Section 4  Agriculture moves to value creation: Toward the creation of new business models

<Key points>

1. Export-oriented business model

In the case of apple exports to the United Kingdom (UK), various innovative elements appear as a business model, including: (i) correctly gauging the demand of the export destination, and going beyond high quality strategy to identify niche markets; (ii) realizing that the distribution route to the UK is shorter and simpler than that in Japan; and (iii) using ingenuity to comply with the UK’s demand for the track record on production, and the ongoing implementation of production history management systems in Japan could possibly rebound to the benefit of domestic marketing strategies.

2. Regional production for regional consumption business model

The case of the direct sales stand suggests that efforts toward value creation through new business models in the agricultural sector are not necessarily limited to those targeting global markets. The decisive factor for agricultural products is their freshness, and however developed a global distribution network may be, there is a limit to the extent to which products can be shipped to a wide range of consumption regions while maintaining the same level of freshness as immediately after picking or harvesting. This case is a good example of the strategy of regional production for regional consumption, which is developed by placing the emphasis on enhancing the freshness and not the appearance of the products, and distributing information utilizing the Point of Sale (POS) system.

3. Protection of regional brands of agricultural products

From the perspective of the differentiation of Japanese agricultural products, the establishment and protection of regional brands, including protection of domestic geographical indicators, have the potential to play a role in enhancing Japan’s agricultural competitiveness in the continually growing East Asian economy. Specifically, given that geographical indicators link characteristics of the production region with the quality of the product, it is possible to differentiate such agricultural products in the market from mass-produced products. Protecting regional attributes is not just done in order to strengthen the competitiveness of agricultural products; it also contributes to community revitalization by protecting producers and consumers, and by facilitating the establishment of regional brands.

In Japan’s agricultural sector, as well, aggressive steps are being taken to achieve a switch to new business models. This section will introduce new cases of business models in the agricultural sector based on the findings of a survey conducted by the Japan Research Institute and commissioned by the Ministry of Economy, Trade, and Industry (METI). (The case in Akasaka Town in Okayama Prefecture, introduced in Chapter 2, can also be considered an example of such efforts.) Moreover, the protection of regional brands including the use of
geographical indicators, from the standpoint of enhancing competitiveness of agricultural products, will briefly be touched upon at the end.

1. Export-oriented business model

K Apple Orchard, which produces and ships apples from the foot of Mount Iwaki in Aomori Prefecture, formerly sold apples only for domestic consumption. However, when apple prices crashed in 1997, K Apple Orchard began considering overseas exports. Since the US and New Zealand have extremely rigid procedures related to communicable disease control, K Apple Orchard focused on exports to Europe, especially targeting the UK, and commenced a feasibility study.

(1) Export to the UK by trial and error

As a first step, K Apple Orchard sent the UK a sample shipment. At first, K Apple Orchard sent a type of apple that is highly popular in the Japanese market, but such apples were not well accepted by UK consumers. The first samples were considered “too big, and can only be used for processing.” Then, K Apple Orchard sent small-sized apples that are considered non-standard within Japan (only sold in the Japanese domestic market to make juice). Those apples were rated highly and a deal was made. Through this process, K Apple Orchard made an important marketing discovery: in the UK, pocketable (small-sized) apples are preferred, and the type of apple popular within Japan (large-sized honey core/ watercore apples) is not rated highly. Those small-sized apples would never have been considered for exporting before because apples traditionally exported to Southeast Asia have been large-sized honey core/ watercore apples.

(2) Meeting the request to disclose information on origins of products

The conditions presented by the UK importers were that the apple producers as well as pesticide spray records and other related information needed to be made clear. At the time, as the bovine spongiform encephalopathy (BSE) issue had not yet emerged in Japan, K Apple Orchard was not familiar with the idea of disclosing information on the origins of products. The first obstacle faced in concluding the contract was that Japan had no agency that issued a “sanitary certificate” (a document that indicates “this product is safe, and is suitable for human consumption”), which the UK side had requested. Therefore, the president of K Apple Orchard registered his own signature with the Japan Chamber of Commerce and Industry (JCCI), created his own document using the registered signature, and submitted it to the UK importer. The UK government had accepted the document as an official “sanitary certificate.” Among other documents that needed to be submitted annually was the pesticide spray schedule, the use of which is also not practiced in Japan.

