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論　文

New Market Development and Activation of Urban Society through Direct Sales in the Restructuring Process of Wholesale Market Distribution (2)

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Abstract

In the context of the reorganization of wholesale market distribution, producers are exploring new means of satisfying consumer needs for face-to-face distribution and safer, higher-quality produce. Therefore, mass retailers who promote local production and local consumption make direct contracts with producers. Similarly, collecting and shipping organizations are open new sales channels. Among them, small producers sell directly with the advantage of pricing rights, saving intermediate costs, reducing working hours, and reducing overwork during the harvest adjustment processes. Agriculture thrives in urban areas due to several aspects and individuals flourish through deepening trust, communication, and exchange.

The present study focuses on ensuring fairness of transactions, transparency of information, better local distribution, shipment small quantities of several items, and speed. Based on these realizations, seek profitability and production efficiency, expansion of physical trading space, realization of wide area. The study results guides policy to strengthen the network of producers, between producers and consumers, and between producers and mass retailers in the urban society and to improve the added value of local products and regional information.

Key Words: Off-site wholesale market distribution, Mass retailer, Intermediate cost, Harvest adjustment process, Direct sales

4. Development of off-site wholesale market distribution and local production and local consumption

4.1 Expansion of off-site wholesale market distribution

In recent years, large-scale mass distribution in Japan has been fully developed against a backdrop of the formation of large production areas, development of a central wholesale market, development of storage technology and highway networks, and increases in mass purchases by mass retailers. On the other hand, negative aspects of the distribution policy have been indentified, including imbalances between production and consumption, rigidly uniform food products, difficulties experienced by small producers in making sales, pesticide poisoning and environmental problems. As a result, traditional local distribution based on Japan's philosophy of "Shin-do-fu-ni"(15) and local production and local consumption(16) have been reviewed.(17)

Needless to say, the biggest factor for the increase in distribution through off-site wholesale markets(18) is the demand generated by the rise of mass retailers. At the same time, the desire of people in urban areas to revitalize primitive or classical methods in order to eliminate the negative aspects of the conventional distribution policy had some influence on this increase in distribution.(19) Various breakthroughs have occurred under the turbulent social environment surrounding production areas, including legal reform, increased imports, changes in demand, the rise of mass retailers, and JA mergers (Hashimoto eds., 2004, pp. 129-130). Urban farming that exploits the potential productivity of part-time and elderly farmers, such as the promotion of production areas to produce traditional local varieties, and branding with local specialties, have begun to emerge. As local distribution is being revived, small and medium-sized production areas located in the suburbs are developing a type of agricultural distribution that takes advantage of proximity to consumers. Contract transactions with mass retailers and direct sales to consumers are also active. Compared to conventional distribution methods with price differences, and price instability due to differences in standards, a new organizational structure that offers more stable prices and can fully reflect the abilities of various producers is an "advantageous sales method" for producers in the suburbs. It is also an important requirement for the creation and survival of this sales channel. Furthermore, the flexibility to sell products designated as nonstandard in the wholesale market can be seen as a precondition for expanding that sales channel. In direct sales

offices, the producer can set product prices, and intermediate costs can be reduced by taking on marketing functions. In addition, since it is possible to ship products throughout the year according to the various circumstances of individual members, it is easy for new producers to enter, and the activeness of members can be expressed (Kobe eds., 1970, pp. 19-39). Described above, there are great important questions about the wide-area mass distribution policies that have been promoted by the state due in response to the gap between production and consumption. Given these unique conditions, organizations and activities growers that sell fresh produce produced in specific regions have attracted attention, and a variety of players, including part-time farmers, elderly farmers, and women farmers are beginning to actively participate in their local markets.(20)

4.2 Development of local production and local consumption activities

Thus, the distribution environment that has supported the supremacy of JA joint sales has changed. Sustainable agricultural production methods have been incorporated into agricultural policies, with the supply of safer and higher-quality agricultural products as the most important issue. Advanced JAs recognizes the importance of production and sales businesses that reflect demand, and partially promotes direct sales offices and direct delivery in production areas, citing time demands, ease of entry, and opportunities for JA business expansion (Takizawa eds., 2000, pp. 160-164). The reasons for this support are focused on the consolidation of large cities into wholesale markets, the increase in transfer costs from the central wholesale markets for large cities to local wholesale markets, and the difficulty of sorting due to excessive product standardization. Formation of large production areas in anticipation of making shipments to distant, large consumption areas, and progress in achieving wide-area mass distribution have revealed problems on the production side, such as an increase in single-item production, and the occurrence of continuous crop disorders and pests.

The momentum to restore regional distribution, which is a format suitable for agricultural products, has been increasing, reviving multiple crops, strengthening cooperation with local wholesale markets, and increasing direct sales to consumers are promoted (Hashimoto eds., 2004, pp. 123-124). A decline in agricultural sustainability, stress on the overall ecosystem, a loss of traditional food culture, increasing globalization, etc. pose risks to food safety ; as a result, local production and local consumption activities is being promoted. Supermarkets that are strengthening product differentiation

and purchasing local products support the rise of this activity (Fujita, 2005, pp. 23-24). At least in East Asia, since the supermarket revolution that began in the 1990s there has been a symbiosis between traditional retailing and modern food processing and logistics, based on the need to link small producers to supermarkets (Reardon et al., 2012). In Japan, where convenience stores continue to proliferate, value creation through collaboration and learning effects that do not depend on a low-price strategy, development of private brands for fresh produce and local production and local consumption in collaboration with producers and retailers are being pursued (Kidachi, 2012, pp. 22-24).

