Photo: Kashiwa City Hall

Agro-Commerce-Industry **Partnerships** A New Model from Kashiwa City, Chiba Pref.

By Masahide NAWAOKA

Population continues to grow in Kashiwa thanks to its geographic advantage, but balancing residential and agricultural land is a priority.

Kashiwa City, with a population of 397,000 and located in the northwestern part of Chiba Prefecture, is one of Japan's 41 "core cities" with greater administrative authority than ordinary cities. Its agricultural and urban areas are growing in a harmonious combination as the city is close to Tokyo, a huge center of consumption, with its population swelling rapidly as a bedroom town for the national capital. It is home to a wide range of industrial and commercial establishments with unique technologies. The city is characterized by a favorable balance between residential and agricultural land. Kashima has seen smooth development of "agro-commerce-industry partnerships" as the three sectors seek to find business opportunities in the activities of one another. They are not limited to conventional patterns such as joint food processing and development. They have accelerated a "local production, local consumption" movement to promote recycling of resources under the theme of environmental conservation. The Kashiwa-originated move is beginning to attract attention from across the country as a community-rooted agro-commerce-industry alliance model one step ahead of others.

Geographic Advantage Produces a Well-balanced City

Kashiwa, situated near the border between Chiba and Ibaraki prefectures (separated by the Tone River), has a land area of 114.9 square km. It enjoys a great geographic advantage as it is located at the midpoint between Tokyo and Tsukuba Science City (which is home to many research institutes) and close to Narita Airport, the gateway to Japan from the sky. The JR Joban Line connects the city to central Tokyo while the Tobu Noda Line, stretching from north to south, links it to Funabashi, another major city in Chiba Prefecture. And in 2005, the Tsukuba Express (TX) was inaugurated, connecting the Akihabara district in Tokyo and Tsukuba Science City via Kashiwa. With National Highways No.6 and No. 16 crossing in Kashiwa, the city is one of the most convenient hubs in the prefec-



Kashiwade, a farm produce outlet, aims at communication with local residents by allowing them to experience rice planting.

ture. As a satellite city to Tokyo, it is also active commercially, boasting a trading-area population of about 2.3 million.

The city's population grew by some 5,000 people between 2008 and 2009, which is extraordinary as Japan as a whole is suffering from the serious problems of a low birthrate and a declining population. The city's population growth is attributed to residential development projects along the TX line and vigorous condominium construction near stations along the JR Joban Line in the last few years. Kashiwa Mayor Akira Honda predicts the city's population will reach 400,000 before the end of fiscal 2009 (in March 2010).

With commercial sales of nearly 900 billion yen and industrial shipments of some 360 billion yen a year, the city boasts many clusters of manufacturing firms thanks to convenient transportation access and a large land area. There are many midsize and smaller companies that take full advantage of their masterly skills to develop and manufacture products. The city has also successfully lured academic and research institutions, such as the University of Tokyo and Chiba University, to create businesses based on industry-academia partnerships.

The city's annual agricultural production/shipments are just under 10 billion yen. It is well known for its vegetables such as *negi* (leek), *kabu* (Japanese turnips) and *horenso* (spinach). Kashiwa's agriculture is assessed to be sound and strong as a farming industry on the periphery of a large metropolis. Because of its harmonious development of the grain belt along the Tone River and growing clusters of condominiums and industrial plants, Kashiwa is often cited nationally as a model case of town-building. Nevertheless, the severe recession is also plaguing Kashiwa just as it does other regions: Both commercial sales and industrial shipments have declined from their year-earlier levels. The continuous decline in agricultural production/shipments, in particular, is serious, partly due to cheap Chinese vegetable imports. Agricultural shipments have declined 20% in the past five years. However, people concerned are not just standing still in this harsh environment.