Since 2002, the requirement standard for the disclosure of information on the origins of products exported to the UK has become more stringent. In case of inquiry regarding the origin of certain apples sold in the UK, K Apple Orchard is requested to disclose this information within 24 hours. In order to meet this request, the use of a fax machine would not allow for a prompt enough response. Therefore, K Apple Orchard is considering
the use of the Internet and currently is working on establishing a domestic sales and distribution system of “apples with information on their origin” on a trial basis.

(3) Evaluation

As a business model, K Apple Orchard’s export to the UK as described above, which is making successful progress, has several new aspects.

First is the fact that the needs of the export destination were accurately gauged. The apples exported by K Apple Orchard are those which could be thrown out as having non-standard quality within Japan. This suggests that by gauging the needs of the export destination accurately, there are possibilities for export that are traditionally considered unthinkable. A possibility exists for finding niche markets that are different from a simple high quality strategy.

Second is that the distribution route to the UK for K Apple Orchard is shorter and simpler than the distribution route that exists within Japan. As seen in Figure 3.4.1, the number of steps taken for the apples to go from the producers to the consumers is shorter compared to the regular route within Aomori Prefecture.

Third is that the request from the UK side to disclose information for tracing the origin of products was met through ingenious measures. Steps are being taken to introduce a system of providing information on the origins of products in Japan as well. The fact that creative ingenuity was used to meet the necessary requests for exporting to the UK may generate positive effects on future marketing strategies within Japan.

Figure 3.4.1 Comparison of domestic and export distribution channels

Source: Survey of Trends in Primary Industries (The Japan Research Institute).
2. Regional production for regional consumption business model

U direct sales stand located in the town of Uchiko, Ehime Prefecture, is the central element of a multipurpose facility, which consists of a restaurant, an agricultural products processing plant, agricultural information center and others. It has annual sales of 400 million yen, works with 350 producers, and receives an average of 1,000 visitors (most of them are tourists), per day.

(1) Business development with an emphasis on freshness

Before building direct sales stand officially, U direct sales stand starts by running a small-scale trial operation to accumulate know-how and to change the awareness of the producers who ship their products to the direct sales stand. The key is that the strength of the direct sales stand lies with the freshness of the products sold. Specifically, while prices and product names are left to the producers’ discretion, if any of the products delivered to the stand in the morning are left unsold, producers must take them back by the end of the day. Since the advantage a direct sales stand has is the freshness of its products, it was decided that absolutely no requirements would be placed on their “appearance.” It is a simple point, but much time needed to be spent on driving this home to those involved. It was difficult to convince the producers to take their leftover products back within the day. This was because those who are used to shipping to the market had never had to collect unsold products, unless a complaint was made. Moreover, it took much trial and error to establish the idea of placing the emphasis on freshness and not to be concerned about the appearance of the products. In the beginning, the producers seemed unable to let go of the conventional practices used when shipping to the market, and many often delivered their products to the direct sales stand under the same standards as those of Japan Agricultural Cooperatives (JA).

Through such efforts, its rules—especially the system of collecting leftover products on the same day—became effective and began to give the direct sales stand more of an edge. Because having to go back and collect the products is a cumbersome task, the producers began to only ship an amount that would definitely be sold within that day. This caused them to take more care in deciding on the range of products to ship. Their decision is based not on appearance, but on freshness as mentioned before. As a result, the direct sales stand began to develop a characteristic that is clearly different from general mass retailers and others: its products do not necessarily have great external appearance, but they are extremely fresh.