Local production and local consumption based on regionalism, as promoted in various parts of Japan, is a new method of selling agricultural products that has been cultivated in the face of widespread mass distribution. This is due not only the fact that collecting and shipping organizations such as JAs have continued to develop various sales channels to promote their sales, but also to the power of producers who have sought new sales channels as a reaction to wholesalers who have acquired the purchase right, increasing the collection of goods from low-priced, large production areas. The development of various technologies in transportation, storage, and communication, and the development of infrastructure such as roads and ports are also driving factors (Fujishima et al., 2009, p. 73).

4.3 Survival of urban agriculture through direct sales offices

The rise of direct sales offices and direct delivery in production areas, which are a form of distribution in the off-site wholesale markets, is due to a number of factors : centralized shipments and transfers to wholesale markets of large cities, the increase of commoditized products with nutritional and safety concerns, excessive sorting and standardization in appearance, the decline of local products in the local wholesale markets, and the fact that the local wholesale markets depend on shipments from the central wholesale markets. At the current stage of agricultural product distribution, this results in a pairing approach for wholesale market distribution (AMS ed., 1991, p. 42). Mass retailers post detailed information about producers, such as a photograph of the producer's face and name in a special corner, and practice targeted marketing. Promoting face-to-face distribution increases the attachment to local products, and provides detailed information and new marketing activities for consumers (Hashimoto eds., 2004, pp. 129-130).

Table 3　Number of direct sales offices in Prefectures

Prefectures	Number of direct sales offices in the production areas				
	Total (100 units)	Organization managers			
	0 1 2 3 4 5 6 7 8 9 10 11 12 13	Local governments	3rd sectors	Agricultural cooperatives	Other (Producers)
Hokkaido		11	17	67	759
Aomori		4	11	43	113
Iwate		−	8	10	269
Miyagi		2	7	26	296
Akita		1	5	24	163
Yamagata		1	7	31	368
Fukushima		7	18	74	375
Ibaraki		8	15	80	357
Tochigi		9	2	46	374
Gunma		22	4	56	1,011
Saitama		10	16	99	527
Chiba		2	10	53	1,221
Tokyo		7	−	68	524
Kanagawa		7	1	159	486
Niigata		3	12	92	466
Toyama		1	−	29	149
Ishikawa		3	3	22	77
Fukui		−	18	16	70
Yamanashi		8	8	32	862
Nagano		4	20	96	319
Gifu		3	10	36	413
Shizuoka		−	6	107	301
Aichi		3	11	119	492
Mie		4	6	59	114
Shiga		2	6	33	78
Kyoto		−	7	24	274
Osaka		3	1	46	192
Hyogo		8	24	77	282
Nara		5	6	21	77
Wakayama		2	6	30	116
Tottori		−	6	58	83
Shimane		−	10	33	151
Okayama		11	14	42	105
Hiroshima		6	7	33	255
Yamaguchi		4	3	41	233
Tokushima		−	3	25	97
Kagawa		1	8	38	43
Ehime		2	16	43	124
Kochi		5	13	51	91
Fukuoka		4	14	55	423
Saga		2	5	29	124
Nagasaki		3	2	26	139
Kumamoto		2	30	55	191
Oita		−	9	31	180
Miyazaki		9	19	25	196
Kagoshima		13	24	31	230
Okinawa		1	2	13	69
Total	16, 816	203	450	2, 304	13, 859

Source : Agriculture and Forestry Census (2010).

In addition to focusing on distributions of off-site wholesale markets, direct sales offices make it easier to consider the circumstances of individual producers, such as changes in their workers and management, including part-time employees and super-aging, and the enthusiastic and highly skilled farmers. This can provide additional opportunities for social interaction compared to supermarkets (Mckibben, 2007). Direct agricultural markets can provide alternatives rooted in a market economy and can build closer social relationships between producers and consumers (Hinrichs, 2000). The concept of FM (Farmers Market) is related to the elements of fun related to food and cooking, women and dual-parent households, but is not related to the economic power of food (Zepeda, 2009). In addition to simplifying food security and enhancing social interaction, it tends to be favored by various end-users, which is one of the reasons they support the rich food culture and eating habits of metropolitan areas. Moreover, it is possible that the use of direct sales offices will lead market participants to reconsider the fresh food supply system and to regenerate urban agriculture through collaboration between producers and consumers. (Kashihara, 2008, pp. 19-42). It is also likely that development of new markets and diversification will be encouraged through direct consumer engagement (Hinrichs et al., 2004).

Within JA's organizational base, there are an extremely large number of self-sufficient farmers or "non-farmers with land" who manage a smaller scale of land compared to commercial farmers (selling farmers). Moreover, there are many producers who continue to farm even in old age. Therefore, despite being categorized as "small-scale farmers," they are actually just households that own farmland, which includes enthusiastic farmers who in the future will influence the conservation and liquidation of Japan's farmland. By facilitating the organization of diverse agricultural practices for the next generation and proactively attracting potential and motivated successors to JA's business and organizational activities, the future inheritance and utilization of farmland can be secured.

The number of direct sales offices in Japan is summarized in Table 3. This differs considerably from the current state of wholesale market distribution. The local government with the most direct sales offices is Chiba Prefecture (1286 facilities), followed by Gunma Prefecture (1093 facilities) and Yamanashi Prefecture (910 facilities). Direct sales offices tend to be located across many suburban agricultural areas in the Tokyo metropolitan area. Among 47 prefectures, Aichi Prefecture is ranked 7th and Tokyo is ranked 8th, indicating a trend that contributes to the sales channels of

producers living in metropolitan areas. JA direct sales offices, many of which are considered permanent, are most commonly deployed in Kanagawa Prefecture (159 facilities). These facilities tend to be located near local governments in the north of Kanto, including Kanto, compared to Western Japan.

