

Survey on Success Factors of International Industrial Partnerships in Industrial Cluster Areas



June 18, 2008

JETRO Regional Industry Cooperation Division

Masako Osuna

1. Region-to-Region Project

- 1) Outlines of Region-to-Region Project
- 2) Political Background

2. Success Factors Analysis

- 1) Outlines of Research and Analysis
- 2) Background Analysis of Region to Region Project
- 3) Results of Analysis
- 4) 8 Points for the Success of International Industrial Partnership

3. RIT Program

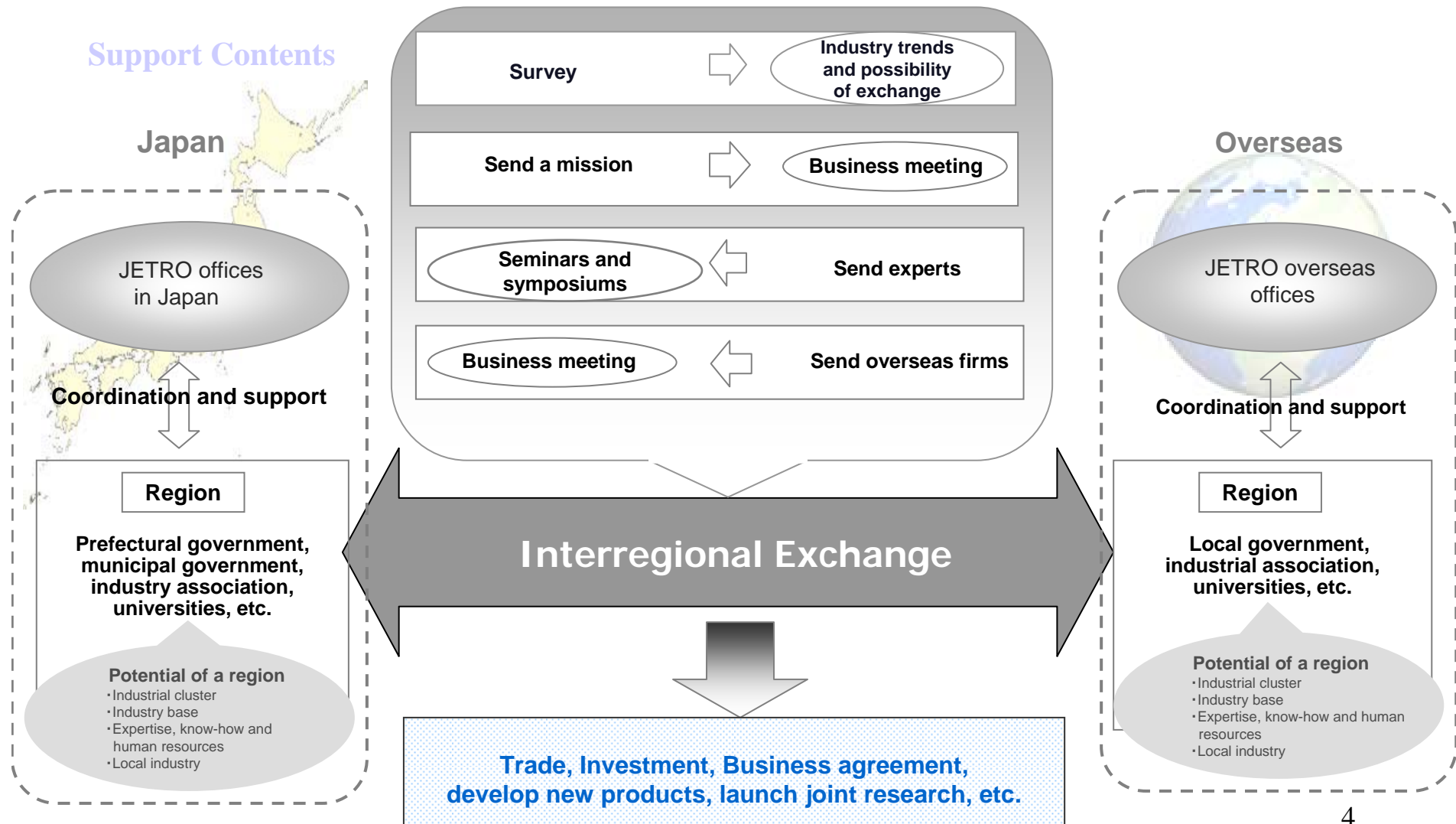
Region-to-Region project

Aims to increase stimulation industry exchanges between specific regions of Japan and other countries, to create new businesses, and to diversify and advance local industries through promoting cooperation by boosting each region's local economy and internationalization projects.

*Implementation of Region-to-Region project: FY1996-FY2006

1. Region-to-Region project

Basic supporting mechanism



1. Region-to-Region project <case study1>

Suwa city, Nagano prefecture- Dalian, China (Mechanical metal process)

1. Implementation Period and System

- Implemented in 2004-2006
- Domestic Implementation Body: Suwa Dalian Association
- Oversea Implementation Body: Dalian city

2. Specific exchange projects

- Dispatching specialist research: 1 time
- Dispatching leading companies to overseas: 2 times
- Invitation of specialists and leading companies to Japan: 3 times (11 persons)

3. Achievements

A die manufacturing company in Suwa successfully developed various businesses, including the establishment of a joint venture with a Chinese partner, building a plant in China, and the creation of a sales company in China. These led to an expansion of exchange in other business domains such as tourism.

<E.g.> To cater to the needs of the partner region, a joint trading venture was established to sell products that have been made at plants in Suwa and China.



1. Region-to-Region project <case study2>

Fukushima Pref. and Sweden (Medical and Welfare Apparatus Industry)

1. Implementation Period and System

- Implemented in 2003 - 2005
- Domestic Implementation Body: Fukushima Pref.
- Overseas Implementation Body: ISA (Invest in Sweden Agency), Umea University, Lund University

2. Specific exchange projects

- Dispatching specialist research: : 1 time
- Dispatching leading companies to overseas: 4 times
- Invitation of specialists and leading companies to Japan: 3 times (11 persons)
(10 persons, 24 persons including participants by private expense)

