

AGRICULTURAL DEVELOPMENT THROUGH COOPERATION BETWEEN AGRICULTURAL COOPERATIVES AND CONSUMERS' COOPERATIVES IN JAPAN: FOCUSING ON DIRECT MARKETING OF AGRICULTURAL PRODUCTS

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ABSTRACT

In the context of recent high economic growth in Asian countries, agrarian structure has also been drastically transforming. Agricultural development has been mainly led by increase of production. Nowadays, however, farmers' response to urban consumers' demands for safe and environmentally friendly foods is becoming more and more important to further development of agricultural sector.

Considering the situation above, direct marketing conducted by agricultural cooperatives (JA) and consumers' cooperatives (Co-op) in Japan is one of the outstanding efforts to improve relationship between farmers and consumers. The purpose of this study is to discuss effects of "farmer-consumer communication activities" on agricultural development and to consider cooperation structure for implementation of the activities through some successful cases.

Implications from case studies are summed up as follows. (1)Communication activities have positive effects on trust building among the cooperatives, which stabilizes or improves product trades within the cooperatives. (2)Virtuous circle of communication activities and product trades is needed to maintain direct marketing. (3)Cooperation between staffs of JA and Co-op, cooperative members and staffs, and cooperatives and other organizations is required to vitalize direct marketing.

Direct marketing based on cooperation among cooperatives is suggested as an alternative approach to improve agricultural situation in Asian countries.

Keyword: Direct marketing of agricultural products, cooperation among cooperatives, relationship marketing

INTRODUCTION

Perspective

Agricultural development in Asian regions had been based on increase of productivity which was initially led by Green Revolution during 1960s. Subsequently, transition to market economy mainly after 1990s also had drastically improved farmers' incentive to produce in some countries. Nowadays, however, increase of production seems not to be enough for further agricultural development. As shown in figure 1 and 2, increase trends of rice production and consumption have gradually becoming stagnant in recent years. In this situation, farmers' response to rising consumers' demands toward safe food or products which are cultivated in the process of environmentally friendly way are highly regarded than the past.

In case of Vietnam, as a country under rapid transformation of food consumption and agrarian structure, consumers' demand towards "safe-vegetable" which is certificated by Vietnamese government has been expanding, and farmers have gradually begun to undergo

its production. Farmers' efforts toward safe-vegetable production, however, are not always successful in improvement of their income standard. The main reason of the stagnancy is information imbalance on quality of vegetable between producers and consumers. There are many cases of falsification or mislabeling in the process of safe-vegetable supply chain. Such problems can be seen not only in Vietnam but also in other countries. Overcoming these problems is thought to be a key for further development of agricultural sector in future.

In order to discuss directions to improve the situation above, direct marketing of agricultural products between agricultural cooperatives (JA) and consumers' cooperatives (Co-op) in Japan is suggestive. It is one of outstanding efforts to develop marketing of safe products putting emphasis on "farmer-consumer communication activities" which enhance relationship between members of JA and Co-op. The purpose of this paper is to consider the effects of communication activities on agricultural development and implementation structure of cooperative cooperation through some successful cases of direct marketing.

Figure 1. Production trends of rice in Asian countries

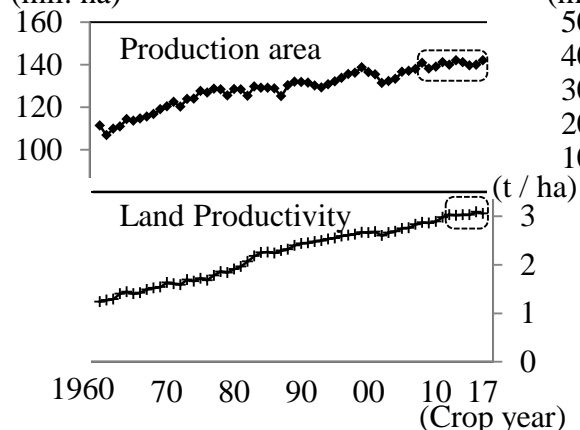
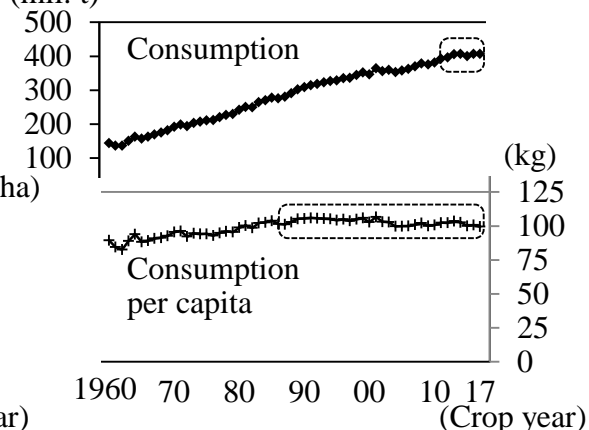


Figure 2. Consumption trends of rice in Asian countries



Source: World food statistics and graphics, Shoichi ITO, Laboratory of food and agriculture policies, Graduate School of Bioresource and Bioenvironmental Sciences, Kyushu University

Agrarian structure in Japan compared with other regions in Asia

In order to illustrate characteristics of JA and discuss direct marketing hereafter, it is helpful to clarify the feature of agriculture and rural society in Japan from perspective of Asian scale.

