

Activating Industrial Clusters -On-the-spot Experience

September 29th 2003

Hiroyuki Inoue Director, Industrial Cluster Promotion Office Regional Economy and Industry Group Ministry of Economy, Trade and Industry (METI)



Factory Location Law



1980's

Issues : Tertiary industrialization, High-value added economy

Inward industry complex of processing and assembly industry: Techopolis

Laws : Law for Accelerating Regional Development Based upon High-Technology Industrial Complexes(Technopolis Law)

> Law to Promote The Group-Sitting of Designated Types of Businesses Contributing to More

Sophisticated Local Industrial Structure

1990's

Subjects : Hollowing out of industries

Support for new businesses with high growth rates

Self-sustained development based on existing industrial accumulation in regions

Laws : Law on Temporary Measures for Activation of Specific Regional Industrial Agglomeration

Law on Improvement and Utilization in City Center

Law on for Facilitating the Creation of New Business







Background

- ·Changes in international competition environment
- ·Collapse of Keiretsu relationship between big enterprise and small- and- medium sized enterprises
- ¹Isolation of enterprises in local areas in spite of their high technical capabilities
- ·Checkmate of traditional regional industrial policy focusing moves of factories
- ·Application of the cluster theory

Definition

"A cluster is a geographically proximate of companies and associated institutions in a particular field, linked by commonality and complementary

Michael .F.Porter. On Competition

Contents of Project

- ·Formation of Human networks in regions
- ·Implementing supportive measures for cluster enterprise







Main participants

Enterprises(5000 small-and- medium enterprises)

·Universities (200 universities)

·Bureaus of Economy and Industry of MATI (500 officials)

Network organizations ,Secretariats

Contents of activity

Support for academic, business, government circles

Exchange program, seminars, workshops

• Promotion of exchange and cooperation helped by coordinators

Effect of Industrial Cluster Plan

- [•]Higher productivity
- Induced innovation
- ·Development of new businesses



- 19 projects nationwide, 5,000 companies and 200 universities -





Networks in clusters : survey on Japanese enterprises (METI)







Manufacturing Clusters in the TAMA (Project to Revitalize Industry in the TAMA)



Activities with the cooperation of the whole community (participating organizations, etc.)

| | Local governments | : 17 (Sayama City, Hachioji City, |
|---|--|--|
| | Universities, etc. | : 28 (Tokyo University of Agriculture and Technology, University of |
| | Public research institut | Electro-Communications, etc.) es : 3 (Tokyo Metropolitan Industrial Technology Research Institute, Kanagawa Industrial Technology |
| | Business incubators | : 4 (Entrepreneurs Office of Fuji Electric Co., Ltd., Sagamihara Incubation Center, etc.) |
| | Fund supply, etc. | : 62 (Seibu Shinkin Bank, TAMA-TLO Ltd., Sayama Chamber of Commerce and Industry, etc.) |
| | | |
| | | |
| | Activities | (FY 2002) |
| | (i) Managerial/technica | (FY 2002) Il assistance by coordinators |
| | (i) Managerial/technica responding to proble (A total of 289 coord | (FY 2002) Il assistance by coordinators ems dinators were dispatched to 55 |
|) | Activities (i) Managerial/technica responding to proble (A total of 289 coord companies.) (ii) Holding of ordering- presentation meetin (iii) Activities of regiona | (FY 2002) al assistance by coordinators ems dinators were dispatched to 55 exchange meetings and technological gs (About 900 participants) I exchange meetings (Mini-TAMA |
| | Activities (i) Managerial/technica responding to proble (A total of 289 coord companies.) (ii) Holding of ordering- presentation meetin (iii) Activities of regiona Councils) (iv) Provision of informa (Number of hits: 2,0 month) | (FY 2002) al assistance by coordinators ems dinators were dispatched to 55 exchange meetings and technological gs (About 900 participants) I exchange meetings (Mini-TAMA ation via Web site 00-3,000 per day, and 100,000 per |
| | Activities (i) Managerial/technica responding to proble (A total of 289 coord companies.) (ii) Holding of ordering- presentation meetin (iii) Activities of regiona Councils) (iv) Provision of informa (Number of hits: 2,0 month) Technological devel | (FY 2002) al assistance by coordinators ems dinators were dispatched to 55 exchange meetings and technological gs (About 900 participants) I exchange meetings (Mini-TAMA ation via Web site 00-3,000 per day, and 100,000 per |
| | Activities (i) Managerial/technica responding to proble (A total of 289 coord companies.) (ii) Holding of ordering- presentation meetin (iii) Activities of regiona Councils) (iv) Provision of informa (Number of hits: 2,0 month) Technological devel public assistance | (FY 2002) al assistance by coordinators ams dinators were dispatched to 55 exchange meetings and technological gs (About 900 participants) I exchange meetings (Mini-TAMA ation via Web site 00-3,000 per day, and 100,000 per opment utilizing (FY 2001-2002) |