4.4 Branding and networking and high customer satisfaction

Direct sales have resulted in high customer satisfaction. In this section, we will examine research studies to better understand marketing, networks, consumer awareness, organizational structures, and more.

According to a survey conducted by the Ministry of Agriculture, Forestry and Fisheries in 2009,(21) the annual sales for direct sales offices (16,816 stores in total) operated by producer groups, JAs, and third sector businesses (mainly roadside service areas) amounted to 876.7 billion yen. In addition, the average annual sales were 52.14 million yen. Although this figure is low, direct sales offices—where 87 producer-households are registered per store—have raised the total profits generated by small-scale shipments. Direct sales offices have also generated employment opportunities for local residents, with an average of 7.1 people working at each direct sales office. In an attempt to add value to products, many direct sales offices have adopted the practice of harvesting in the early morning (70.8%), while slightly less have started selling local products only (65.8%). In the case of producers whose annual sales amount to less than 1 million yen, some have been building brand name recognition and practicing cultivation method display (30%), slightly less have been selling special products (20%), and an even smaller number have sold high value-added products (10%). However, among producers whose annual sales amount to 500 million yen or more, a strong majority have been building brand name recognition, practicing cultivation method display, and selling special products (90%), while a smaller percentage are selling high value-added products (60%). These producers are also promoting the traceability and branding of regional values. Regarding efforts to attract customers and promote sales, some of these producers have held special days and events (40.7%), while some have made their products available to large retailers (7%). Indeed, it is clear that the wide-scale sale of local products is not the only goal emphasized ; producers strive to attract consumers seeking local products to production areas so that they can sell their local products and take advantage of the economic ripple effect throughout the production areas.(22) Regarding the most common form of cooperation between producers and local communities, some producers supplied

food to kindergartens, nursery schools, and educational institutions (19.7%), highlighting the importance of emphasizing local consumption and cooperation.

Next, according to a survey by Yamamoto & Okamoto (2014),[23] roadside service areas have functioned mainly to transmit information (66.5%), facilitate tourism (60.7%), and allow for the utilization of local resources (46.2%). Likewise, roadside service areas are involved in selling local specialty products (91.1%), providing a place for employment (51.7%), supplying foodstuffs to residents (37.1%), and providing residents a space for local meetings and events (34.5%). The unit price per customer in 2012 was 1039 yen, which is relatively low. However, products such as confectioneries (63.9%), agricultural and marine products (59.6%), soft serve and hard ice cream (53.1%), and processed agricultural and marine products (49.5%) all sold well. Moreover, as the majority of raw material is locally produced and the majority of employees comprises local residents, profits and wages flow back into the local economy where the store is located. The relationship between roadside service areas and residents was reported to be "very related" and "related" at the same rate of 43.6%. Roadside service areas function as places for residents to interact, and they facilitate communication between producers and consumers. Only 11% of respondents responded as having "not much relation" to roadside service areas and 0.4% reported having "no relation" at all. More specifically, roadside service areas are the centers of businesses and link together producers of agricultural and livestock products, product suppliers, local promotion facility employers and shopkeepers, manufacturers, wholesalers, local governments, self-governing organizations, welfare facilities, processing plants, and direct sales offices. Furthermore, the network of roadside service areas tends to widen internal networks between businesses, connecting them to external networks (Figure 9).

According to a survey conducted by the Japan Finance Corporation in 2012,[24] the most common reason for visiting a direct sales office was "buying everyday food items" (53.8%), followed by "buying souvenirs while sightseeing" (44.3%). Therefore, it is clear that direct sales offices are supported by both residents and tourists. This survey categorized direct sales offices based on locations : urban offices, suburban offices, and mountainous area offices. The majority of offices fell into the suburban category. Consumers' usage patterns and needs are heavily influenced by the location of direct sales offices. For example, consumers who visit urban offices are often local residents in their 40s (or older) who visit by themselves on weekday mornings, mainly to purchase foodstuffs. Suburban consumers often visit offices with their families in the afternoons

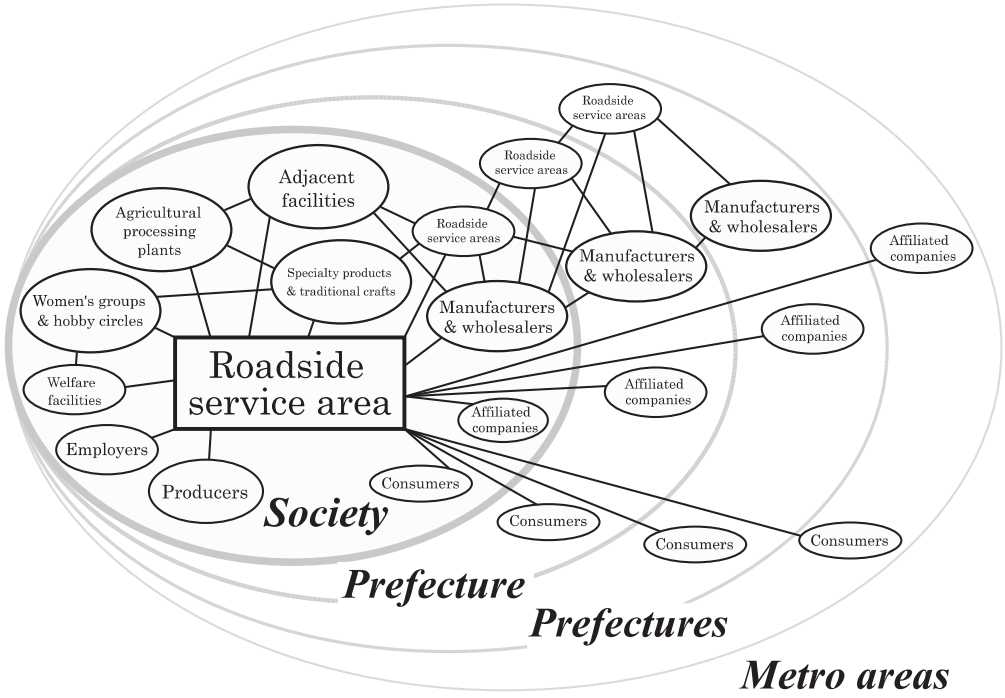

Fig 9　Expansive network of roadside service areas and business partners
Source : Yamamoto & Okamoto (2014), p. 100.