Agrarian structure between Japan and other Asian countries is partly similar. Above all, mass volume of small-scale paddy farmers is a common feature of rural villages in Monsoon Asia. Active paddy cropping has strongly supported population growth due to favorable nutrient of rice which allows to sustain mass population, so that approximately 60% of world population is living in Monsoon Asia, even though its land area is only approximately 20% of the world land area. Recent high economic growth in many Southeast Asian countries is based on rich labor supply and low food price thanks to abundant supply of rice.

Differences in agrarian structure between Japan and other Asian regions, especially three great deltas of Mekong, Ayeyarwady, and Chao Phraya rivers, also should be referred. As Embury (1950) pointed, "tightly-structured society" can be seen in Japan, in contrast to "loosely-structured society" in Thailand and other many areas in Southeast Asia. This

difference in social structure is partly affected by the history and process of farmland development. In Japan, development of alluvial plain for paddy cropping had already become close to the end in 17th century. On the other hand, the three great deltas were started to be actively developed after 19th century, mainly because of technological difficulty in flood management.

From historical perspectives mentioned above, it is implied that Japanese rural society had faced with population pressure for a long periods. In order for survival of mass population in limited farmland area, rural society had been strongly organized for the sake of response to agricultural intensification. In the process of quality-wise agricultural transformation in early modern Japan, “autonomous village” stated by Saito (1989) has generated. Such tightly structured village has been a prominent feature of Japan compared to other countries.

Roles and structure of JA

Existence of autonomous village had strongly affected development of Japanese agricultural cooperative (JA) as Saito (1989) mentions. JA is known as one of the well-organized cooperatives in the world because of the background that each JA has originally been based on tight communities. Recently, the number of JA has been decreasing¹ because of merger, but the activities of its branch offices are often based on local communities especially in rural areas. In addition to the organizational feature, it should also be noted that JA is categorized to “multi-purpose agricultural cooperatives” which provides wide range of services to its members, in contrast of “single-purpose agricultural cooperatives” in Western countries.² Almost all JA provides agricultural marketing, farming guidance, credit services, mutual insurance and other various supports for local development.

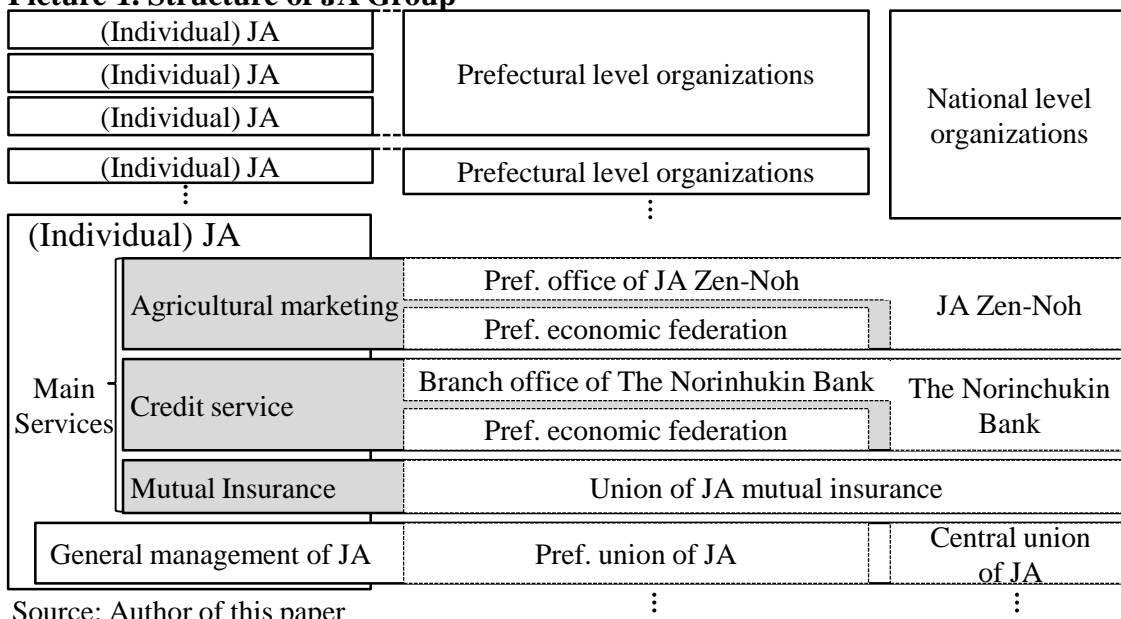
These diverse activities are supported under cooperation between JA and other related organizations. JA is mainly established in municipal areas, and there are several organizations in prefectural and national level (Picture 1). These organizations including JA are generally called “JA Group”. In case of JA’s agricultural marketing business, a certain individual JA collects agricultural products from its members, and prefectural organizations such as “economic federation of JA” or “prefectural office of JA Zen-Noh” collect products from each JA in the certain prefecture and sell the products to wholesale markets or retailers. This process of “mass collection and mass sales” supports enhancing bargaining power of farmers.