3. Achievements

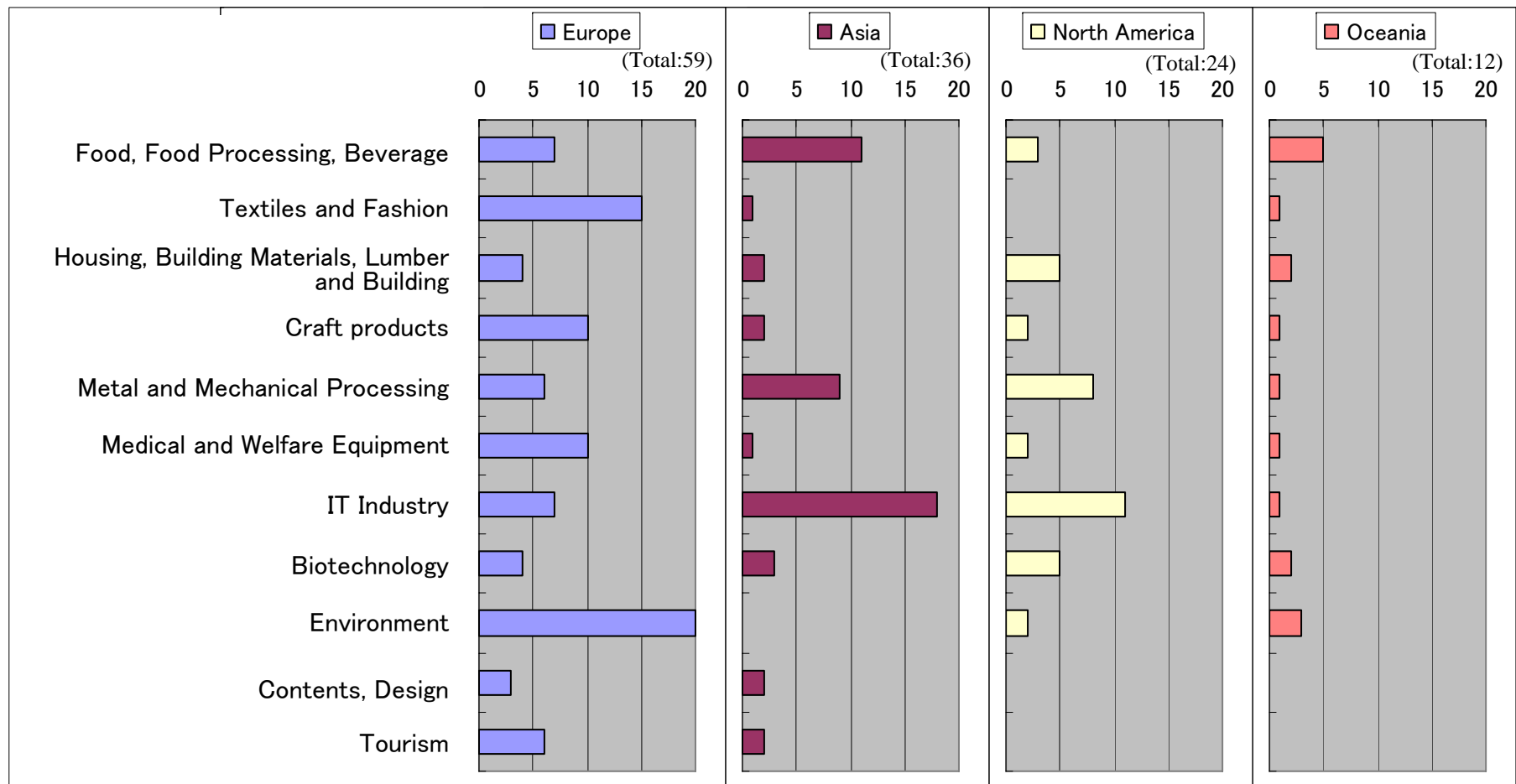
Exchange between Fukushima Prefecture and Sweden has resulted in many cases of joint development of medical apparatus among research institutes and companies.

<E.g.>

A venture company from the College of Engineering of Nihon University developed a “breast cancer checker” and started clinical tests jointly with a Swedish company to launch it in the EU.⁶

1. Region to Region project Diffusion of implemented Region to Region project by country and sector

<by region overseas>



1. Region-to-Region project Diffusion of implemented Region-to-Region project by country and sector

<by Region in Japan>

Unit: numbers

Region (Bureau of Economy, Trade and Industry)	Food, Food Process, Beverage	Textiles and Fashion	Housing, Building Materials, Lumber and Building	Craft products	Metal and Mechanical Processing	Medical and Welfare Equipment	IT industry	Biotechnology	Environment	Contents, Design	Tourism	Grand total
Hokkaido	1		2				1		1			5
Tohoku	7	2	5	3	1	2	4	1	2		1	28
Kanto	4	3	1	4	13	1	8	3	3	3		43
Chubu	1	2	1	4	1	4	7		2	1	1	24
Kinki	1	6			3	2	2	4	3	1	1	23
Chugoku	5	3			3	3	3	1	3		1	22
Shikoku	3		1	1	1	1	1		1		1	10
Kyushu	5	1	3	3	2	1	12	5	10		3	45

1. Region-to-Region project **Political Background**

- 1992 Law on activating designated medium and small size enterprise clusters
(B cluster)
<plan agreement 118 regions> (*27 themes for Region to Region project)
- 1996 **Region to Region project started**
- 1997 Law on activating foundational technology clusters (A clusters)
<plan agreement 25 regions> (*11 themes for Region to Region project)
- 2001 Industrial Cluster Plan (the 1st period) (17 regions)
- 2006 Industrial Cluster Plan (the 2nd period) (15 regions)
(*56 themes for Region to Region project)

2. Success Factors Analysis

① Objectives and Method for Analysis

1. Objectives

To conduct smooth project implementation for the new international exchange program by extracting success factors of the region-to-region project

2. Analytical Method

① Selection of successful cases and preliminary analysis @survey study group



② Implementation of the questionnaire survey based on preliminary analysis



③ Implementation of the interview to gain more detailed information of each case study



Overall success factor analysis

Questionnaire Survey

Based on the preliminary analysis, the questionnaire survey was implemented, targeting the implementation body and key persons

Survey period: From November 16 to mid December, 2007

Target numbers: 200 themes

No. of questionnaires sent: 183

No. of valid responses: 131

Response Rate: 71.6%

Interview

The Interview survey was implemented to analyze each case in detail based on successful case selected from the survey study group.