during holidays to buy foodstuffs and partake in tourist activities. These consumers are mainly those in their 30s, live within an hour's drive from the store, and tend to visit stores several times a year. Finally, consumers who use the mountainous area stores are mainly tourists. The majority of customers visit these stores with their spouses on afternoons during the holidays. As they come from places that are over an hour's drive away, they prefer the presence of scenic, rural landscapes as well as amenities such as parking lots and eating facilities.

Considering factors that affect the attractiveness of direct sales offices from the perspective of consumers, "freshness" was the highest at 75.2%, followed by "low prices" at 65.2%, "local products" at 45.1%, "sense of the seasons" at 34.2%, and "producing areas and producers" at 28.5% (Figure 10). Unsurprisingly, many of the products sold at direct sales offices are agricultural products that producers harvest early in the morning. Contrastingly, agricultural products sold in supermarkets must pass through JA's selection and wholesale markets. Therefore, agricultural products are not displayed until several days after they have been harvested. In addition to reducing intermediary costs, direct sales also reduce food spoilage and nutritional loss. Direct sales models also excel

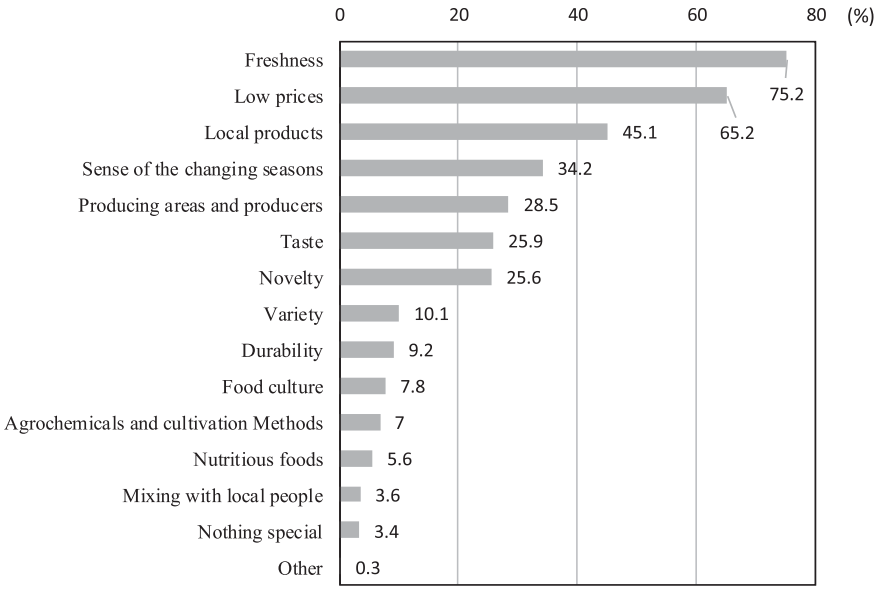

Fig 10 Advantages of direct sales offices
Source : Japan Finance Corporation (2012) 1-3.

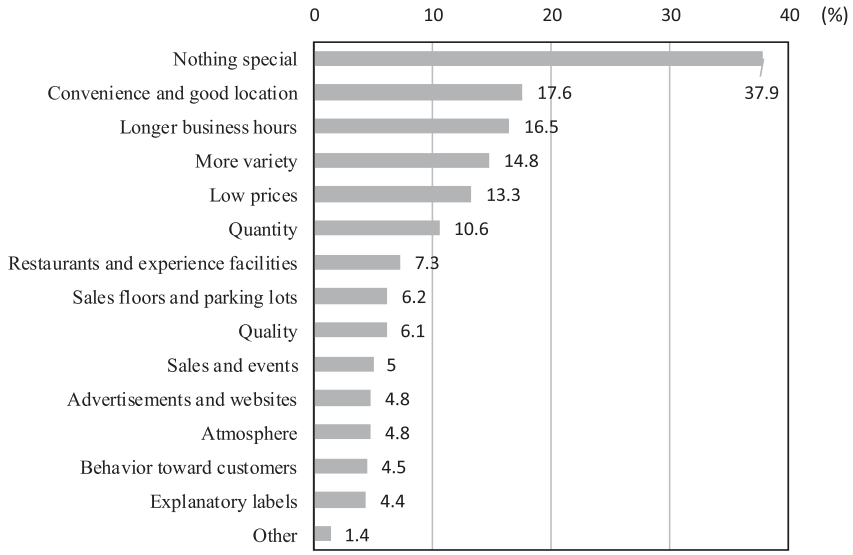

Fig 11 Suggestions for improving direct sales offices
Source : Japan Finance Corporation (2012) 1-10.

at communicating with producers and guarantee better eating and health habits for consumers. Thus, the most common suggestion for improving direct sales offices was doing “nothing special” (37.9%). Indeed, it is evident that there is little consumer dissatisfaction (Figure 11). Although there is a high number of requests for improving

the location, business hours, product line-ups, and prices of direct sales offices, it is clear that customer satisfaction is high.

