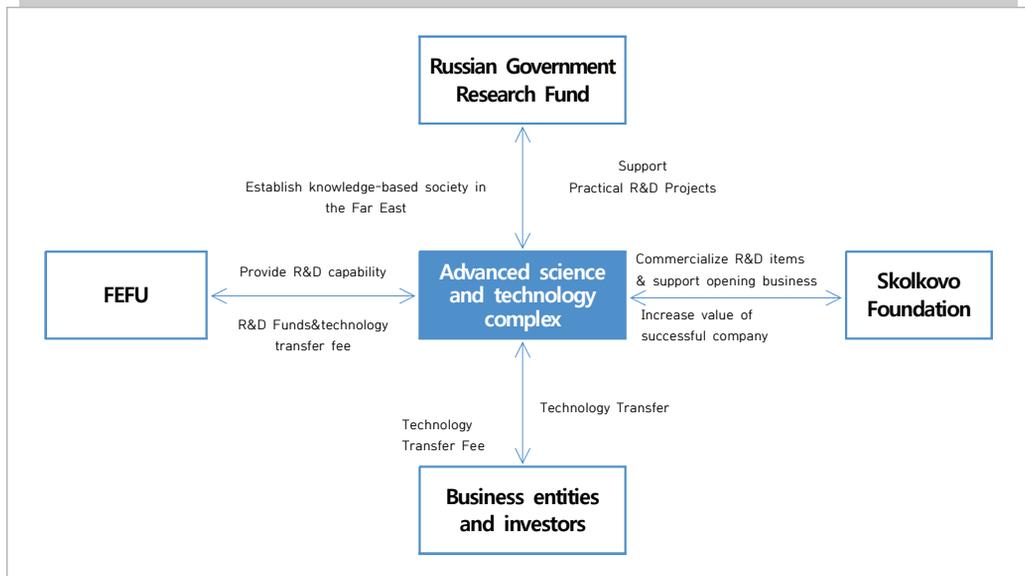
Until now, since Russia has promoted the public sector mainly by government agencies such as central government, municipalities, Ministry of the Far East Development, and so on. If private sector investment is slow, it is necessary to actively consider industrial-academic cooperation measures at the national level. International industrial-academic cooperation can maximize the advantages of competitiveness between countries, complement weaknesses, and stimulate basic and advanced scientific fields through policy consideration.

In Korea, Daedeok Science Town is developing advanced science and technology. Since construction began in 1974, development was slow in Daedeok Science Town. However, recently, private enterprises such as Samsung, LG, SK, etc. have established a research laboratory and changed the city into a technopolis. The Korean government provided basic infrastructure facilities and provided various academic funds.

The environment for industrial-academic cooperation between Korea and Russia is well prepared. Korea is interested in Far East Russia, which has long-term growth potential as a region of new economic vitality. Russia is looking at Korea to modernize its own industry and as a new market. Korea and Russia will be able to embody global industrial-academic cooperation in high-tech industries by creating various basic science cooperation centers such as energy and medicine on Russky Island and attracting Korean and Russian companies.

In 2013, the Korea-Russia summit agreed to accelerate establishment of a 'Korea-Russia Innovation Center (KIC)'. Due to institutional specificity and technical characteristics between Korea and Russia, the companies of both countries have many difficulties in technical cooperation and business activities locally. It was decided to build KIC as an infrastructure capable of one-stop support such as technology matching, incubation, local management, legal and tax consulting to support efficient local technology commercialization, but there is no substantial progress yet. It is necessary to consider establishing KIC on Russky Island.

[Figure 2-12] Financing and Economic Effects for International Industrial-Academic Cooperation



The Russian government has sufficient funds to carry out international industrial-academic cooperation. The Russian government jointly established a Russia-China Investment Fund in June 2012 with China Investment Corporation. In addition, the Export-Import Bank of Korea and the Russian Development Bank (Vnesheconombank, VEB) will set up a \$2 billion 'Joint Investment and Financing Platform' for \$1 billion each at the Korea-Russia Summit meeting on November 13, 2013, and the Korea Investment Corporation and Russian Direct Investment Fund established a 'Joint Investment Platform' of \$500 million and \$1 billion respectively, for a total of US \$3 billion.³⁴⁾ It will be possible to utilize these international funds to carry out international industrial-academic cooperation on Russky Island.

34) https://president.globalwindow.org/kz.info.ConfrDetail.do?confr_seq=4

Reference

[Korean Sources]

