

Go West, Young Venturers!

In the introductory article to our Clusters series last month, Tsukamoto Yoshiaki reviewed the background to the Industrial Cluster Project launched by the Ministry of International Trade and Industry in 2001. **Tamura Mariko** now takes up the Clusters baton, beginning her investigation of some of the more successful projects that have sprung up nationwide with a visit to the TAMA Association in western Tokyo.

From among the nineteen projects initiated around the country in 2001 as part of the Industrial Cluster Project, one model example has already emerged, though its success owes much to the steady efforts of those involved even before the launch of the government initiative. That project goes by the name of TAMA Industrial Vitalization Association Inc., or the TAMA Association for short, where TAMA stands for Technology Advanced Metropolitan Area. In the TAMA region, which covers the Tama area of western Tokyo including southwestern Saitama-ken and central Kanagawa-ken prefectures, industry and academia have joined forces to launch new businesses and boost the local economy.

I spoke with Dr. Furukawa Yuji, professor at the Faculty of Technology, Tokyo University of Agriculture and Technology, who has chaired the association since it was founded, about the activities of the TAMA Association.

How was the TAMA Association established?

We started as a voluntary organization that consists mainly of middle-ranking small and medium enterprises (SMEs), technological universities, local governments and commercial and industrial associations in the western Tokyo metropolitan area, or Tama region, in April 1998. In April 2001, we reorganized ourselves into an incorporated association. Since then, we have endeavored to promote collaboration between industry and aca-

demia, and among enterprises.

One of the factors that led to the establishment of the TAMA Association was the Industry-Academic Collaboration and R&D Promotion Project pursued by the former Ministry of International Trade and Industry (now the Ministry of Economy, Trade and Industry). The Project aimed at consolidating the "foundation for manufacture" by organizing consortia of university researchers who possess technological seeds and small and midsize venture businesses (VB) that excel at experimental production, research and development and sales, to enable prompt development of world-class products and technologies.

What are the unique features of the TAMA industrial cluster, as compared with the eighteen other industrial clusters located nationwide?

All kinds of industries have gathered in the region, from the fiber industry to information technology (IT) and the nanotech industry. In addition, there are a great many second-tier companies and SMEs that possess manufacturing technologies for industrial machinery, electronic equipment and telecommunications equipment. The total number of people working with these enterprises is around four million. Not only that, there are as many as forty technology universities in the area. It is an enormous industrial accumulation that boasts double the industrial output of the Silicon Valley, with an annual value of 26 trillion yen (236 billion dollars). It is also an area of Japan with remarkable technological potential.

What are the major activities of the TAMA Association?

There are as many as 380,000 business establishments in the TAMA region. Of these, about 300 product development enterprises have joined the TAMA Associa-

tion. The number may only be 300 now, but by revitalizing these enterprises, we believe the synergic effects could boost the whole area.

One way to attain synergy is through networking. The first attempt we made was the Information Networking Project, in which enterprises may post information about their activities to our Web site. The site receives about 5,000 hits each day, and more than 100,000 each month. Business agreements have already been reached via the Internet.

A good example is an order amounting to several hundred million yen placed with a development manufacturer of incinerators by a local government in Kyushu (southern Japan), which accessed the manufacturer through the information network of TAMA and thought its incinerators to be suitable for the locality.

The second approach is the configuration of the TAMA database. We have built databases of firms and researchers. For example, if you wished to develop a loudspeaker, you could search the database with appropriate keywords and find that the speaker components you want are being made by Company X in the TAMA region, or that Professor Y of such-and-such university is doing research on it.

We also have the self-managed Mini-TAMA Meetings, which support the TAMA Association in a face-to-face way. At the meetings, opinions are exchanged on examples of collaborative research, fundraising and other topics. There are similar regional organizations, such as the Mini-TAMA Seibu Meeting in western Saitama, and the Mini-TAMA Santama Meeting in the Tama region of western Tokyo. The Mini-TAMA Sagami Meeting (provisional name) is soon to start.

What kind of technical support has the TAMA Association provided to R&D-type VBs?

There is a supporting office for VBs called the Fuji Incubation Office (FIO).

At the former Tokyo System Factory of Fuji Electric, there are facilities called micro-mechatronics (MEMS), which are capable of manufacturing products with high added value. VBs can use the facilities.

The second example in the private sector is Seibu Incubation Office (SIO), for information provision, which is operated at Seibu Shinkin Bank. Affiliations have also been formed with several public-testing facilities.

