

## *Session C: International Food-Industry Clusters and Niigata*

For the three years from fiscal year 2007, ERINA has made efforts on the problems of food security and of the food industry in Northeast Asia, and has furthered its collaborative research with Niigata University and the University of Tokyo. The food session this time around is the third one. This time, while looking at a variety of studies and case examples concerning food-industry clusters, we have explored the potential for a food-industry cluster in Niigata.

First, Roger Stough, the Vice President of George Mason University, a world authority on industrial cluster theory, gave a speech on "Industrial Cluster Analysis, Entrepreneurship and Regional Economic Development" and put in order the points necessary for the formation of clusters.

Knowledge production and the conversion of that knowledge into useful economic knowledge is central to successful economic development and growth. What are the conditions for optimizing the conversion of pure knowledge into economically useful knowledge at the regional level? Clustering and related economic activity is assumed to be one of these conditions itself, but that alone is not sufficient. In the global economy there are many other ingredients. They are the "smart infrastructure" of capital availability, tax advantages, presence of angel investors, intellectual property management, science parks, business incubators, education and training programs, and physical infrastructure processes.

Furthermore, he introduced the optimum public policy with the example of the food-industry cluster in Denmark and southern Sweden (Oresund).

Next, Jiao Jiang, General Agronomist at the Heilongjiang Academy of Agricultural Sciences, with profound exchange with Niigata, reported on the "Industrialization of Agriculture in Heilongjiang Province".

The rate of commercialization of food products in Heilongjiang Province is more than 70% and that amount accounts for approximately 30% of the total for the country as a whole, which makes the province the largest commodity grain production area in China. What are sold are mainly raw materials and primary processed products. The overall number of processing companies is large, but the percentage of small-sized companies in the above number is high, companies are weakly linked, and the production of superior processed products has yet to begin. The percentage of an integrated production and sales system, having a processing company at its core, is increasing, and the quality specific to each product is coming to be emphasized. In addition, the improvement of the transportation of foodstuffs is also important.

It is necessary for farmers and companies to establish a structure of integrated production and a system of profit sharing. For the direction of the industrialization of agriculture, it is advisable to diffuse "regional cluster production models."

For the case example from the ROK, Lee Jae-hyeon, an Associate Professor at Kagoshima University, contributed a report on the "Actual Situation of Regional

Brands and Possibilities of Regional Agricultural Clusters in the ROK", but due to urgent business, Zhu Yonghao of ERINA read it on his behalf.

For implementation of the WTO Agricultural Agreement, the ROK had to open the domestic agricultural product market and at the same time reduce domestic subsidies. In recent years, the food product industry has been broadly included in the area covered by agricultural policies for the collaboration of agricultural and food product industries. As a policy targeting rural areas and the food product industry, there is support for the formation of regional agricultural clusters that aim at the positive development of agricultural/rural-related business that includes the food processing industry, which has taken advantage of local specialties, and among others, green tourism.

In the efforts of forward-looking local agricultural clusters in the ROK there are many cases where the integration tends to be forward-directed from the producer side (upstream) to the processing/selling businesses (downstream) and there is no small number of cases lacking in innovation dynamics, which work as the largest benefit of corporate accumulation.

As a Japanese case example, this time around there was the report of Yuko Akune, Researcher at the Graduate School of Life and Environmental Sciences, University of Tsukuba, entitled "A Consideration on the 'Green Tea Cluster' with the Tea Manufacturing Industry in Shizuoka Prefecture at its Center".

The amount of production of raw leaves and crude tea in 2008 was largest in Shizuoka Prefecture. In the Makinohara area, stretching from the middle to the western part of the prefecture, raw-leaf production, crude-tea processing and finished-tea processing are thriving, and most of the processes of tea manufacturing have been mechanized, with many companies that produce the machinery located in the area.

Tea farms and tea merchants are engaged in tea production, agricultural cooperatives and mediators in the mediation of crude tea trading, and tea production machinery companies in machinery production. In particular, research and development and marketing activities, which are the source of product differentiation, are actively conducted in this cluster, and the Tea Section, Division of Agriculture and Fisheries, Department of Industry, Shizuoka Prefecture, as an administrative entity, and the Shizuoka Tea Experimental Station, as a research institute, have been supporting this.

Lastly, presenting collaborative research, Lily Kiminami, a professor at Niigata University, reported on the "Formation of an International Food-Industry Cluster and the Potential of Niigata."

In recent years, the formation of industrial clusters has been drawing attention as one of the important strategies for regional development. For the formation of industrial clusters, what is significantly important is not just the accumulation of companies, but the way that business cooperation works. The result of the analysis of

the relations between business cooperation of food-related companies and their performance in Niigata Prefecture and in Heilongjiang Province is that the establishment of methods of cluster formation that will lead to better corporate performance was an urgent issue.

Higher-level approaches are necessary for Niigata to play the role of the core of such an international food-industry cluster. It is only after the stage begins when companies and clusters in different regions in different countries are able to recognize each other as competitors/cooperation partners that efforts toward the formation of an international cluster can progress for the first time.

What professor Kiminami has illustrated here is the

method of thinking on a research platform for promoting international food-industry clusters. It shows the way forward for coordination between industry, government, and academia in Niigata Prefecture and research collaboration in Northeast Asia. I hope that ERINA will play a core role not only in food-industry clusters, but, as an international research exchange center, in Northeast Asian economic research as well.

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