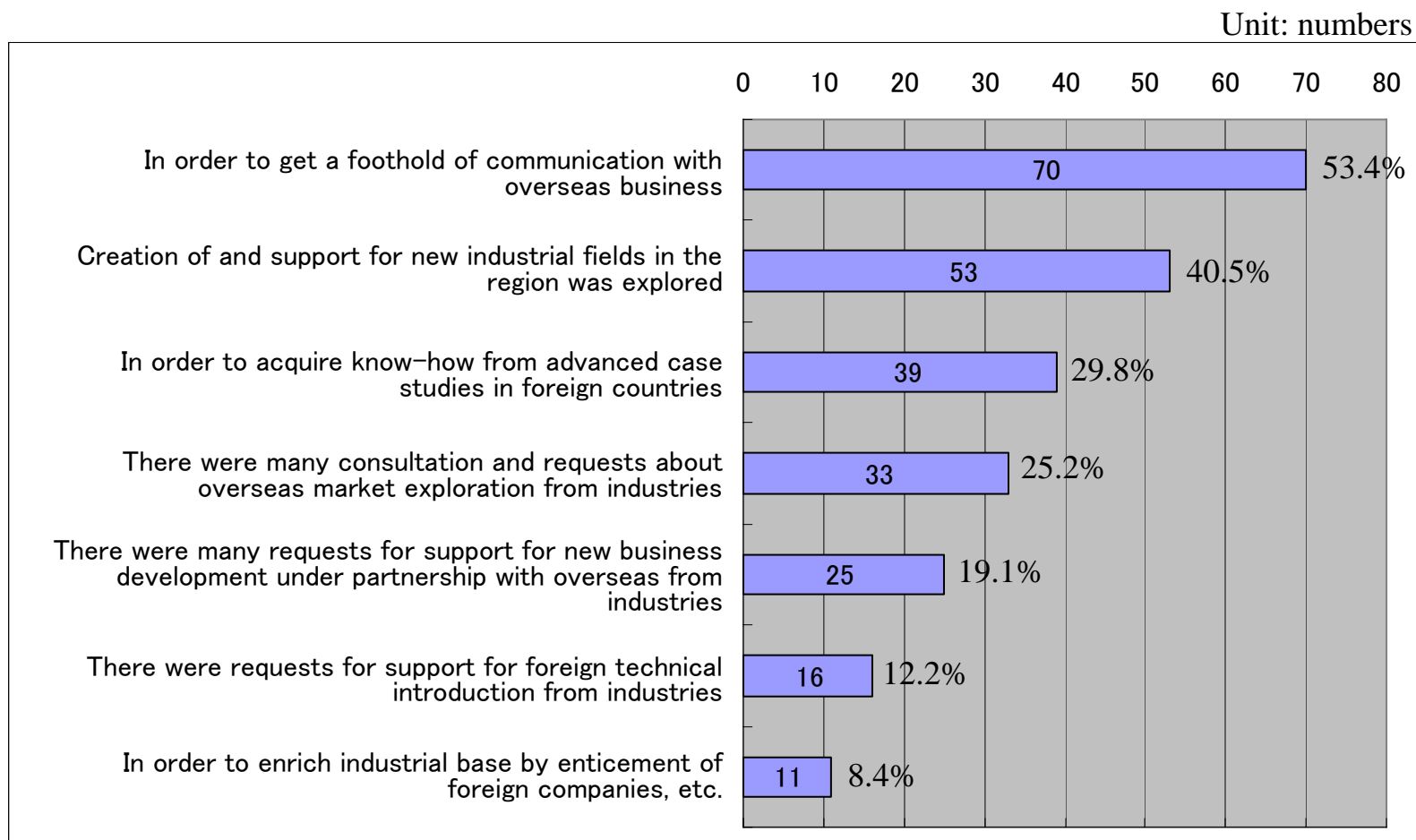
■ List of Interviewed Cases

1. Fukushima prefecture—Skåne, Västerbotten, Sweden (Medical welfare) <<FY2003 to FY2006>>
2. Suwa city, Nagano prefecture—Dalian, China (Mechanical metal processing) <<FY2004 to FY2006>>
3. Toyama prefecture—Milan, Italy (Industrial design: Household goods, interior accessories, etc.) <<FY2002 to FY2005>>
4. Ishikawa prefecture—Daegu, South Korea (Digital contents, etc.) <<FY2003 to FY2005>>
5. Fukui prefecture—Lyon, France (Textiles and fashion) <<FY2001 to FY2003>>
6. Shimane prefecture—Texas, U.S.A. (Precision machinery) <<FY2004 to FY2007>>
7. Shimane prefecture—Austria (Utilization of woody biomass) <<FY2004 to FY2006>>
8. Iizuka city, Fukuoka prefecture—Silicon Valley, California, U.S.A. (Information and communication industry) <<FY1998 to FY2002>>
9. Nagasaki city, Nagasaki prefecture—Sichuan, China (Environment, agriculture, landscape architecture, biotechnology, etc.) <<FY1997>>
10. Nagasaki city, Nagasaki prefecture—Daejeon Metropolitan City, South Korea (Information-related industry) <<FY2002-2003>>

2. Success Factor Analysis
(2) Background Analysis of Region to Region

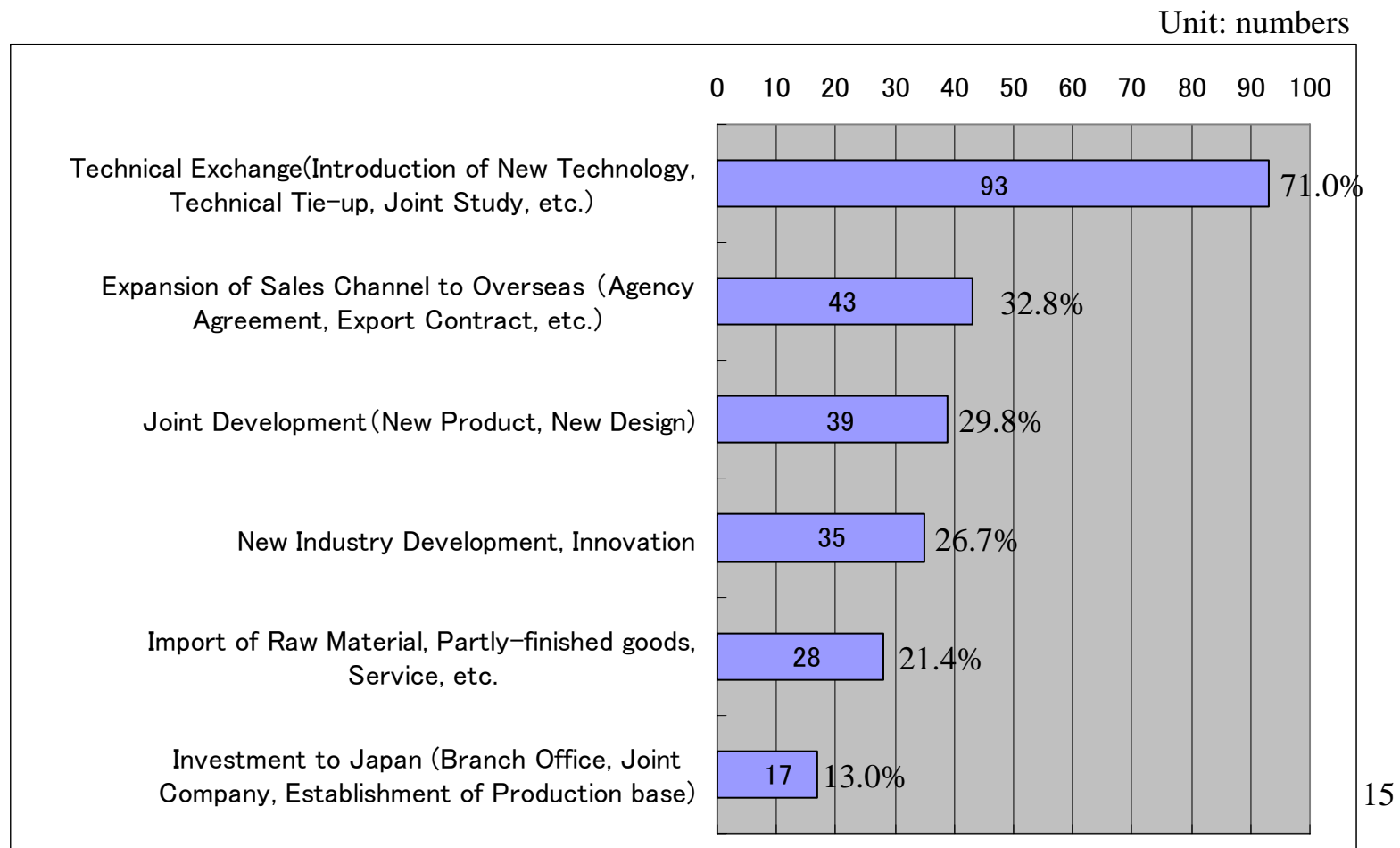
Reasons for international industrial tie-up

- “Communication with overseas business” and “Creation of new industrial field in the region” are the two main backgrounds



2. Success Factor Analysis (2) Background Analysis of Region to Region Objectives of Region to Region project

- Technical Exchange is the main objective. Also, expansion of sales channel to overseas is fairly expected



2. Success Factors Analysis (2) Background Analysis of Region-to-Region project

What expecting for the partners

- Generally, an industrial cluster of the same area in the region is expected and, on the other hand, special skills are sought as seen in the craft product sector.