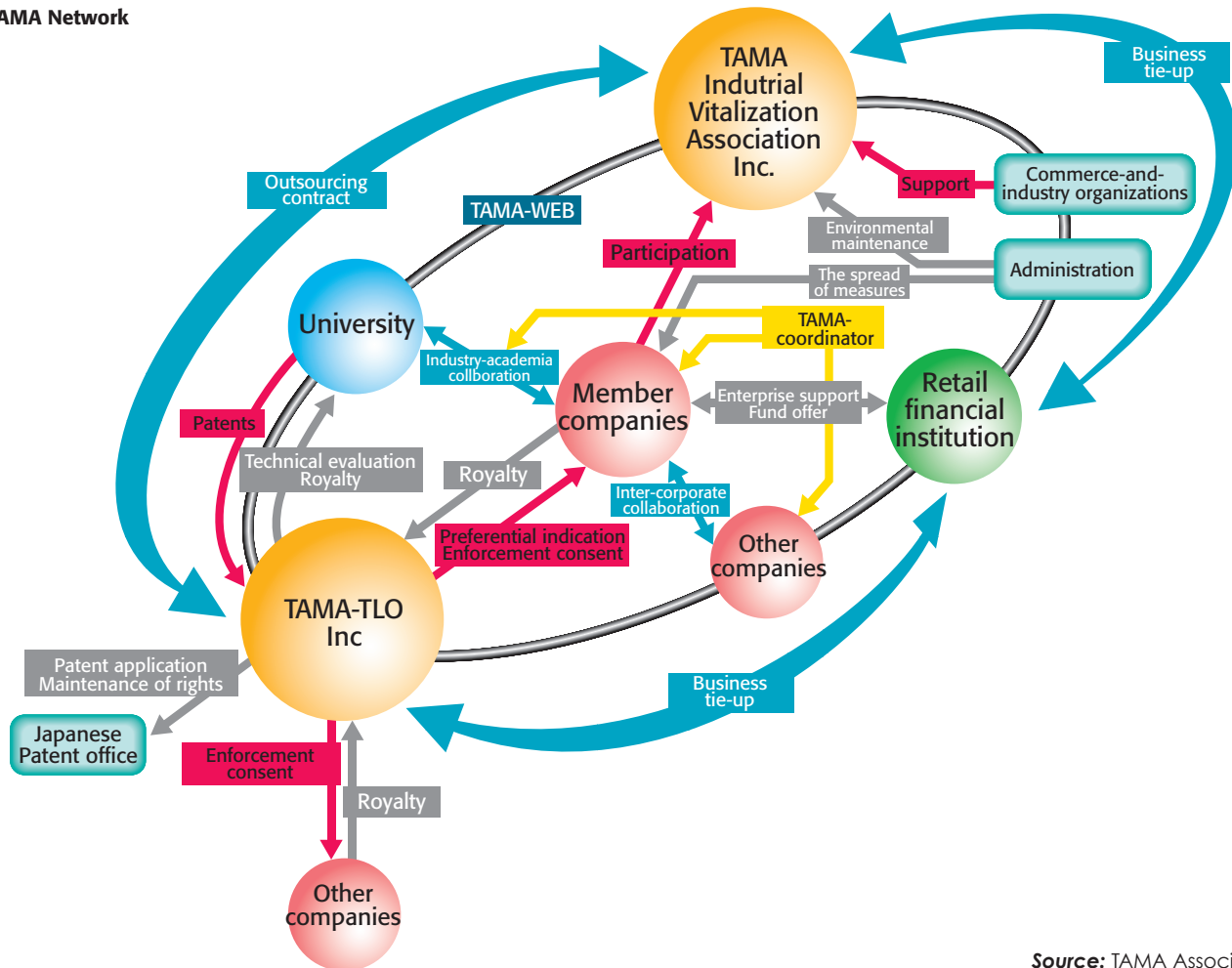
Moreover, TAMA Virtual Laboratory System has been established. A database



COURTESY OF TAMA ASSOCIATION

Dr. Furukawa Yuji (left) meets Kim Chong Yang, president of Hanyang University, in Korea, June 25. Dr. Furukawa was in Korea to speak about the work of the TAMA Association, with which Korean businesses are considering forming alliances.

The TAMA Network



Source: TAMA Association

was created for test equipment installed at about forty facilities, at universities, enterprises and public research institutes. The database is made available from the Association's Web site. It is leased to those who wish to use those facilities. It is used by local SMEs and VBs, to promote the development of new technologies for the whole region.

We also hear that the TAMA Association has supported industry-academia collaboration from the aspect of intellectual property.

There is an organization called TAMA-TLO Inc. (President: Ibuka Makoto), with a membership made up of 16 universities and about 260 enterprises in the region. TAMA-TLO has attempted to use the research results produced by universities by transferring them to SMEs and VBs in the area.

The Research and Development Promotion Committee has primarily been organized by TAMA-TLO, which is constantly studying the technologies and products needed in the TAMA region. The target numbers for patent applications and technological transfers by 2005 are sixty and five, respectively.

Support has also been provided for the creation of new businesses through the annual Business Plan Competition. The winning business plan is provided with funds from the TAMA Fund, which has an association with Seibu Shinkin Bank. The TAMA Association, TAMA-TLO and Seibu Shinkin Capital Corporation jointly decide on the targets for investment. It is important to develop and sell actual products, using the R&D results.

We are also engaged in matching people with the right jobs. Capable engineers from major companies who are set to retire have been referred to smaller companies. There has recently been growing demand for competent salespeople.

We also hear that the TAMA Association has allied with organizations in Canada, the United States, China and other countries.

This fiscal year, we have promoted exchanges and tie-ups with the Veneto region of northern Italy, with a focus on "in-house products and technologies as added-value."

We are expecting high added value to emerge from among the products that combine the advanced technologies of TAMA and the sophisticated designs of Italy.

What are the key issues you are now facing? And what is your outlook for the Association?

The biggest issue is funding. We believe that it is important to increase the number of members to about 500 firms, up from the current 300, so that we can stabilize our financial base.

There are many enterprises in the TAMA region that excel in mechatronics, or measurement and control, so we are going to pursue MEMS, which is a smaller version of mechatronics. MEMS offers very high added value, and could be traded at about 1,000 yen (9 dollars) per gram. This is the same as the price of gems, gold or semiconductors. There is a plan to build a plant for experimental production of MEMS and a common center, which can be used by all members.

In any case, last year marked the end of our first five years, and we have entered the second phase. We hope to achieve the specific goals outlined in the Second-Phase Five-Year Plan, one by one. ■

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