However, there are some cases that individual JA sells the products directly to wholesale markets or retailers because they often prefer to appeal “local brand” of products. This study is regarding this pattern of JA’s agricultural marketing focusing on direct marketing with Co-op.

¹ The number of JA was more than 12,000 in 1960 but is approximately 670 in 2017.

² In Japan, there are also simple-purpose agricultural cooperatives which provide specific services to specialized field of farming such as livestock, but the development of multi-purpose agricultural cooperatives is remarkable in comparison with other countries. In most of cases, multi-purpose agricultural cooperatives are categorized to JA but single-purpose agricultural cooperatives.

Picture 1. Structure of JA Group



Source: Author of this paper

DEVELOPMENT PROCESS OF DIRECT MARKETING BETWEEN JA AND CO-OP

Direct marketing of agricultural products³ has been mainly led by JA and Co-op in Japan. This is because not only these cooperatives have continuously made efforts to vitalize safe products trade but also their organizational structures and relationship are effective in implementation of direct marketing. Recently, however, direct marketing of these cooperatives is facing some difficulties such as hyper aging of producers and competition with other retailers who newly entered to business of organic product from around 2000. In this situation, JA and Co-op are now actively trying to appeal the originality of their direct marketing products through vitalizing “farmer-consumer communication activities” as an important part of their direct marketing.

Feature and scope of direct marketing

Direct marketing had initially been spotlighted and vitalized during 1970s and 1980s as the era of high economic growth symbolized to “mass production and mass consumption.” In this context, environmental pollution was a serious social problem which a number of people began to strongly concern about. Along with this movement, arose of consumers’ concerns towards food distribution system also could be seen. Development of wholesale food market in those eras promoted efficiency of mass volume food distribution, but the distribution process was unclear for consumers. It caused consumers’ doubts on mass use of pesticides in production process as well as immoderate profit seeking of wholesalers in distribution process. These problems regarding information imbalance among producers, wholesalers, and consumers was a trigger to vitalize direct marketing of agricultural products as an alternative food distribution system which farm products are not distributed via wholesale food market but distributed directly from producers’ side to consumers’ side. In this context,

³ “Direct marketing of agricultural products” is mainly called “*Sanchoku*” in Japanese. Japanese Consumers' Co-operative Union (JCCU) also uses the term.

JA and Co-op have been main actors to lead development of direct marketing.

There are notable rules of direct marketing adopted by almost all Co-op, which are “three principles of direct marketing” initially introduced by *Kyoto Co-op* in 1982. Their keystones are as follows; (1) “traceability” which means production area and producer is clear, (2) “standardization” which means production process is clear, and (3) “communication” which means communication activity between producers and Co-op members is conducted. The principles are important factors to overcome information imbalance between farmers and consumers which is often seen in food distribution via wholesale market.

The principles seems to meet consumers’ demand to purchase safe products, however, strict implementation of them requires Co-op and producers’ side to conduct detailed adjustments between them. In response to this issue, well-organized membership and relationship structures of JA and Co-op is effective in terms of following points.

Firstly, producers basically belong to members’ organization of JA in which using method and criteria of fertilizer and pesticides are shared for direct marketing or organic farming. In addition, these organizations continuously develop their farming skills through cooperation with farming instructors of JA. Secondly, Co-ops also have well-organized memberships structure. There are members’ organizations for cooperative activities and sometimes members’ organizations specialized for promotion of direct marketing. Members of these organizations are not only active purchasers of direct marketing products but also promoters of direct marketing who plan communication activities or develop new products through cooperation with Co-op staffs. Thirdly, active intercommunication between staffs of JA and Co-op is absolutely essential for implementation of products trade and communication activities.

The three principles and multilayered structure within cooperatives are part of the key factors that direct marketing has been led by cooperatives rather than other organizations. However, some difficulties in implementing direct marketing within these cooperatives can also be seen. Problems such as falsification of production area occurred around 2002, immoderate requests from Co-op to producers’ sides, JA’s intention not to ship farm products to out of JA Group, hyper aging of producers, and recent competitive circumstance in sales of organic and specially cultivated products are sometimes pointed as challenging aspects of direct marketing.