(2) Service-oriented agriculture through information technology (IT)

The rule to collect leftover goods resulted in promoting the use of IT in the ordering process of products at the direct sales stand. In the evenings, the direct sales stand started to be inundated with inquiries from producers regarding whether there were any unsold items remaining or a need for an additional shipment. In order to support the demand for such information, U direct sales stand developed a POS system. A schematic of this system is shown in Figure 3.4.2.
This system directly links the POS of the direct sales stand with the 220 terminals located at commercial farms. It allows the producers to get the information instantly about the sales, leftovers, reservations and others statuses. Furthermore, the shippers can transmit information about their reservation of shipment for the following day to the direct sales stand from their own home. Every hour, they are able to check the overall sales status of the direct sales stand. By doing so, they can compare the sales status of the agricultural products they shipped according to unit price with that of other items of the same kind sold at the direct sales stand, to get a grasp of their percentage of share and information.

By linking the direct sales stand directly with the producers using the POS system, the producers are now able to strategically sell and ship their products, achieving an enhanced quality of product range at the stand. For example, farmers who wish to avoid competition with other shippers may increase the number of types of crops, resulting in more variations in the items sold at the direct sales stand. On the other hand, some producers may choose to advance into areas of products that are currently selling well. This will generate competition among the same types of products sold at the direct sales stand, leading to the improvement of product quality. Such diversity and enhanced quality of products, in turn, lead to an acquisition and retention of customers.

The characteristic of this business model is that the commodity is both produced and consumed regionally. The previously mentioned K Apple Orchard developed an export market. On the other hand, the case example of U direct sales stand suggests that value creation through the development of a new business model within the agricultural sector need not be limited to that with the global market in mind. The decisive factor for agricultural products is their freshness, and however developed a global distribution network may be, there is a
limit to the extent to which products can be shipped to a wide range of consumption regions while maintaining the same level of freshness as immediately after picking or harvesting. The U direct sales stand’s case is a good example of the strategy of regional production for regional consumption, which is developed by placing the emphasis on enhancing the freshness and not the appearance of the products, and distributing information using the POS system.

3. Protection of regional brands of agricultural products

Examples of efforts related to new business models being made in the agricultural sector have been introduced thus far. This final section will briefly touch upon the protection of regional agricultural product brands from the perspective of enhancing the competitiveness of agriculture, with a focus on the use of geographical indicators.

Regional branding means to utilize natural and other resources found in a certain region to create differentiation from other products and to develop locally-triggered businesses. One of the ways to protect such regional brands could be to protect labels that indicate the origin of products (geographical indicators), if the established quality and social valuation of the product are attributed to its origin (e.g. champagne, wine, etc.). In Japan, the protection of geographical indicators is currently possible to a certain extent, under such laws as the Unfair Competition Prevention Law and Trademark Law.

Internationally, intellectual property rights are protected under the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). Wine and spirits, in particular, have stronger protection than other products. (Japanese Shochu Spirit is also protected heavily under the TRIPS Agreement.) Moreover, under the Doha Declaration in 2001, the following agreements were made: (i) to negotiate the establishment of a multilateral system of notification and registration of geographical indicators for wines and spirits within the framework of the New Round; and (ii) to address issues related to the stronger protection of geographical indicators on wines and spirits provided for in Article 23 of the TRIPS Agreement to be extended to other products. Vigorous discussions are currently taking place.

From the viewpoint of “differentiation” of Japanese agricultural products, the establishment and protection of regional brands, including protection of domestic geographical indicators, have the potential to play a role in enhancing Japan’s agricultural competitiveness in the continually growing East Asian economy. Specifically, given that geographical indicators link characteristics of the production region with the quality of the product, it is possible to differentiate such agricultural products in the market from mass-produced products. The protection of regional brands would contribute not only to the greater competitiveness of agricultural products, but would also lead to the protection of producers and consumers by eliminating counterfeits and ensuring the authentic indication of production region, and to regional economic vitalization through the establishment of a regional brand by improving the added value of agricultural products.