Agro-Commerce-Industry Alliance to Energize Local Economy

"Is it all right for agriculture to be left behind like this?" "I want more people to experience, understand and support agriculture." With these thoughts in mind, farmer Shigeru Someya founded Agri Plus K.K. in 2003 to operate Kashiwade, an outlet where farmers can directly sell their products to consumers. Today, 230 farming households bring their fresh produce for sale to the outlet every morning. Also in 2003, Someya established "Kashiwa Future Farm" to cultivate idle farmland jointly with other guarters concerned. Its aim is to take full advantage of Kashiwa, a production center close to the great consumer market in Tokyo, and to create an atmosphere in which young people would feel like launching agricultural production. However, very few people expect the farming population to increase overnight. This is because farming households whose principal source of income is agriculture have been emaciated, many suffering from the lack of successors. One reason for the hardship is that the average annual farming household income is only 1.6 million yen. Kashiwa is no exception. "It is becoming increasingly difficult to make money in agriculture," Someya says.

The industrial, commercial and agricultural sectors are also struggling to surmount their plight. Hence, the realization of agro-commerceindustry partnerships linking these three sectors is in progress across Japan to revitalize local economies, not to speak of individual businesses, by taking advantage of management resources of one another. In Kashiwa's case, in particular, "each of the agricultural, commercial and industrial sectors has basic strength, although they are in hardship, so their linkage will create a large frontier for them," Mayor Honda says.

Pasta Using Irregular Spinach Being Developed

In a tri-sector partnership, Keihoku Supermarket, a long-established supermarket chain operator in Kashiwa, is developing pasta using locally produced spinach. The company deals with a large number of farmers and related people. One day, a company official, seeing nonstandard spinach being thrown away, thought it was too good to waste, and the company has since been working to develop spinach pasta by turning it into paste in a joint project with a local pasta maker. If the effort proves successful, it will increase farmers' income. In tandem with a food-processing firm which has a patent based on the know-how of Waseda University, Keihoku is working to put the product on the market. When the product is perfected, it will be supplied to restaurants run by the supermarket chain and to other channels. The project is now in its final stage.

Hopes are pinned on agro-commerce-industry linkups as a vehicle to create new industries. There are countless examples of development of new products and services based on such partnerships across the country. But Kashiwa goes farther. Moves to find solutions in linkage with agriculture from the viewpoint of the environment and energy have been picking up there. Yamamoto Sangyo KK collects leftover food and kitchen garbage from food-processing firms and food-catering services in the city, and dries and pulverizes them to make compost raw materials. It also collects vegetable scraps generated at the Kashiwade outlet run by Agri Plus and ferments them to make fertilizer for distribution to farmers in the city. Yamamoto regards garbage as a resource and hopes to promote "local production, local consumption" by recycling resources within the region. It is also exploring biomass power generation based on methane gas obtained by methane fermentation of food waste.



Joint potato harvesting by farmers is an effort to help sustain agriculture in the urban neighborhood.

Projects under Environment/Energy Theme

Biomaterial in Tokyo Co., a venture firm engaged in research and development on bioethanol, is about to launch a new project in cooperation with farmers. The company has formed a limited liability partnership with several partners, including Kashiwa Future Farm, Nagase & Co. and Nippon Paper Chemicals Co. Their project to produce bioethanol from rice stalks was selected by the Ministry of Agriculture, Forestry and Fisheries as a recipient of its subsidies in fiscal 2009. Their plan is to collect rice stalks from an area of 11 ha to produce bioethanol. "Kashiwa is a good place to conduct research on bioethanol," says Yoshiya Izumi, president, Biomaterial in Tokyo. "For one thing, its agriculture is sound and, for another, its population is big enough to consume ethanol where it is produced." Nevertheless, there are problems, to be sure. The recycling of local resources is a system which is viable only if the population in the area concerned is sufficiently large, but not too large. Izumi says that at around 400,000, the current population of Kashiwa is "reasonably big enough," meaning the city must maintain the present balance between farm and residential land. Also anti-odor measures must be taken in treating waste and also in decomposing organic substances to make compost.

Kashiwa implemented a basic ordinance on industrial development in the city in April 2008 to promote its harmonious development. It aims to create an environment in which the commercial, industrial and agricultural sectors will be able to exist together without competing with one another in such areas as use of space and employment. Kashiwa is one of a few cities in Japan where essential conditions for the tri-sector cooperation are present. If Kashiwa is able to sustain its agro-commerce-industry partnerships while taking advantage of its geographic advantage and maintaining the superb balance between farm and residential land, rather than relegating them to a temporary boom, and to introduce its new model to the rest of the country, it will contribute not only to the development and revitalization of regional economies but also to the international community in the future.

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