Recent challenging situation in direct marketing between JA and Co-op

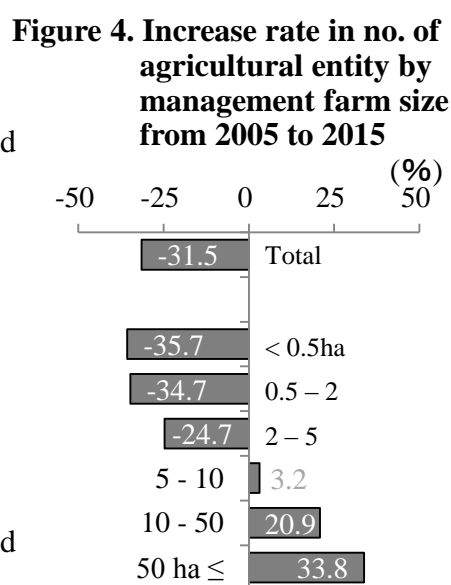
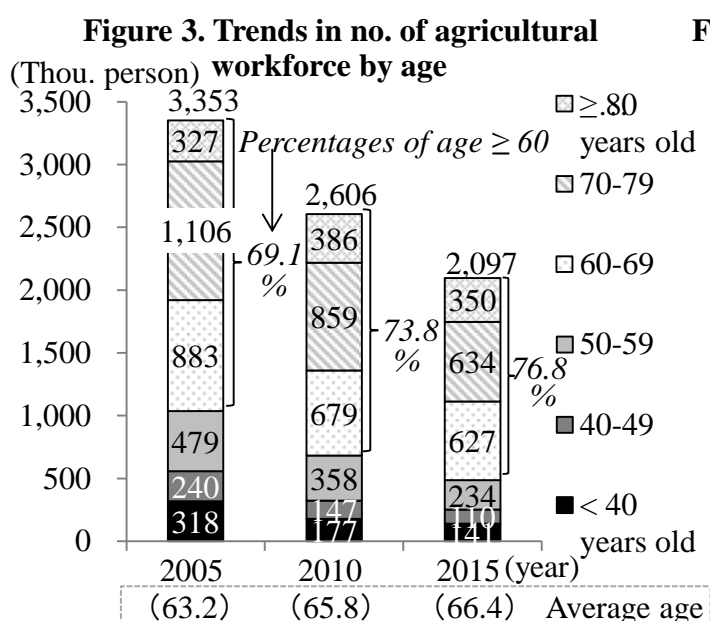
Among the problems pointed above, hyper aging of producers and competitive circumstance are particularly challenging factors towards maintaining direct marketing between these cooperatives.

Figure 3 is recent trend of agricultural workforce, which is not limited to the producers of direct marketing products. Number of agricultural workforce rapidly decreased from 2005 to 2015, whereas aging of farmers became severe. In contrast, it seems to have positive effect on improving agricultural productivity that number of large-scale farmer has increased caused by retirement of old farmers (figure 4). In case of direct marketing, however, this trend cannot be taken optimistically, since its main producers are small-scale farmers. In addition to production and sales lot of direct marketing being limited, direct marketing requires producers to keep complicated rules such as the three principles set by Co-op, so that large-scale farmers tend not to prefer direct farming. In this situation, “Report on National Survey of Co-op’s Direct Marketing⁴” (JCCU 2015) states that more Co-op began

⁴ Its original name is “Zenkoku Seikyou Sanchoku Chousa Houkokusho” in Japanese. This series of reports have been

to actively undergo “creation of sustainable food production model and maintenance and improvement of food productivity” as one of “three new challenging issues⁵”. It indicates that promotion of direct marketing is aimed in terms of not only food marketing but also efforts toward sustainable farming.

Active entry of retailers towards organic products marketing is also a challenging factor. Since around 2000, distribution of organic products has shown a big change. Co-op has faced competition with other retailers after introduction of “organic JAS system⁶” in 2001 which facilitate active new-entry of other retailers to direct marketing. Above all, Ishikawa (2007) states that Aeon, a large retailer, started organic products sales which substantially keeps the principles of Co-op’s direct marketing. Under these circumstances, Japanese Consumers’ Co-operative Union (JCCU) points that supply chain of Co-op’s direct marketing had long been a great advantage of theirs but it is now in difficult situation to stand out from other retailers’ supply chain (JCCU 2015).