Finally, according to research conducted by Ryutsu Kenkyusho Co., Ltd. (2010),[25] direct sales offices that opened after 1994 accounted for 82.8% of the total, surplus operations accounted for about 40%, and deficit operations accounted for about 10%. The number of offices with increasing sales accounts for about 40% of the total, in the same way, the flat sales is about 30% and the decrease is 20%. As there is a limit to the amount of local products that can be sold, it is crucial to have a better product line-up than wholesale markets and JAs in other regions and to secure local distributors. Currently, about 20% of direct sales offices coordinate their activities with direct sales offices in other regions to strengthen their product line-up, which in turn allows them to increase or decrease the amount of agricultural products they sell. Such collaborative projects allow offices to replenish stock during shortages, sell agricultural products that are not locally produced, sell at lower prices, obtain a variety of information, and publicize special products. According to interviews conducted by the company at a total of 31 locations, including direct sales offices in large cities, it has become difficult to maintain consistent purchasing and sales to interviews conducted by the company at a total of 31 locations, including direct sales offices in large cities, it has become difficult to maintain consistent purchasing and sales volumes throughout the year in the Tokyo metropolitan area, where farmland and producers are scarce. In fact, direct sales offices in Tokyo's 23 wards regularly purchase products from other regions. It is difficult to secure the necessary amounts of products and meet diverse food demands when relying on local products only. Moreover, this difficulty is not limited to direct sales offices in the Tokyo metropolitan area. In fact, about 30% of the products sold at direct sales offices are goods purchased from wholesale markets and other regions. However, individual transactions and cooperation present certain problems, as the logistics cost per unit increases in the case of small lot transactions. Therefore, unless this cost is passed on to the consumer in the price of the product, it will become a burden on the production area and direct sales offices. It is expected that direct sales offices will not only realize profits by selling fresh products such as vegetables and fruits, but they will also develop various business strategies, such as selling processed products with long shelf lives, providing a venue for traditional and local events, hosting exhibits and sale events, organizing information exchange meetings, providing public relations at sightseeing spots, and attempting sales trials in urban areas.

5. Direct sales functions and regional revitalization

5.1 Intermediate costs savings in the new system

Direct sales offices are involving diverse members in various circumstances, including retirees and women who find it difficult to engage in agriculture that requires large-scale mechanization and large shipments to central wholesale markets in large cities. People can consciously create a place to work and can cultivate a small amount of farmland to earn income. A function lacking in conventional organizations is known as the "hospitality function of the direct sales offices"(26). The systems and technologies required for organizational management in a direct sales office are designed from the producer's perspective.

Producers engaged in local production and local consumption can set their own product prices, allowing them to sell agricultural products at a price that meets their needs. In addition, they can also reduce transportation costs, reduce pesticides, simplify sorting, and shorten working hours, allowing them to work in ways that are comfortable for their circumstances. With local production and local consumption, it is possible to ship agricultural products that have a less-than-perfect appearance, and that are inconsistent in size and small in quantity in fresh condition. It is easy for part-time farmers, older people, and women to ship products locally, and it facilitates human interaction through direct dialog with consumers (Hashimoto eds., 2004, pp. 55-56).

We compare wholesale market distribution to direct sales in Table 4. As noted previously, direct sales can reduce intermediate costs and improve distribution time from producer to end consumer, contributing to an increase in the profits of producers, and providing low-cost, fresh agricultural products to consumers. In addition, wholesale market distribution is generally incorporated into JA's joint sales, and its profits are pooled. Therefore, producers cannot immediately realize their selling price and cannot determine whether or not the amount eventually received is appropriate given their sales. This controlled shipping mechanism was originally established to ensure fair profit distribution to JA members, but it has various consequences, including the uncertainty of information disclosure. On the other hand, with direct sales, most of the revenue, excluding the collection fee, is distributed to the individual members, providing the producer's with their profits. Moreover, packaging has been simplified and product standards have been abolished. Small shipment volumes are not a problem and, most

Table 4　Distribution form for wholesale market distribution and direct sales

	Wholesale market distribution	Direct sales
Fundamentals		
Main decision makers	Wholesalers	Members (Producers)
Shipping methods	Joint sales, Consigned shipping	Personal shipping
Collectors	Agricultural cooperatives	Agricultural cooperatives, 3rd sectors, Producer groups, etc.
Number of intermediaries from producers to consumers	4-5	1
Intermediate costs		
Collection fee	Yes	Yes
Selection fee	Yes	No
Agricultural cooperative fee	Yes	No
ZEN-NOH fee	Yes	No
Market fee	Yes	No
Transportation cost	Yes	No
Stability fund	Yes	No
General regulations		
Standardizations	Yes	No
Classifying	Many	Few (or none)
Sizes of packaging	Big	Small (or none)
Destinations	Wholesale markets	Direct sales offices
Price makers	Wholesale markets	Members (Producers)
Profit sharing	Pool accounts	To individuals other than the collection fee

Source : Ose (2002), p. 103.

Notes : The collection fee is required when sending the agricultural products collected at the JA branchs to the head offices. The selection fee is required when inspecting agricultural products classified as “best, excellent, good” or “LL, L, M, S.” The agricultural cooperative fee is required when selling to wholesale markets. The “ZEN-NOH” (National Federation of Agricultural Cooperative Associations) fee is paid to the national organization that controls all JAs. The market fee is paid to the wholesale markets. The stability fund is a fund that prepares for a decline in the wholesale market price (if it is cheap, it is compensated for the producers).

importantly, each individual member has the right to determine his/her prices in direct sales, while the wholesaler determines prices in the wholesale market distribution model.

In terms of technology, corporations and partnerships in agricultural production that sell differentiated products that are difficult to procure in the wholesale market can benefit from stable contract prices, simplified standards, and reduced transportation costs. By expanding distribution outside of the wholesale market, it is possible to save on logistics costs for small items and for products that have not been computerized. During sales activities, you can make a quick decision by managing orders with a computer.