Unit:
numbers

	Total	Region-to-Region Program targeted sector						
		IT industry	Biotechnology	Medical and Welfare Equipment	Craft products (Tableware, Furniture, Textile)	Environment	Metal and Mechanical Processing	Food, Food Processing, Alcohol
Overall	131	29	11	9	20	13	17	14
Industrial cluster of same area in the region	49	16	6	3	10	3	4	3
Cluster of advanced technology	43	11	4	5	2	8	8	2
Existing exchange achievements	33	11	5	4	0	1	4	3
Industrial cluster supplemental to the region	20	3	2	2	1	3	6	3
High design ability	20	0	0	2	12	0	1	1
Excellent brand image	20	3	0	0	6	4	0	4
Partner needs for regional technology	16	4	3	0	2	3	4	0
Existence of desirable materials to procure	11	2	1	0	1	0	0	4
Compilation of know-how on project management and implementation	10	1	1	1	0	2	1	0

33~50%
 50~66%
 over 66%

2. Success Factors Analysis (2) Background Analysis of Region-to-Region project Project implementation system

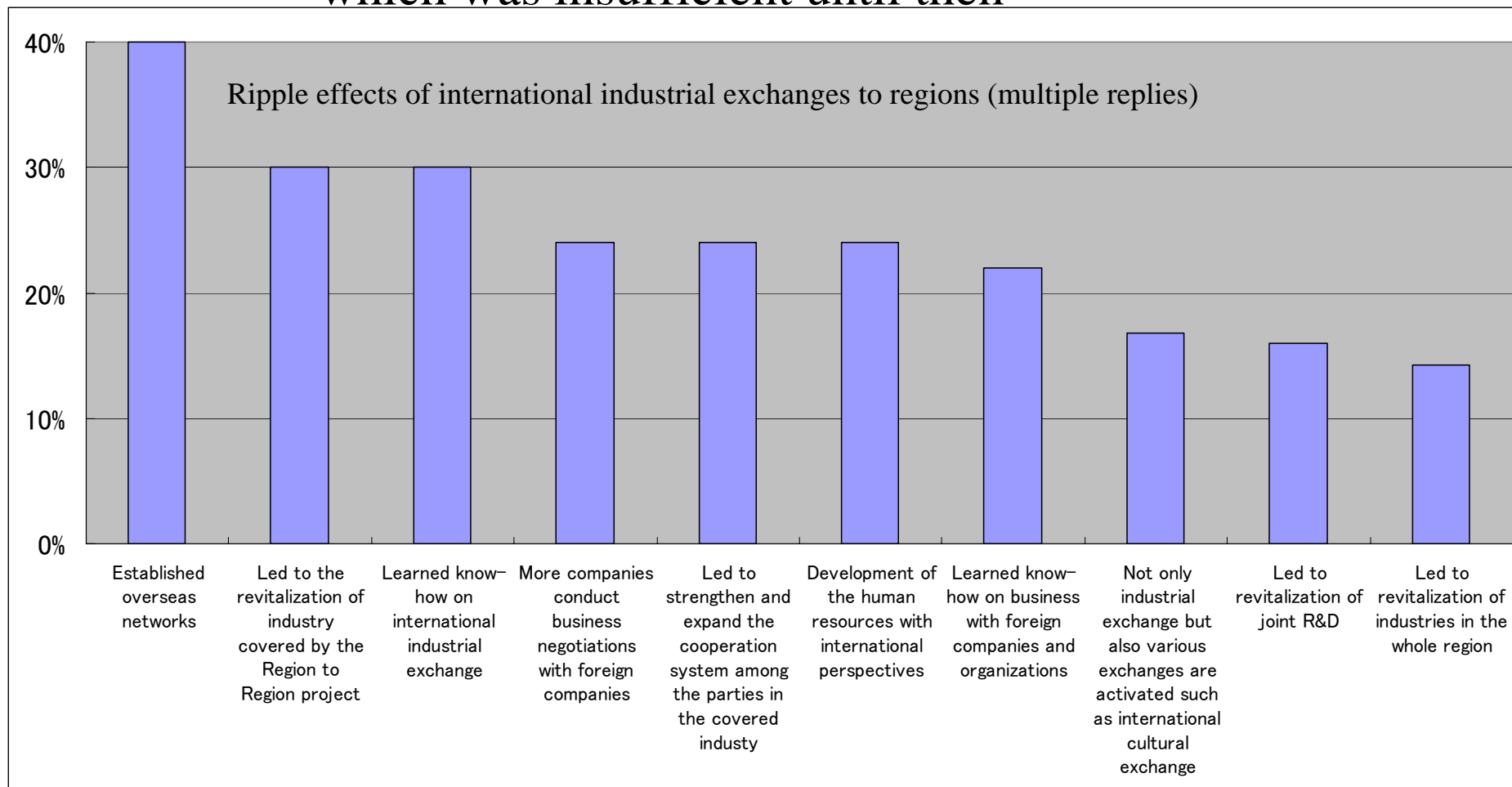
- Companies in region are the main players and local governments are involved

Unit: numbers

	Total	Region to Region Program targeted sector									
		IT industry	Biotechnology	Medical and Welfare Equipment	Textile)	Craft products (Tableware, Furniture, Textile)	Environment	Metal and Mechanical Processing	Alcohol Processing, Food	Materials, Building	Tourism, Housing, Design,
Overall	131	29	11	9	20	13	17	14	8	10	
Regional Companies	100	20	9	9	13	12	14	10	5	8	
prefectural governments, Supporting organizations	67	14	5	6	11	6	8	8	4	5	
City governments, Supporting organizations	65	10	5	4	10	8	6	9	5	8	
Universities, Colleges, etc.	52	11	6	5	5	8	7	1	4	5	
Chamber of Commerce	47	11	1	3	6	7	5	7	2	5	
Other associations and industrial groups	39	7	3	2	8	2	4	4	3	6	
National governments (Regional bureau, etc.), Supporting organizations	21	6	0	2	0	2	4	4	3	0	
Consulting Offices	17	3	3	1	1	6	0	0	1	2	
industry-academic-government total	46	9	5	5	4	6	7	2	3	5	

33-50% 50-66% Over 66%

High score for “Established overseas networks”
which was insufficient until then



(note)% is the ratio when 119 cases for research is 100%

2. *Success Factors Analysis* (2) Background Analysis of Region-to-Region project Ripple effects of international industrial exchange ②

【Overseas network】

We are utilizing the overseas network established through various industrial exchange after the Region-to-Region project (UK, bio)

【Revitalization of industry】

We are cooperating with overseas designers to produce furniture using regional materials, which are being developed after the Region-to-Region project. (New Zealand, timber processing industry)

【Know-how on international industrial exchange】

We could obtain information such as difference of commerce tradition and building construction technology, that we could not at private level (Korea, housing material)

【More business negotiations】

More SME companies negotiate with overseas companies and more companies have websites in English. (Israel, hi-tech industry)

【Enhancement and expansion of the cooperation】

The Region-to-Region project triggered the establishment of a consortium consisting of regional industries, and a cooperation system was formed based on the network (Australia, Metal/mechanical casting and processing new technology)

....and many other examples

① Commitment of implementation body

- Committed participation and contribution of an implementation body can invite enthusiastic participants and approach a more efficient mission, etc.
- As a result, the chance of achievement at an early stage increases.