Source of figure 3 and 4: Census of agriculture and forestry (Ministry of agriculture, forestry and fishery 2005, 2010, 2015)

Recent changes in scope of direct marketing by Co-op

As these issues became obvious, goals and scope of direct marketing have diversified and extended. This trend became clear in recent versions of “Report on National Survey of Co-op’s Direct Marketing” (JCCU 2012, 2015) which puts emphasis on sustenance and vitalization of agriculture and society as goals of direct marketing. These reports introduce some Co-ops’ efforts to involve enhancement of environmentally friendly agriculture, “local

continuously published by JCCU once in three or four years.

⁵ Other two challenging issues are as follows; (1) innovation of supply chain which allows to acquire mutual benefit between production and consumption, (2) promotion of intraregional economic circulation through “local production for local consumption” on which this paper focuses.

⁶ It is a kind of JAS (Japanese Agricultural Standard) certification system. Organic JAS is certificated to the foods which are produced in organic way such as non-use of chemical fertilizer and pesticides, use of organic feeds for raising livestock, or limited use of food additives, etc.

production for local consumption⁷ (LPLC)” and practical supports for agriculture such as pecuniary assistance or farming support by Co-op, and those efforts are regarded to important parts of direct marketing. In terms of the extended scope, it is implied that recent direct marketing has been not only a safe food supply chain but also an approach to achieve sustainable agriculture.

The reasons Co-op have actively extended the goals and efforts could be thought as follows. First is to improve supply situation of direct marketing products. Under hyper aging of farmers, supply sides have been drastically declining, so that vitalization of agriculture is thought to be becoming more important for Co-op. Second is response to new-entry of other retailers to organic products sales. Under competition with them, Co-op has to develop originality of direct marketing products such as contribution towards environmentally friendly agriculture. “Story” of agricultural products has been becoming an important value in Co-op’s marketing.

These changes in Co-op have often provided important opportunities to promote agriculture in some regions. In response, growing number of JA have started to undergo unique activities based on direct marketing such as following successful cases.

CASE 1: VITALIZATION OF SUSTAINABLE INTRAREGIONAL RESOURCE CIRCULATION THROUGH ENHANCING “LOCAL PRODUCTION FOR LOCAL CONSUMPTION” BY JA MIDROINO AND CO-OP MIYAGI IN MIYAGI PREFECTURE

Co-op Miyagi has actively conducted direct marketing since 1970s with some aspiring JA including JA Midorino aiming at achievement of “local production for local consumption (LPLC)” within Miyagi prefecture. This case study focuses on the efforts of these cooperatives to vitalize intraregional resource circulation system through development of LPLC based on direct marketing.

Locality-based direct marketing of Co-op Miyagi

Characteristic of Co-op Miyagi’s direct marketing is that its marketing partners such as JA are located in Miyagi prefecture because of its intention to vitalize LPLC. When Co-op Miyagi and a supplier makes an alliance on direct marketing, supplier is required to make “Basic Agreement on Promoting Relationship between Farmers and Consumers⁸” with Co-op Miyagi and also to be a member of “Convention for Promoting Relationship between Farmers and Consumers in Miyagi Prefecture⁹” established in 1985. The main purpose of the agreement is to promote healthy and safe diet, maintaining and developing agriculture, forestry and fisheries, and preserving culture and natural environment through cooperation among its members.

Under the agreement, Co-op Miyagi has actively planned and implemented communication activities with partners and continued to diversify activities regarding direct marketing. Table 1 is the list of recent activities and number of participated Co-op Miyagi members. It shows that almost 10,000 members have participated in total. Among the wide range of events, following activities are remarkably important to illustrate the characteristics of Co-op Miyagi’s direct marketing.

⁷ In most of cases, LPLC indicates that a product is cultivated and consumed within a prefecture. This movement has also often rooted to the reflection of emerging food culture in the era of high economic growth which is based on “mass production and mass consumption.” The scope and merits of LPLC are to reduce environmental burden and cost in distribution process, to vitalize local economy, to access to local flesh and seasonal food, etc.

⁸ Its original name is “San Shou Teikei Ni Kansuru Kihon Kyoutei Sho” in Japanese.

⁹ Its original name is “Miyagi Ken San Shou Teikei Suishin Kyougi Kai” in Japanese.

Firstly, annually-held general meeting on direct marketing is outstanding in its large numbers of participation from Co-op members, Co-op staffs, producers, JA staffs etc. Approximately 1,300 people including the 924 Co-op Miyagi members participated the meeting held around FY 2015 (table 1). Such large-scale meeting regarding direct marketing is quite rare in Japan. The reasons of the scale are not only Co-op members' high interest in local agriculture, but also Co-op Miyagi's efforts to promote locality-based direct marketing so that many producers in Miyagi prefecture were able to attend.