- Choi, Tai-Kang (2015), "Measures in Response to the Assignment of Free Port in Primorsky Territory", Siberian and Far Eastern ISSUE PAPER, No. 13, 8-9.
- Consulate-General in Vladivostok (2017), "Policy Trends in TASED and Vladivostok Free Port".
- Jeh, Sung-Hoon et. al. (2014), "The Regional Development of the Russian Far East and Baikal and Korea's Measures in Response", Research Report, 14-23, Foreign Policy Research Institute.
- Jeju International Free City Development Center & Jeju University (2010), "A Study of the JDC's Economic and Non-Economic Spread Effects".
- Jeju Special Self-Governing Province (2017), "The Second Revised Plan for the Comprehensive Plan for the Jeju International Free City".
- Jeong, Jin-Sup (2011), "Proposals for Using Civilian Capabilities for Attracting Investment."
- Kang, Meang-Gu (2016), "The Assignment and Implications of Russia's Territories of Advanced Socio-economic Development (TASED)", Weekly KDB Report.
- Kim, Dong-Wuk (2007), "Proposals for Attracting Investment to Jeju International Free City", Invitational Seminar of Experts on Systemic Improvements and Infrastructure Building for the Successful Promotion of Jeju International Free City, Jeju Self-Governing Province.
- Kim, Dong-Wuk (2009), "The Vision and Prospects of Jeju Self-Governing Province as an International Free City", Real Estate Magazine, February 2009.
- Kim, Dong-Wuk (2009), "Proposals for Introducing Investment Promotion Zones on Jeju Island", 7th Anniversary of Jeju International Free City Policy Seminar, Jeju Self-Governing Province.
- Kim, Dong-Wuk (2009), "Improving the Policies to Boost Investment in Jeju Investment Promotional Zone", Korean Local Government Review 11(1), 109-126.
- Kim, Dong-Wuk (2012), "Intangible Elements of Attracting Investment on Tourism in Jeju Self-Governing Province", Korea Tourism Investment Newsletter, Winter 2012, Korean Tourism Organization.
- Kim, Dong-Wuk (2014), "Proposals to Promote the Systemic Improvement of Special Autonomous Zones and their Takeoff", Jeju Island – Jeju Island Assembly – National Assembly Joint Seminar.
- Kim, Yeong-Sik (2014), "Proposals on the Strategies and Cooperation of Developing

- Russia's Far East", Siberian and Far Eastern ISSUE PAPER, Autumn, 2014, 9-10.
- Kim, Hyun-Chul, Dong-Wuk Kim (2013), "A Study on the Proposals for Improvement and Operation Effectiveness of Jeju Investment Promotion Zones", Jeju Development Institute.
- Kim, Hyun-Chul, Dong-Wuk Kim (2014), "A Study on the Proposals for Improvement and Analysis of the Performance of Jeju Investment Promotion Zones", Jeju Studies, Vol. 41, 61-92, Society for Jeju Studies.
- Korea Institute for International Economic Policy (2013). An Investment Guide to Russia's Far East.
- Korea Institute of Public Finance (2015), "An International Comparison of Public – Private Partnership Tax Policies."
- KOTRA (2013), "A Case Study and Current Situation on the Primary Foreign Countries' Investment Incentives."
- KOTRA (2015), "2015 KSP Policy Consultation: Russian Primorsky Territory."
- Oh, Yoon-Jeong, Kang-Yeong Lee (2016), "The Achievements and Future Tasks of Jeju International Free City – Focusing on Analysis of Jeju Citizens Awareness-", Jeju Development Studies, Vol 20, 49-83.
- The Federation of Korean Industries (2010), "Status of industrial-academic cooperation from enterprises' viewpoint and improvement projects"

[Foreign Sources]

- Deborrah A. Demasi & Kennech B. Weiner (2012), International Project Financing, 4th ed. JURIS.
- Ernst&Young (2014), "The Road to 2030: a survey of infrastructure development in Russia".
- United Nations (2013), "Introduction to Public Private Partnership", p.4.

[Websites]

- CEIC, <https://www.ceicdata.com>
- EU. <http://europa.eu>
- Far East Development Cooperation, <http://erdc.ru/>
- Far East Development Fund, <http://www.fondvostok.ru>
- Far Eastern Federal University, <http://www.dvfu.ru>
- Federal State Statistics Service of the Russian Federation, <http://www.gks.ru>

ICC Jeju, <http://www.iccjeju.co.kr>
Investment Portal of Primorye, <https://invest.primorsky.ru>
Jeju Development Center, <http://www.jdcenter.com>
Jeju Special Self-Governing Province, <http://www.jeju.go.kr>
Kommersant, <http://www.kommersant.ru>
Korea Customs Service. <http://www.customs.go.kr>
KOTRA Foreign Market News, <https://news.kotra.or.kr/>
KOTRA, www.kotra.or.kr/
LENTA, <http://www.Lenta.ru>
Ministry for the Development of the Russian Far East, <http://minvostokrazvitia.ru>
Moody's, <https://www.moody's.com/>
Primorsky Aquarium, <http://primocean.ru/en/>
Primorsky Krai Development Corporation, <http://www.cdprim.ru>
Primorye Investment Promotion Agency, <https://pkia.ru/>
Russia Focus, <https://russiafocus.co.kr>
S&P Global website, <https://www.standardandpoors.com/>
Statistics Korea, <http://kostat.go.kr>
The Central Bank of the Russian Federation, <https://www.cbr.ru>
The Export-Import Bank of Korea, <https://www.koreaexim.go.kr/>
The World Bank, <http://worldbank.org>
U.S. Department of Commerce, <https://www.commerce.gov>
U.S. Department of the Treasury, <https://www.treasury.gov>