Unit: number

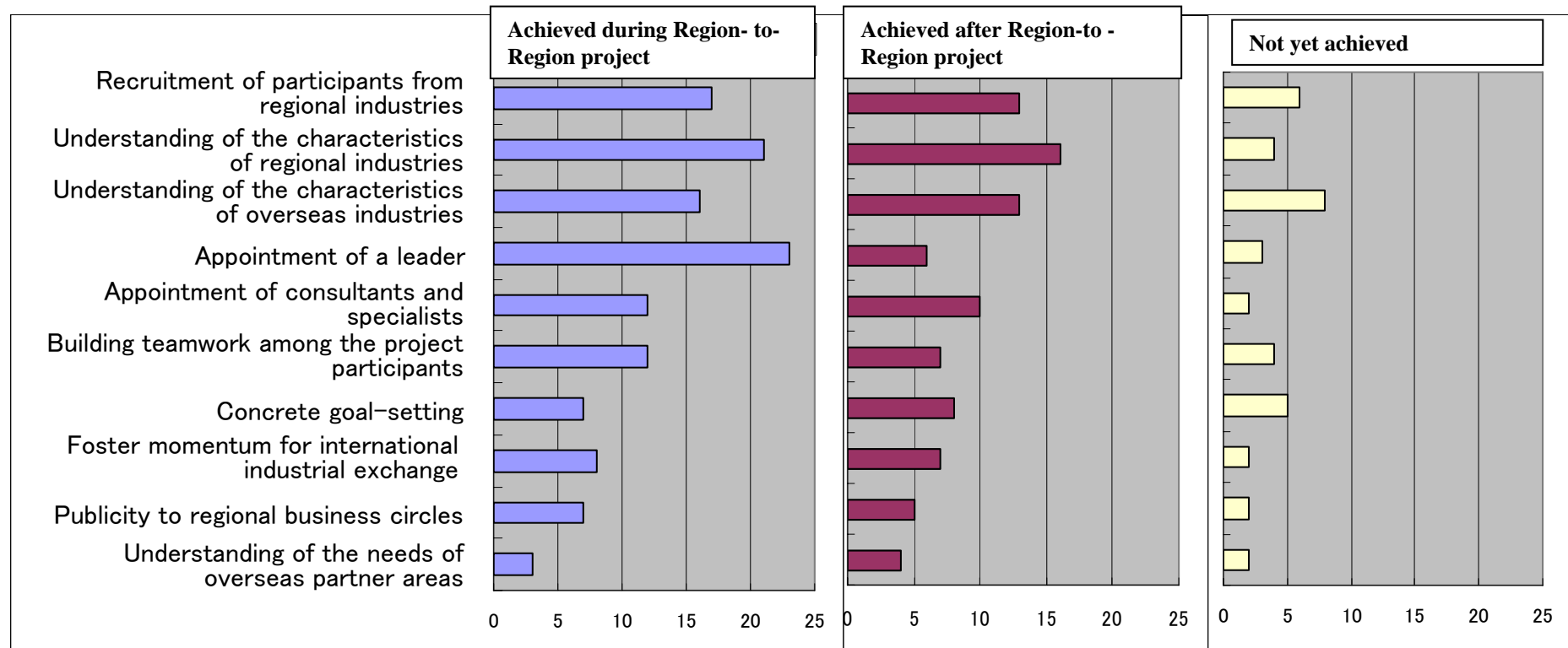
Degree of participation and contribution of the implementation body	Achieved for the 1st time during the Region-to-Region period	Achieved for the 1st time after the completion of Region-to-Region project	Not achieved yet
Took part in and contributed sufficiently	26	9	7
Took part in and contributed to an extent	14	24	12
difficult to tell	1	2	3

② Advance Preparation

For cases that had achievements quickly, they have recognition that they are prepared in advance in various aspects

Sufficient advanced preparation for projects (multiple replies)

Unit: Numbers

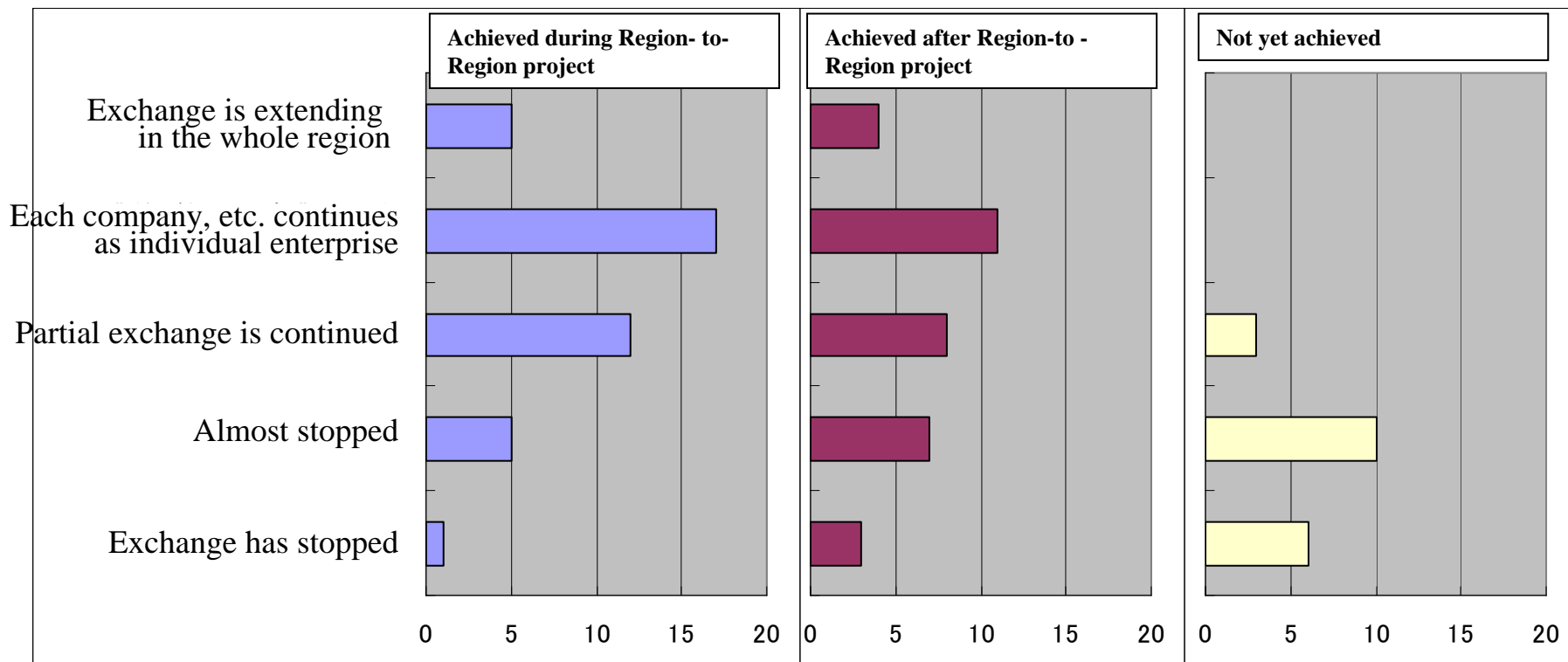


③ Exchange activities after support

-When uncompleted within the Region-to-Region project period, continuation of exchange after the support can bring achievement and promotion of exchange