Secondly, each Co-op Miyagi' branch store holds communication activities which are highly locality-based and promote close relationship between producers and consumers. Each store has farmers' market corner to which producers directly ship their products. At the corner, Co-op members, staffs and producers have daily communication. In addition, "branch store-based meeting" in table 1 is also held approximately 11 times a year taking turns by each store. These meetings give important opportunities to the producers to appeal their own farm products to the Co-op members through detailed explanation of production process.

Thirdly, there are varieties of activities regarding farm study as shown in table 1 while the most thriving one is a year-round program for family participants to study on local farming and food culture. This program is held once a month throughout a year supported by host farmers who are members of JA Midorino. Hosts farmers and JA Midorino provides the participants various seasonal experiences such as paddy planting and harvesting, survey on biodiversity at paddy fields which direct marketing rice are cultivated, making traditional foods, etc. This program is limited to thirty families per year due to the capacity of host farms. It is very popular so that the registered families are selected by lot every year.

In addition to these diverse activities aiming at strengthening relationship between producers and Co-op members, training courses regarding direct marketing are also conducted. During FY 2015, these courses were held 10 times and total of 266 staffs participated them. It can be said that LPLC has been developed through promotion of locality-based direct marketing under active interrelationship among members and staffs of Co-op and JA.

Table 1 Various communication activities regarding LPLC and direct marketing by Co-op Miyagi (from 21st May 2015 to 20th May 2016)

Contents	Times	No. of participant
Tours to production area or food factories	97	2,766
General meeting on direct marketing	1	924
Workshop for direct marketing	10	266
Branch store-based meeting on local farm products	11	288
Workshop held by Co-op members' organization for cooperative	39	974
Study session about direct marketing	34	785
Study session about cooperative activities (including theme of food)	3	33
Co-op festival (No. of participants is executive members of the festival)	58	1,503
Promotion activities for direct marketing	158	1,147
Cooking class held by producers	15	252
Practical study on paddy farming at members' house	21	713
Total		9,651

Source: Provided by Co-op Miyagi and translated into English by the author

Advancement of environmentally friendly agriculture

LPLC is further developing through advancement of environmentally friendly agriculture in recent years. Here are the examples of characteristic efforts to promote and sophisticate sustainable agriculture.

The prominent endeavor which should be firstly noted would be “Survey on Paddy Field Biodiversity” conducted by JA Midorino and other related organizations. This kind of activities have been widely spread throughout the nation responding to legislation of Measures to Conserve and Improve Land, Water and Environment in 2007 and International Year of Biodiversity in 2010. Although these are basically targeting at elementary school pupils for their environmental education, JA Midorino conducts more professional survey in addition to the activity for children.

In April 2009, “Survey Project on Paddy Field Biodiversity in Tajiri Area (locates in business area of JA Midorino)” began with wide range of cooperation networks among JA Midorino, farmers’ groups for direct marketing, Co-op Miyagi, Tohto Co-op, NPO, Miyagi University, some JA Group organizations, etc. The project conducts professional survey on ecosystem of paddy fields which cultivate direct farming rice, as well as environmental education for elementary school pupils. It should be noted that the project aims not only at conserving agricultural environment but also at making use of biodiversity information as an indicator to measure quality of direct marketing products. It helps to complement existing certification systems of direct marketing products¹⁰. Direct marketing rice of Tohto Co-op, a member of the project and marketing partner of JA Midorino, have introduced a special mark on rice bag which indicates the survey being implemented. This effort is highly evaluated and the rice bag with the special mark was displayed at Convention on Biological Diversity 2010 (COP10). This effort is considered as a visualization of information on environmental conservation.

In addition to the Survey on Paddy Field Biodiversity, JA Midorino has actively undergone indication of “carbon footprint (CFP)” which is also considered as an effort to visualize information on environmental conservation. CFP indicates the amount of carbon dioxide emitted in whole process of foods production and distribution. It aims to visualize environmental burden through showing CFP on food package. Reduction of CFP is strongly supported by producers’ endeavors toward promoting resource circulation agriculture. Besides reduction in use of chemical fertilizer and pesticide, there are characteristic activities such as exchange of paddy straws and composts through cooperating with local cattle farmers and use of recycle compost making use of Co-op Miyagi’s food residues.

Intraregional resource circulation system based on cooperative cooperation

JA Midorino and Co-op Miyagi have deepened their cooperation and constantly tried to vitalize LPLC through various characteristic activities. It is considered that these efforts towards vitalizing LPLC have been evolving into intraregional resource circulation system. The following two points can be listed as the background of the sophistication.

