Outline of Regional Innovation Cluster Program

Project for Developing Innovation Systems

< Regional Innovation Cluster Program > FY2010 budget: 12,065 million yen

This program promotes joint research by industry, academia and government with local core universities and other research institutions with high R&D potential, and aims to form clusters capable of producing sustainable innovations by establishing industry-academia-government networks.

Outline of the Project

1. Implementation of the Project

- Setting up a core organization to serve as the regional "Knowledge Cluster Headquarters" (appointment of a Project Director, Chief Researchers, etc.)
- Assigning science and technology coordinators to promote industrializing, and utilizing advisory services such as patent attorneys

2. Execution of Joint Research by Industry-Academia-Government

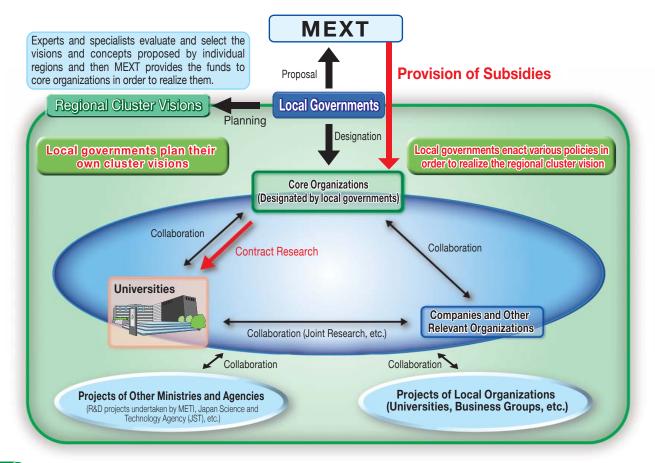
- Promoting industry-academia-government joint research in response to the needs of local companies
- Patenting research results and conducting R&D for industrialization of the results

3. Utilization of Projects and Policies of Local Governments, Relevant Ministries, etc.

• Executing activities at all phases in the projects, ranging from R&D to commercialization of the research results, by utilizing projects initiated by local governments and relevant systems and policies of the Ministry of Economy, Trade and Industry (METI) and other relevant government organizations

4. Other

- Holding forums, conferences, etc. to announce research results and promote business matching
- To boost regional independence, relevant regions are required to implement cluster-related projects through the matching fund method for efforts toward cluster formation.



Accelerative Support

Global Type

City

Area

Type

Global-type projects for the formation of globally-competitive clusters, and city-area-type projects for the formation of clusters that may be small in scale but that maximize local characteristics were selected under the Regional Innovation Cluster Program (Accelerative Support) for FY2010, from among areas where past efforts were made for cluster formation. Support will be provided to the seven areas selected and listed below, for the formation clusters that will help the relevant area achieve independence and continuous development.

The Seven Areas Selected

Central Iwate-Kamaishi Area

Further efforts will be made to promote research and development toward commercialization and material standardization, along with activities for the expansion of sales routes to markets in Asia, USA, and Europe (where demand is high for the application of alloys to biomaterials), in order to form a cluster comprising local established alloy materials manufacturers as its core. This will be achieved by taking advantage of results from past efforts toward the establishment of foundations for the practical application of "Made in Iwate" high-value-added cobalt alloys that are utilized in medical and general industrial applications.

Fukushima Area

Efforts will be put forth to develop and commercialize safe, user-friendly advanced diagnostic devices and medical care equipment by combining haptic technology (a technology to measure hardness utilizing ultrasonic waves, resulting from past research), with optical and information processing technologies, etc. for the ultimate realization of measurement devices that can obtain biomedical information such as blood sugar levels but do not inflict damage to the body, endoscopes with tactile sensitivity, etc., along with systems for their remote control.

Foot of Mt. Fuji

Commercialization will be promoted in four areas, from among the outcomes of previously-conducted research in advanced cancer-related medical technologies, including the development of tumor markers that show commercial potential for overseas markets as the main project under the "Pharma Valley Project." This particular project aims for the establishment of a health/medical industrial cluster at the foot of Mt. Fuji in eastern Shizuoka Prefecture, in order to improve the area as one of the few clusters in Japan, in which medical institutions play the main role.

Southern of Lake Biwa

Research and development for ultra-micro analysis and robotic laparoscopic surgery technologies will be implemented with the aim of realizing an "advanced medical care anytime, anywhere" ideal, building upon the accumulation of miniaturization technologies and the history of close collaboration between corporations and regional universities. Moreover, efforts will be made to form a collaborative manufacturing cluster of medical and industrial communities through increased self-sustainability and reinforcement of networks comprising industry, academia, government, and financial institutions.

Hirosaki Area

Various efforts will be put forth to form a health- and beauty-related industrial cluster, by positively exploiting Aomori Prefecture's local characteristics, with the aim of developing functional foods, cosmetics, and pharmaceutical products, etc., through the utilization of Hirosaki University's accumulated intellectual and human assets in the area of glycotechnology, as well as technology for the mass production of proteoglycans, which are the primary elements comprising animal cartilage, collagen, and hyaluronic acid.

Central Saitama Area

Through the use of high-speed molecular evolution technology that has been accumulated in the Central Saitama Area, the development of highly functional antibodies, peptide aptamers, and fluorescent protein sensors will be advanced; then applied to create medicines and test drugs, as well as tools for diagnoses and pharmaceutical development to combat intractable diseases that ail aging societies. Moreover, we will strive to form an original next-generation bio cluster with the said technologies at its core, in combination with the local manufacturing tradition.

Yonago and Sakaiminato Area

Efforts will be put forth for the expansion of basic research related to the human artificial chromosome (HAC) technology that is based on chromosome engineering technology from Tottori University; refinement and sophistication of the physiological function assessment system utilizing humanized mouse models created with said technology; assessment of and research on the functionality of food materials and their commercialization through industry-academia-government collaboration in research; and moreover, establishment of a chromosome engineering research center for the cultivation of biotechnology personnel.