Present status of exchange activities

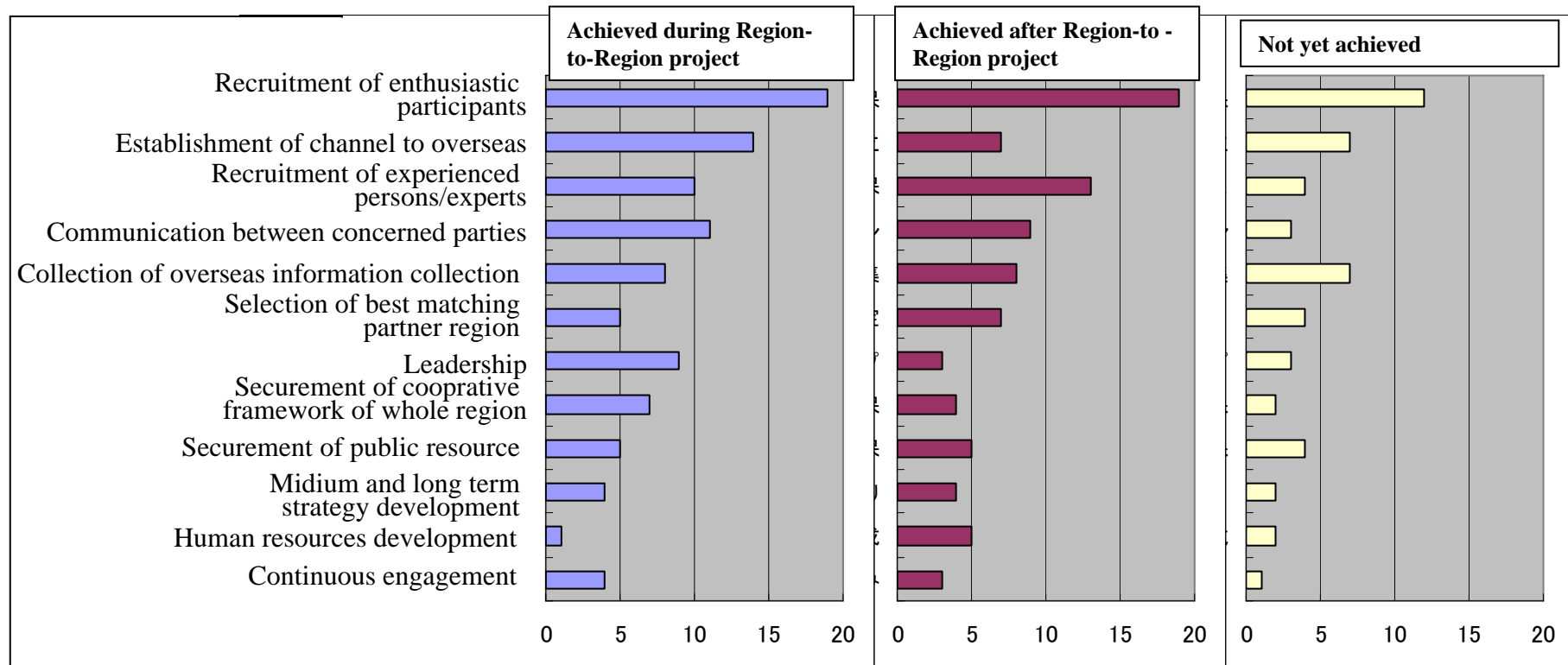
Unit: Numbers



④ Key of realization of international industrial tie-up

- The main point is “Recruitment of enthusiastic participants”

Key of realization of international industrial tie-up(multiple replies) Unit: Numbers



⑤ Obstacles and Challenges of Creating Results

- Communication is the main challenge in many sectors

Obstacles and challenges of creating results(multiple replies) Unit: Numbers

	Grand Total	IT Industries	Bio Technology	Medical and Welfare Equipment	Craft Products	Environment	Metal and Mechanical Processing	Food, Food Processing, Alcohol	Building Materials, Lumber and Building	Housing, Building	Tourism	Contents, Design,
Overall	131	29	11	9	20	13	17	14	8	10		
Communication between counterpart	44	14	2	2	7	4	6	2	3	4		
Recruitment of enthusiastic participants	36	8	4	3	1	4	5	5	2	4		
Understanding of the needs of overseas partner areas	31	9	1	4	3	3	6	2	2	1		
Fostering momentum for international industrial exchange	17	6	1	2	0	2	2	1	1	2		
Fundraising and Securement of resouce	16	3	1	0	0	3	1	2	2	4		
Recruitment of human resource who has know-how	13	0	2	1	2	1	1	1	2	3		
Methods of technology development and product development	13	2	3	0	1	4	1	1	0	1		
Publicity to regional business circles	10	4	0	0	1	3	1	0	1	0		
Change of socio-econimic status	9	1	0	1	2	1	4	0	0	0		

33~50% 50~66% over 66%

2.Success Factors Analysis

(4)8 points for the Success of
International Industrial
Partnership

Planning Stage

1. Discover regional technology from a global perspective
2. Cooperation with regional measures
3. The exchange vision from a wide perspective

Structuring Stage

4. Motivation of participating companies
5. Utilizing government, industry and academia networks

Action Stage

6. Sufficient communication
7. Flexibility to overcome failures
8. International exchange with a long-term perspective

2. *Success Factors Analysis*

(4) 8 points for the Success of International Industrial Partnership

① Discovering regional technology for a global perspective

Regardless of the type of industry – from a traditional to cutting-edge technology, it is important to foster them as regional industries in view of international development

E.g. of Fukushima Pref.:

Based on the demand for the technology from a university, the prefecture's next generation industry creation plan focused on exchange through a medical engineering partnership with Sweden. By providing various kinds of support, Fukushima prefecture could gain concrete results at an early stage.

2. *Success Factors Analysis*

(4)8 points for the Success of International Industrial Partnership

② Cooperation with regional measures

Implementation of the Region-to-Region project in the system of regional industry promotion measures can lead to achievement realization

- demonstration of clear project direction
- easier provision of multifaceted support
- improvement of awareness to the Region to Region project in the region

E.g. of Fukushima Pref.:

The medical/engineering partnership was positioned as a prefectural industry promotion measure and representatives of Fukushima prefecture could conduct the project more smoothly.

2. *Success Factors Analysis*

(4) 8 points for the Success of International Industrial Partnership

③ The exchange vision from a wide perspective

The elimination of pre-assumptions and implementation of the exchange vision in a calm manner and with a wide perspective can lead to higher possibility of success

E.g. Suwa city:

- In the beginning of the project, Suwa mainly considered to provide parts to major Japanese-affiliated companies in the economic development district in Dalian
- Contrary to this assumption, such parts could be easily procured within China, causing change of their exchange plan.
- From the second year, they collaborated with JETRO and communicated with Chinese local companies and organized individual exchanges

2. *Success Factor Analysis*
(4)8 points for the Success of International Industrial Partnership

④ Motivation of participating companies

Discovery and participation of motivated companies is the core of exchange; Use their motivation as a driving force for exchange

E.g. of Nagasaki city:

Company A, which has the idea of importing a specific product and strong desire to make it as a business, became the core, starting exchange with the region together with the city of Nagasaki and companies in various industries that became project members.