First is both cooperatives’ cooperation in conducting diverse communicating activities

¹⁰ JA Midorino conducts certification system of direct marketing products in two ways. First is that Miyagi prefecture, the third party, provides certification to farmers whose production process meets the standards of reduction in chemical fertilizer and pesticides set by the prefecture. Second is participatory certification by both producers and Co-op members. First system is adopted in direct marketing towards Co-op Miyagi and second is towards other partners including Tohto Co-op.

that allows Co-op Miyagi members to deepen their understanding of local agriculture. It is an important factor to promote environmental conservation agriculture through active purchase of agricultural products which are cultivated with environmentally friendly process. Second is to make the merit of effort to promote environmentally friendly agriculture clear. Visualization of its information increases the value of direct marketing products and it is also thought to have positive effects on promoting purchase from co-op members who are actively interested in agriculture.

These series of activities could be considered as a successful model to vitalize intraregional resource circulation system through sophistication of LPLC led by locality-based direct marketing between local cooperatives.

CASE 2: RESPONSE TO PRODUCERS' RISKS THROUGH ENHANCING COMMUNICATION ACTIVITIES BETWEEN JA SHIMANE'S REGIONAL HEADQUARTER OF OOCHI AREA AND CO-OP HIROSHIMA

JA Shimane's regional headquarter of Oochi area¹¹ and its member farmers have actively developed and cultivated a unique product named "herb rice." Herb rice is a kind of specially cultivated rice, which is particularly spotlighted due to its high evaluation of flavor and environmentally friendly production process. Co-op Hiroshima, an active direct marketing partner of the headquarter, has continuously bought it as one of the main commodities of the Co-op, although there is a fluctuation risk in its production caused by geographical reason. This case study discusses the effects of enhancing communication activities between these cooperatives on contribution to overcome the risk and stabilize trade condition of herb rice.

Background and feature of herb rice production

Business area of the headquarter is typical mountainous areas facing hyper aging and population decline. In addition, it is distanced from consuming areas and the easiest area to access from the area is Hiroshima city which locates in adjoining prefecture. In such difficult economic and social condition, development of local brand products has been in urgent needs and herb rice was introduced under initiative taken by the regional headquarter in 2003. Thanks to active organic farming including herb cultivation and favorable geographic condition for good flavor rice¹², the regional headquarter and some innovative paddy farmers have succeeded in development and cultivation of herb rice.

The main feature of herb rice production is that 99% of chemical fertilizer and more than 50% of pesticide must be cut off compared to conventional farming process. Instead, red clovers or crimson clover which are kinds of herb are used as green manure. Herb rice production requires producers to work at the paddy field throughout a year. They sow clovers into paddy field right after rice harvesting in autumn, grown them during winter, and clovers are ploughed into soil in next spring before paddy planting. The important point is that better growth of clover is needed for better growth of paddy so that farmers are required to continuously take care of both paddy and clover. In addition to the endeavors of producers, the regional headquarter also actively take initiative in quality management of herb rice through various efforts such as strict implementation of production record specialized in herb rice, continuous consulting for producers about usage of fertilizer and pesticides, holding workshops, development of efficient farming methods, etc. These efforts are based

¹¹ Its original name is "JA Shimane Shimane Oochi Chiku Honbu" in Japanese.

¹² Good flavor of rice is thanks to the difference in temperature between day and night caused by the geographical feature of mountainous area.

on yearly agreement document for herb rice cultivation between herb rice farmers, herb rice farmers' group and staffs of the regional headquarter.

As the results of various efforts of producers, all the producers have acquired "eco-farmer" certification from Shimane prefecture and started to receive "direct payment for environmentally friendly farming" since 2011. In addition, the flavor of the rice is highly evaluated so that it has obtained trademark registration as "Iwami-kogen¹³ herb rice" in 2009 and proceeded to final judgement in "The 12th Japanese Top Rice Contest in Shizuoka¹⁴" in 2015. Through these high evaluations of herb rice and active demands from Co-op Hiroshima, as shown on table 2, its producers' price¹⁵ in reality is higher than other rice produced in the regional headquarter.

Production area of herb rice has expanded rapidly from 6.6ha in the first year of its cultivation to 181ha in FY 2016 in the context of active entries by local farmers to its production, even though agriculture of this area has been in challenging situation under hyper aging of and severe population decline. Production and production area of herb rice, however, drastically decreased in 2014 and 2015 as shown in figure 5, due to heavy downpours and landslides occurred frequently in 2013 and 2014, and also because it took long to rebuild or repair damaged paddy fields. The regional headquarter could not stably supply enough herb rice demanded by Co-op Hiroshima in some years due to the geographical risk.

¹³ Iwami-Kogen is a name of region in which herb rice is actively produced.

¹⁴ Its original name is "Dai 12 Kai Okome Nihon Ichi Contest in Shizuoka" in Japanese.

¹⁵ Producers' price indicates the price of which the headquarter purchases from paddy farmers.