Technology also contributes to product safety, as it is possible to achieve discriminatory superiority thorough product traceability. When dealing with mass merchandizers, some organizations link production and sales to an inventory function of roughly one day to reduce lead times. Some agricultural production corporations seeking to gain benefits consider information sharing as an opportunity, and build networks with corporations that have made less progress in this area, sharing information on business partners and joint investment in processing facilities (Saito eds., 2003, pp. 20-22).

5.2 Shortening the harvest adjustment process and increasing producer profits

Production processes for fruits and vegetables consist of a "cultivation process" and a "harvest adjustment process." The latter is the process of harvesting agricultural products, as well as sorting, packaging, packing, and shipping. Agricultural work is basically done by manual labor, and farm work is often the rational for group work. While introducing new machinery can increase efficiencies in the cultivation process, the harvest adjustment process, which is highly dependent on manual labor, is not easy to mechanize. Therefore, the ability to secure the needed quality and quantity of labor regulates and restricts the production scale. Here, we focus on the significance of direct sales, which can reduce working hours and address the problem of overwork by examining the characteristics of farm work by type.

In harvesting root vegetables, the excavation work requires a force equivalent to lifting a weight of about 10 kg instantaneously, in a forward-bending posture ; both the work intensity and the pain level are high. After that, the work requires bundling and transporting the harvest from the field to the transport vehicle in two bundles (about 20 kg in total) using both hands. During the harvest season when there is a lot of rain, the ground becomes muddy and the difficulty of the work increases significantly. In the case of leaf vegetables, the process of cutting and harvesting the root with a blade involves a degree of pain and discomfort similar to the forward-bending posture. After that, the vegetables are sorted and packed in the field (there is no need for cleaning or leaf cutting). Increased demand for western food is a factor in increasing leaf vegetable production, but it is easily affected by the weather and it is difficult to maintain freshness. Lastly, harvesting fruits takes much longer than root vegetables and leaf vegetables. The work continues for several months, and is extremely labor intensive. The shipping stage is complicated, involving sorting, packaging and packing operations, with many subdivisions in these operations. Thus, in the production of fruits and vegetables,

the biggest challenge is to reduce overwork during the harvest adjustment process.(27)

Responding to these circumstances, Akiya Shigeo looked to direct delivery to the production area as a sales channel that is distinct from the wholesale market distribution. In his view, the merits of producers include the development of a simple transportation system, expressed as “you can load unwrapped agricultural products” and “you can load small or modified agricultural products,” minimizing the time and cost of distribution, and saving on sorting and packaging (Akiya, 1978, pp. 77-82). Traditionally, the time when labor-intensive effort is required for the production and shipment of fruits and vegetables can be broadly divided into two phases : “land preparation and planting”

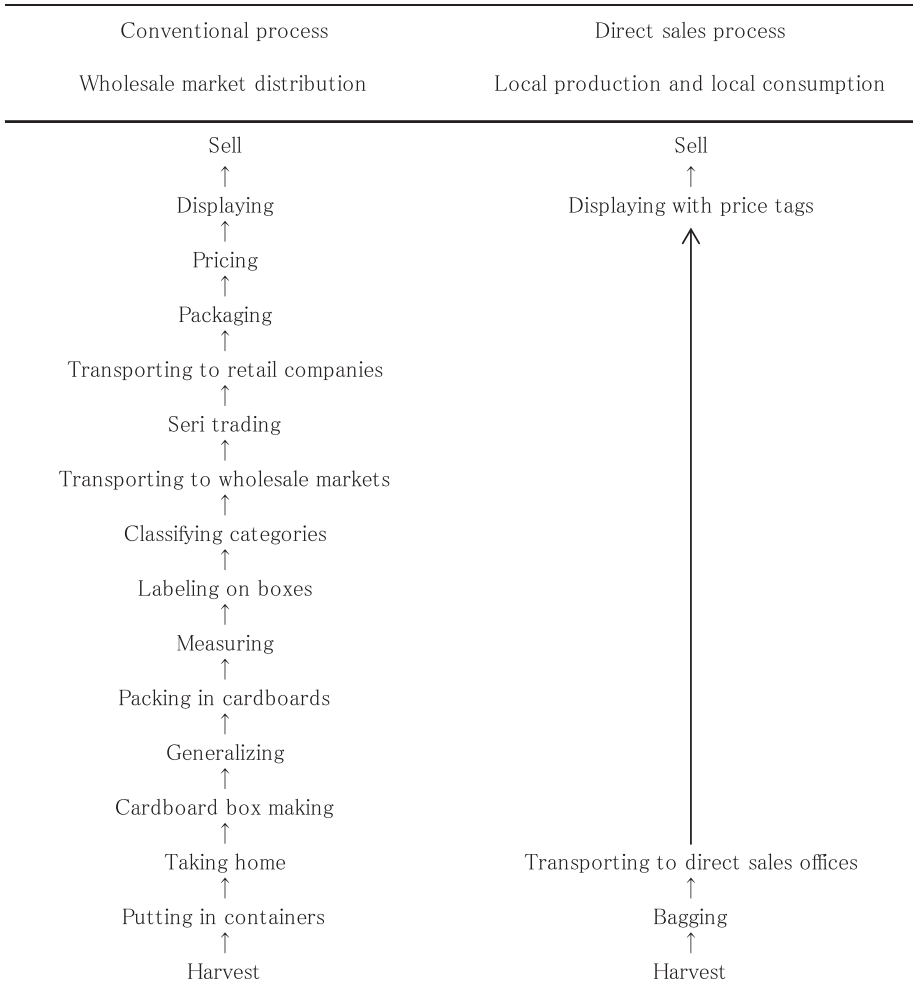

Fig 12　Harvest adjustment process for wholesale market distribution and direct sales.
Source : Akiya (1978), p. 81.

and "harvesting and shipping." In the "harvesting and shipping" phase, fine sorting and packaging work requires substantial work over a lengthy period. In particular, it is not easy to categorize crops as "Large, Medium, Small," or to select "Class A or B," and to pack a certain amount in a crate or other container. At the peak of shipment, sorting and packaging operations are not fast enough to meet the quantity of the harvest ; there are cases where fruits and vegetables are left in the fields and storage rooms to rot. The testimony quoted below describes the labor processes of producers involved in wholesale market distribution.