2. *Success Factors Analysis*

(4) 8 points for the Success of International Industrial Partnership

⑤ Utilizing government, industry and academia networks

Specialist support tended to be required in many phases of the exchange project

- Utilize government, industry and academia networks or the networks of business persons from the region fully

E.g. of Shimane Pref.:

A technology evaluation committee comprised mainly of engineers from the Shimane Institute for Industrial Technology and other institutes evaluated if technologies introduced from overseas are appropriate to be introduced to local SMEs, and supported supervision of the issues related to patent and contract.

2. *Success Factor Analysis* (4)8 points for the Success of International Industrial Partnership

⑥ Sufficient communication

- Close communication with your partners is the foundation of exchange
- Not only language but difference in culture, system, vision, etc. has to be overcome
- It is effective to position a mediator

E.g. of Toyama Pref.:

- Mainly the key person translated materials, and the interpreter has studied design in Italy
- Italian designers were invited to deepen their understanding of Japan, which led to the introduction of Italian design in the form of design suggestion
- They recognized that technologies and designs of Toyama are good enough to compete in the international market

2. *Success Factor Analysis* (4) 8 points for the Success of International Industrial Partnership

⑦ Flexibility to overcome failures

- There is not only one scenario for success. It's important to continue the project, adapting to the circumstances
- Handling based on “failure” experience is necessary
- Look forward to unexpected “chemical reactions”

E.g. of Ishikawa Prefecture:

- The exchange was not conducted smoothly, due to different opinions held by field representatives for the proposal that was agreed to in the beginning and differences in views of both parties.
- Nevertheless, representatives of Ishikawa prefecture promoted the project by making cordial efforts, such as inviting companies from Tokyo to participate in an exhibition held in Korea, which succeeded in establishing a trusting relationship.

2. *Success Factors Analysis*

(4) 8 points for the Success of International Industrial Partnership

⑧ International exchange with a long-term perspective

- Continuation of the exchange as a region will result in better results
- Provision of independent budget for such projects is important

E.g. of Iizuka city:

- Setting a target of creating IT industry as a pillar of the municipal industrial policy, they conducted the Region to Region project.
- They prepared an independent budget for five years even after the completion of Region to Region project.
- Because of this, the city succeeded in commercializing the test product, which led to creating the buzz “go to Iizuka when setting up a business” among students in Fukuoka.

3. Regional Industry Tie-Up Program (RIT)

3. Regional Industry Tie-Up

Objective :

To develop new products and services by supporting inter-regional exchange between Japan and overseas and integrating expertise and know-how of both regions

Target :

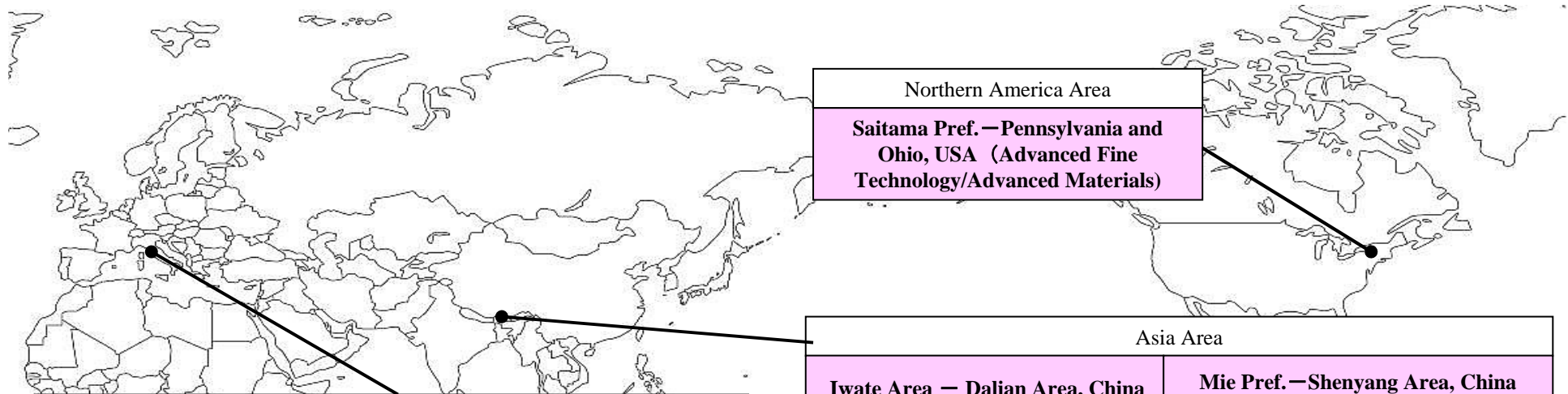
SMEs that do not have sufficient resources and know-how to develop business in the global market in spite of their expertise and sophisticated technologies



3. Regional Industry Tie-up (RIT) Project Support Contents

Support Tool	Maturity of Business	Objectives and Contents	Costs paid by JETRO (examples)
Hold workshop in Japan	★	Establish a strategy for interregional industrial exchange ⇒Interested parties meet at a venue to establish a strategy for inter-regional exchanges, inviting external lecturers in Japan to collect information on the region in which the prospective partner is located.	Costs to arrange venues, travel expenses and fee for external lecturers
Basic survey overseas	★	Deepen basic understanding on international interregional cooperation ⇒Conduct survey on targeted industries overseas and companies interested in launching business in Japan, mainly by JETRO overseas offices.	Overseas survey fee
Survey with overseas business trips	★★	Aim to develop business partners ⇒Send experts from Japan with comprehensive knowledge and human network overseas to conduct survey.	Expenses for travel, stay and activities of an expert, etc.
Invite experts from overseas	★★★	Aim to acquire knowledge and techniques useful for the business ⇒Invite an expert with comprehensive knowledge or technologies in the business field from overseas to Japan to hold seminars, symposiums and on-the-job training.	Expenses for travel, stay, and interpretation for an invited expert, costs to arrange venues for seminar or symposium, etc.
Send missions overseas	★★★★	Aim to hold specific business meetings ⇒Send a mission from Japan consisting of interested companies and organizations overseas.	Expenses for travel, local transportation, and interpretation for an expert, costs to arrange business meetings, etc.
Invite prospective business partners from overseas	★★★★	Aim to hold detailed business meetings ⇒Invite prospective business partners overseas for detailed business meetings.	Expenses for travel, stay, and interpretation for one from one overseas company, up to three people, costs to arrange business meetings, etc.
Retain Japan/overseas coordinators	-----	Support by experts before holding business meetings ⇒Conclude yearly contracts with experts from Japan/overseas as dedicated coordinators who give advice and arrange business meetings from their point of view, aiming to promote business globally.	Yearly commission fee and travel expenses for one respectively from Japan/overseas, up to two in total

2008 Regional Industry Tie-up (RIT) Project Map1



Northern America Area
Saitama Pref. — Pennsylvania and Ohio, USA (Advanced Fine Technology/Advanced Materials)