Industrial and technological base

- Relocation of dominant factories from inner-city district and Keihin coastal area to TAMA area in pre-war era
- Accumulation of subcontract enterprises
 Electricity ,Electron,Transportation,Precision machine
 Small and medium enterprises with product development abilities.
- 1996 White Paper on Small and medium enterprise Clarifying flexible network connection of enterprises specializing high-tech areas.
 - Finding enterprises that utilize network systems in Tama area



1996: Research on developing type industry accumulation in wide Tama area (Kanto Bureau of Economy, Trade and Industry)]

Research about actual situation of enterprises

Activities that utilize industrial accumulation and human network in wide Tama area

1997:Preparatory committee for wide Tama area local industrial vitalization council

enterprises, universities, official research organization, commerce groups, government organizations, and others (total 54 organizations)

1998:TAMA industrial vitalization association

328 members (190enterprises included)







History of Information Manufacturing Industry in Sapporo

- 1976: The study group of Micro Computer was established by Professor Aoki, Hokkaido University.
 - (The first year of micro computer in Sapporo)
- 1977: Hudson entered the micro computer market.
- 1981: MZ-80 by Sharp adopted Hu BASIC of Hudson.
- 1982: Software makers supplied applications to personal computers. Hudson contracted business cooperation with Soft bank (This contract contributed to rapid growth of Soft bank)
- 1987: Tomcat in Asahikawa contracted development of personal computers compatible with EPSON98.
- 1992 : B.U.G developed a router with the highest share in ISDN area.
- 1997: Cyber Trust (digital certification service)was established in cooperation with GTE in USA.
- 1999: Soft front developed the fastest VOIP in the world.

Source: Ikkei Matsuda , President of Hokkaido Venture Capital

The family tree of IT enterprises in SAPPORO VALLEY



Thoshihiro Murata(President of Soft front)

The geometrical acumulation of IT enterprises in Sapporo City









Background

- Concentration of life-science related industry in the Kansai area : Close collaboration between industry, academic and government bodies
- What Kobe has to offer





Core Facilities



Source:Kobe City

17

Formation of the CLUSTER for Translational Research in Regenerative Medicine in KOBE

In collaboration with the Osaka (Saito) area, will create a life science `super cluster' based in the Kobe area.

Core organization: Foundation for Biomedical Research and Innovation

Development of technology necessary for the practical application of advanced medical treatment such as regenerative medicine

• Participation of a wide range of research and industrial organizations in the Kansai region.

• Comprehensive and systematic joint research, based on 4 themes including neural and vascular stem cells.

<u>Creation of a system to promote</u> <u>translational research and</u> <u>commercialization of advanced medical</u> <u>treatment</u>

Incubation capabilities for early-stage start up businesses



Headquarters

| / | | \mathbf{i} |
|------------------------------------|---|--------------|
| | Advisor Hiroo IMURA, Chairman, Kobe Medical Industry Development | |
| | Project Study (Group) | |
| | Director General Masaaki TERADA, President, Institute of Biomedical | |
| Research and Innovation | | |
| | Project Director Shuji HIGUCHI, Executive Director, Foundation for | |
| Biomedical Research and Innovation | | |
| | Research Director Shin-ichi NISHIKAWA, Deputy Director, | |
| | RIKEN Center for Developmental Biology | Ϊ |
| - | | 1 |



Source: Kobe City