"For root vegetables such as Japanese radish and leaf and stem vegetables such as spinach, it is hard work to wash them after harvesting, align their shapes and shapes, and bind them together. Recently, the number of families in farming has been decreasing. High school and university entrance rates have risen, and the scene of engaging school-aged sons and daughters in farming has become rare. Increasingly, the fine handwork such as sorting, fruit selection, packaging, and boxing is done by the farmer's wife, requiring her to select of fruits and vegetables in a hot house, to remain for a long time in a bent-over posture, washing root vegetables and leafy vegetables. In the busy season, a farming couple must either hiring temporary workers, or the couple is overworked" (Akiya, 1978, p. 79).

Next, we compare the harvest adjustment process for wholesale market distribution and for direct sales (Figure 12). Conventionally, 14 processes must be performed between "Harvest" and "Sell." Direct sales requires just 3 steps. Direct sales, which can reduce labor hours and reduce overwork during the harvest adjustment process, is optimal based on the interests and lives of individual households and producers. This is an important consideration, especially in Japan, where the population is declining, the number of producers is declining, the average age of farmers is increasing, and the number of families is decreasing.

5.3 Development of culture and personality in urban society

Lastly, I consider the individuality of producers and consumers and how the development of local culture as affected by local production for local consumption and direct sales. As the divergence between cities and rural areas, and between agricultural producers and consumers increases, producers and logistics organizations have

established standardized routines for wholesale market distribution. On the other hand, in consumer-oriented local production and local consumption activities, “Decisiveness from harvest to sell” such as product specifications and sales prices are supported by a legal system that continuously evolves, and by local customs based on traditional laws, and flexibility has been returned to the producer side. Producers in so-called associations can pursue their own specific interests, expand their personal ownership and save on intermediate costs. As a result, they gain the means of production and improve their quality of work life, reduce working hours, and achieve personal independence.

According to the questionnaire survey given to producers, the appeal of direct sales is that producers can interact with each other, interact directly with consumers, understand the sales results of the day, determine their own prices, and ship products when and as they wish. In other words, the creative aspects and the high degree of freedom offered by direct sales that are highly valued by producers, cannot be provided by the conventional system (Shiratake, 2003, pp. 33-35). Farmers’ motivation to produce increases when producers are more actively engaged in these aspects of agriculture. The following benefits can be expected by setting up a direct sales office : an increase in the number of producers, involvement by older farmers, reduced pesticide use in cultivation, production of traditional vegetables that match the local climate, an increase in the number of cultivated items, an expansion of planting area, a decrease in abandoned farmland, greater development of processed foods using local products, and employment of local human resources. Clearly, there are numerous advantages to using urban agriculture to help revive and revitalize local economies and society overall.

Direct sales of agriculture helps to reduce the use of agricultural chemicals and chemical fertilizers through organic farming by super skilled farmers, simplifies and reduces packaging and containers, and reduces household waste, As a result, greenhouse gases and air pollutant emissions from fossil fuels are reduced, contributing to a more nature-friendly urban society, and supporting the conservation of the environment and critical ecosystems. In modern society, where urbanization is the dominant trend, as urban spaces lack natural beauty, rural environments and farmland for horticultural interests where animals and plants can live and thrive harmoniously, human life can be enriched. Agricultural life and bringing nature’s aesthetics into urban areas can nourish human emotions, enhance comfort, and stimulate economic activity. Cultural events such as festivals, and traditional events and local performing arts related to urban agriculture and food culture will be revived, and producers and consumers will increase their

interactions. In our view, producers have the right to sell their agricultural products in a way that allows their personality to shine, deepening trust, dialog and interaction with consumers, which promotes communication and learning opportunities in urban life. Direct sales of agricultural products can contribute to the realization of the potential capabilities of citizens and to the overall economy.

Local production and local consumption and direct sales reflect some weaknesses of the holistic approach that has been pursued extensively in the production and distribution of food, encompassing consumers' eating habits and providing for a labor process that suits the purpose of the individual producers. It can be a means to reinvent the conventional system through the distribution of food essential for human life, activities and health, and can replace working situations that contribute to inertia and make farm work attractive again. In the end, we believe that creativity, economic efficiency, and the spirit of independence will show the advantages of local system and regionalism over the conventional system to help create a richer urban society, and set people on the path to a market economy that will sustain Japan.

6. Conclusion

The purpose of this paper is to understand the economic and social status of agricultural producers in Japan by analyzing the rise and fall of Japanese agricultural products, changes in trade patterns, and collecting and shipping regulations. We focused on the process of reform in the wholesale market system and the restructuring of markets involving wholesalers, distributors and collecting and shipping organizations since the 1970s.