Europe Area	
Nerima Ward, Tokyo — France (Animation Production)	Chiba Pref. — 《 FY2007 》 South West England Area, UK (expand the region)
Hamamatsu Area, Shizuoka Pref. — Jena, Germany (Optical Appliances Related Industries)	↓ 《 FY2008 》 West England Area, UK and Dusseldorf Area, German (Life Science)
Toyama Pref. — Switzerland (Medicine)	Suwa Area, Nagano Pref. — Switzerland (Micromachine)
Kinki Area, Osaka Pref. — Wageningen, Gederland, Nederland (Food Industry)	East Osaka Area — Dresden, Sachsen, German (Nano Technology)
Kansai Region and North Osaka Area, Osaka Pref. — Alsace Region, France (Pharmaceutical Products)	Kagawa Pref. — Rhone-Alpes Region and Alsace Region, France (Biotechnology)
Hiroshima Pref. — Switzerland (Car Manufacturing and Manufacturing "Monozukuri" Fundamental Technology)	

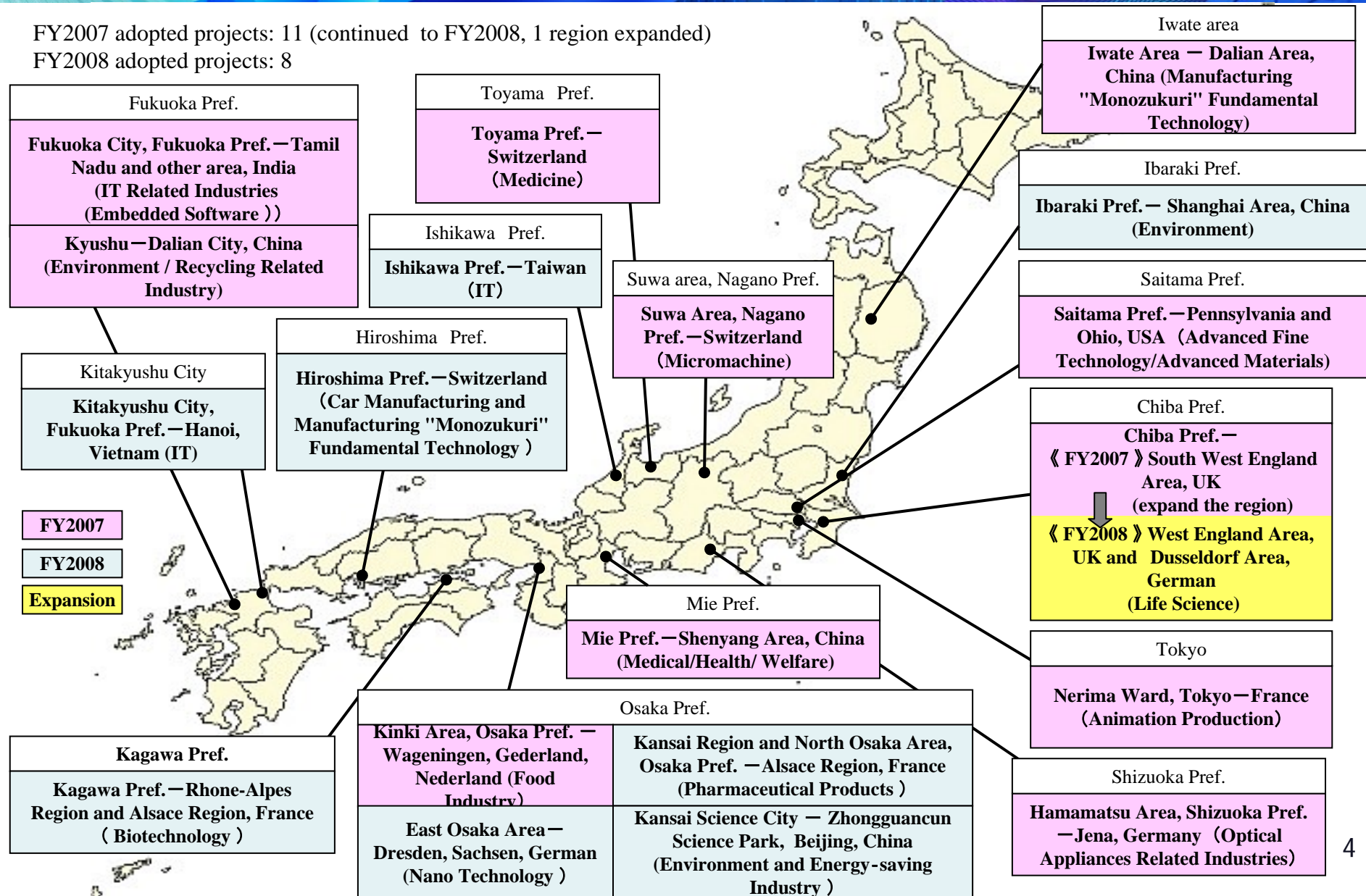
Asia Area	
Iwate Area — Dalian Area, China (Manufacturing "Monozukuri" Fundamental Technology)	Mie Pref. — Shenyang Area, China (Medical/Health/ Welfare)
Kyushu — Dalian City, China (Environment / Recycling Related Industry)	Fukuoka City, Fukuoka Pref. — Tamil Nadu and other area, India (IT Related Industries (Embedded Software))
Ishikawa Pref. — Taiwan (IT)	Ibaraki Pref. — Shanghai Area, China (Environment)
Kitakyushu City, Fukuoka Pref. — Hanoi, Vietnam (IT)	Kansai Science City — Zhongguancun Science Park, Beijing, China (Environment and Energy-saving Industry)

FY2007 adopted projects: 11 (continued to FY2008, 1 region expanded)
FY2008 adopted projects: 8

2008 Regional Industry Tie-up (RIT) Project Map2

FY2007 adopted projects: 11 (continued to FY2008, 1 region expanded)

FY2008 adopted projects: 8



3. Regional Industry Tie-up (RIT) Project Case studies

Iwate Area – Dalian Area, China (Manufacturing "Monozukuri" Fundamental Technology) (FY2007–2008)

There is a cluster of “casting technology”, die technology”, “IT technology” sectors, which are the foundational technologies for production, in Mogami river basin including Iwate prefecture. They tie-up with companies in Dalian, China, which has a cluster of relevant sectors. (FY2007, Dispatching specialist research, Dispatching leading companies overseas, Invitation of specialists and leading companies)

<Case Study of Achievements>

- (1) Iwate University concluded a contract with Dalian University of Technology and a company in Dalian on technical transfer of casting
- (2) Oushu city and the company above concluded a mutual friendship cooperation agreement in order for development of companies through mutual communication



Toyama Pref. – Switzerland (Medicine) FY2007–2008

For further development of medical related industries of over 300 years tradition, Toyama Pref. began communication with Basel, which has a cluster of bio medical industry and is called “the world’s medical city” They have dispatch a mission group and expanded the network. Communication co at joint product development in both region and global development of technologies that Toyama Pref. has. (FY2007, Dispatching leading companies to overseas, Invitation of specialists)

<Case Study of Achievements>

Company in Toyama concluded a product/technology development contract with a company in Switzerland.



Exhibited at Bio Japan