While various opinions exist within Japan regarding the modalities of protection of regional brands, including geographical indicators, research is currently being conducted by the government. Such research is
not intended to be immediately linked to the World Trade Organization (WTO) negotiations, but to carefully consider such issues as: (i) what the appropriate systematic measures to take are; and (ii) what some of the possible products to consider are in case the protection of regional brands is to become institutionalized in Japan.

[Column]

Relationship between the “differentiation” of fruits and the economic growth of East Asia

Section 1 of this chapter described the expansion of vertical intra-industry trade through quality differentiation among the same types of product, with a focus placed on the machinery sector within Asia. Such differentiation based on quality can also exist among agricultural products. This column first takes a look at how the prices of the same product vary within the scope of global trade, giving several types of fruit as examples. However, since data on each fruit’s price does not exist, the variation of average prices of the same items within bilateral trade is examined instead. In addition, in order to verify the assumption that “richer countries import expensive fruits,” we referred to per capita GDP of the importing country by dividing price range up into sections.

Looking at the data for “oranges,” “pears,” and “peaches/nectarines,” which are covered in Figures 3.4.3 through 3.4.5, the difference between the highest price range and the lowest price range for each item is almost tenfold. Moreover, dividing the price range up into five sections and seeing the per capita GDP of the importing countries belonging to each section leads to the conclusion that those countries with higher per capita GDP tended to import more fruit of a higher price range. Specifically, countries begin importing fruit when they begin exceeding the range of 3,000 to 5,000 dollars per capita GDP, and those in the first half of the 10,000-dollar range and above have already become full-fledged fruit-importing countries.

In East Asia, average per capita GDP among the newly industrializing economies (NIEs) is 12,243 dollars, while that of ASEAN4 (Malaysia, Thailand, the Philippines and Indonesia of the Association of Southeast Asian Nations) is 1,224 dollars (both as of 2002). While NIE countries have reached the level of becoming fruit importers, ASEAN4 countries have not yet reached the income level for such imports. However, even within ASEAN4, there is a continuous increase of “middle-tier” regions, which enjoy an urban lifestyle and have a comparatively high income level. Viewed as consumers in the urban areas, they show a very different aspect compared to that of ASEAN as a whole. In Thailand, for example, while the average national per capita GDP as of 2002 is 1,989 dollars, it is three times that amount at 6,054 dollars (1999) in Bangkok. Bangkok has exceeded the level in which countries normally begin to import of fruit. It can be concluded that Bangkok and other urban areas in East Asia have the potential to increase their imports of fruit.
Figure 3.4.3 Distribution of import unit prices for oranges

(proportion of values)

17.5%
12.5%
7.5%
2.5%
-2.5%

$0.20
$0.40
$0.60
$0.80

Weighted average Per capita GDP
$4,842
Weighted average Per capita GDP
$10,525
Weighted average Per capita GDP
$25,545
Weighted average Per capita GDP
$27,686
Weighted average Per capita GDP
$30,882

Sources: UN Comtrade (UN); WDI2002 (World Bank).

(unit: $/kg)

Figure 3.4.4 Distribution of import unit prices for pears

(proportion of values)

30.0%
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%

$0.30
$0.60
$0.90
$1.20

Weighted average Per capita GDP
$3,123
Weighted average Per capita GDP
$15,913
Weighted average Per capita GDP
$23,728
Weighted average Per capita GDP
$30,058
Weighted average Per capita GDP
$29,814

Sources: UN Comtrade (UN); WDI2002 (World Bank).

(unit: $/kg)
Figure 3.4.5 Distribution of import unit prices for peaches / nectarines

(proportion of values)

Weighted average Per capita GDP $3,342
Weighted average Per capita GDP $11,879
Weighted average Per capita GDP $26,892
Weighted average Per capita GDP $27,004
Weighted average Per capita GDP $29,495

Sources: UN Comtrade (UN); WDI2002 (World Bank).

(unit: $/kg)