Since the 1970s, based on the enactment of various laws encouraging mass production, mass distribution, and mass consumption, the wholesale market system in Japan has undergone significant transformation due to the reorganization and expansion of the three roles of wholesalers, collecting and shipping organizations, and mass retailers. In order to meet the demands of privileged wholesalers, even the traditional framework for transactions has been modified, supported by massive consumption in the Tokyo metropolitan area, and the Tokyo Central Wholesale Market has come to occupy an unparalleled position. The wholesalers backed by the system are competing fiercely to take the lead (Bestor, 2004, pp. 344-345 (in Japanese)). Under these circumstances, it is necessary to reform the wholesale markets by obtaining the opinions of various producers

in order to improve the wholesale market system and wholesale market distribution while introducing the principle of competition as a stimulus to achieve improvement.

Above all, the practical issue regarding the combined structure of the wholesale markets and agricultural productions is how to connect small farmers and small-lot producers who are disadvantaged in price formation and who have abandoned agriculture to the wholesale markets. In addition to profitability and production efficiency, fairness of transactions, transparency of information, superiority of local distribution, and protection of small-quantity multi-item shipments must be considered important principles to uphold. It is necessary not only to provide a physical trading space for producers and to serve a wide area of consumers uniformly, but also to develop a system for enhancing the added value of local products and local information, thus reinforcing the network of urban society. Policies to form intermediary functions that connect organizations and people in the community are indispensable.

Social and cultural development is defined by the interdependence between the cultural core related to survival and economic activities, and the physical environment surrounding organisms (Geertz, 1963, pp. 45-51 (in Japanese)). Based on this concept, producers who are loosely organized through local production and local consumption activities play an important role in the process of deepening mutual interactions among small societies to pursue their own lifestyles and increase their autonomy. Previous research on direct delivery from production areas shows that various problems such as the unilateral risk burden on producers and diluted relations between producers and consumers will begin to appear as the scale increases, becoming systematized, negatively affecting society and human creativity, which is the solid foundation of an economy.

To achieve sustainable development of local production and local consumption and direct sales, it is necessary to understand the diversity of small and highly cohesive producer networks, the social significance of respecting individuality, and how to support economic activities through cooperation between producers and urban consumers. In the future, it is expected that the social significance of local production and local consumption and direct sales will be further recognized. In particular, for farmers to earn money from part-time or self-sufficiency farming in metropolitan areas, it is desirable to make known the innovation that enables small-scale and irregular agricultural products to be sold year-round at prices set by the individual producers.

Notes

(15) A Buddhist term meaning "Shin (Result of body or action) and Do (Environment surrounding the body) cannot be separated." It is thought that local seasonal ingredients and traditional foods are good for the body.

(16) "Local production and local consumption" means consuming various agricultural and marine products produced in the area. This activity was started in 1981 by the Ministry of Agriculture, Forestry and Fisheries Life Improvement Division, which started the "Local Food Life Improvement Measures Project" implemented in the 4-year plan. "Produce locally and consume locally."

(17) Takizawa eds. (2003), pp. 95-96. By the way, the background of the rapid increase in the farmers market in the United States is the establishment of the "The Farmer-to-Consumer Direct Marketing Act" in 1976 (Brown, 2001).

(18) Without being bound by the Wholesale Market Law, producers, consumers, mass retailers, etc., eliminate intermediate distribution and pursue each other's profits (Misono eds., 1981, p. 234).

(19) With the increase in distribution outside the wholesale markets, it is said that "primitive distribution," which is the main distribution system before the establishment of the wholesale market system, is diversifying (Fujishima et al., 2009, pp. 64-67).

(20) For example, there are direct sales offices, roadside service areas, direct from the farms, and morning markets. Direct sales offices are the facilities set up by producers and JAs to sell local products directly from producers to consumers. As of 2009, it was installed at 16,816 locations, with annual sales totaling 876.7 billion yen. Roadside service areas are the facilities established in cooperation with Japanese local governments and road managers, and have various functions related to commerce, rest and regional development. The Ministry of Land, Infrastructure, Transport and Tourism (the Ministry of Construction at that time) was officially registered in 1993, and as of June 2019, there were 1,160 registrations. Direct from the farms are defined as "the distribution system that does not go through the central wholesale markets and does not rely on Seri Trading ; also, a distribution system developed to overcome dominant distribution" (Akiya, 1978, pp. 8-12).

(21) In this 2004 survey, a questionnaire was conducted by mail targeting 2982 direct sales outlets, 1686 agricultural processing plants, and 1672 public elementary and junior high school independent and shared kitchens. Responses were collected from 2374, 1107, and 1636 locations, respectively.

(22) The three main purposes for opening direct sales offices were as follows : "increasing the income of producers" (74.8%), "promoting regional agriculture" (67.5%), and "building a base for regional revitalization" (58.3%). In order of magnitude, the effects were as follows : "increasing the income of producers" (73.7%), "increasing the sense of purpose of producers" (63.7%), and "increasing the sense of purpose of the elderly" (51.1%). It is clear that impressive results have been achieved (The Organization for Urban-Rural Interchange Revitalization, 2018, p. 7).

(23) A questionnaire was conducted by mail targeting 1000 out of 1004 roadside service areas registered with the Ministry of Land, Infrastructure, Transport and Tourism (April 2013). The recovery rate for the survey was 51.3%.

(24) In November 2011, an internet survey was conducted targeting consumers nationwide over

the age of 20. A total of 1025 responses were collected.

(25) From September 25 to December 28, 2009, they conducted a questionnaire by mail targeting 5001 direct sales offices that are permanent, manned, and open throughout the year (more than 3 days a week). The recovery rate for the survey was 16.8%.

(26) Kai (2009). The hospitality function here is defined as "a function to promote physical and mental health that keeps producers healthy both physically and mentally, and a function that warms and welcomes consumers."

(27) Mitsunaga (1984), pp. 189-204. This paper suggests that there is tremendous sacrifice due to overwork and lack of domestic work in the remarks of a single-family housewife who confessed that "the work is piled up so that it cannot rest on rainy days" (p. 199).

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