Table 2. Producers' price of rice by kind (FY 2015 and 2016) (JPY/30kg)

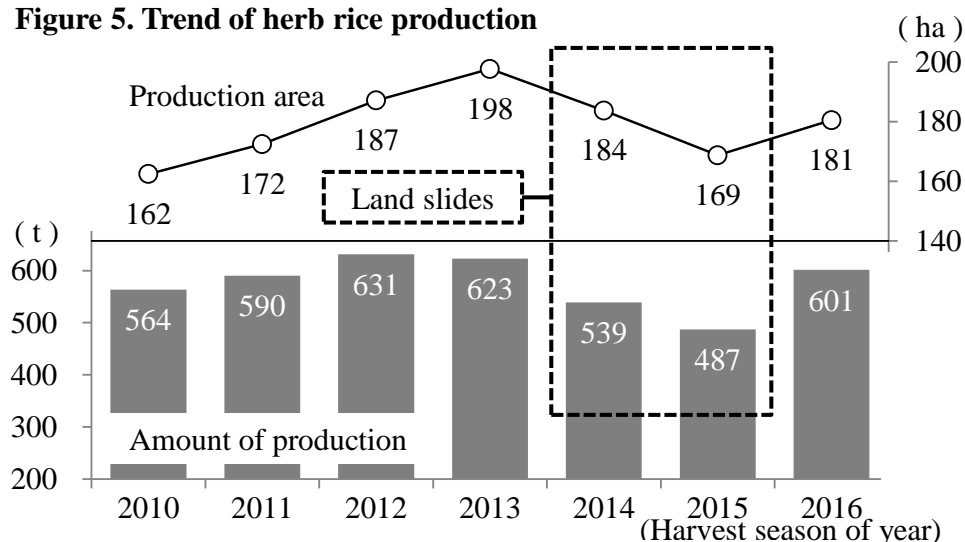
Rice	Grade of production area	Grade of rice						
		Superior		Good		Intermediate		
		2015	2016	2015	2016	2015	2016	
JA brand rice*	Herb rice Koshihikari	superior	7,000	6,300	6,500	5,650	5,250	4,450
	Koshihikari (type A)	superior	6,450	5,600	5,750	4,950		
	Koshihikari (type B)	superior	6,350	5,500				
	Herb rice Koshihikari	Normal	6,450	5,750	6,000	5,300		
	Koshihikari (type A)	Normal	6,200	5,350	5,750	4,950		
	Koshihikari (type B)	Normal	6,100	5,250				
Normal Koshihikari			5,800	4,200	5,450	3,900	4,950	3,400

Source: Two websites of JA Shimane's regional headquarter of Ochi area as follows

- 1 http://oochi-ja-shimane.gr.jp/smoc_02_13_einou-parts/%E3%82%B3%E3%83%94%E3%83%BC%E3%82%B3%E3%83%94%E3%83%BC27%E5%B9%B4%E5%BA%A6%E7%94%A3%E7%B1%B3%E6%A6%82%E7%AE%97%E9%87%91%E7%BC%88%E3%82%84%E3%81%BE%E3%81%AA%E3%81%BF%E3%83%BB%E7%BC%A8%E7%BC%B0%E7%BC%89.xls.2.pdf
- 2 http://oochi-ja-shimane.jp/pkobo_news/upload/6-0link_file.pdf

note: JA brand rice is certificated to the rice which cultivation record is clear.

Figure 5. Trend of herb rice production



Source: Provided to the author by the head quarter

Enhancing communication activities between these cooperatives

When supplier could not stably fulfil the demand from business partner, it is generally urged to cease the trade from the partner. In case of herb rice, however, Co-op Hiroshima strongly intends to continue the trade every year and to further expand the trade amount in the future. At this point, enhancing cooperation among these cooperatives is thought to have positive effect on stabilization and development of herb rice trade.

Herb rice direct marketing, started from 2003, is based on the long term interaction between these cooperatives mainly through vegetable direct marketing started in 1980s. In recent years, these cooperatives begin to make more efforts to sophisticate the contents of cooperation. These series of efforts could be seen in their joint-signature of “Statement about

Development of Environmentally Friendly Farming” under approval of prefectural governor in 2009 and their “Agreement on Promotion of Cooperation between Cooperatives”. Both statement and agreement aim to expand trade of environmentally friendly agricultural products and to promote farm study for Co-op members and staffs. Direct marketing of herb rice have been playing main role in the statement and agreement mentioned above.

Under these efforts, communication activities have been actively conducted. It should be noted that the recent activities also rooted to vegetable direct marketing from 1980s, when JA and Co-op often jointly organized workshops about vegetable marketing. After introducing herb rice in 2003, farm study as a main project of communication activity started to be carried out in a certain part of herb rice field managed by the regional headquarter. Farm study at herb rice field includes wide range of contents such as paddy planting and harvesting, weeding, and survey on herb rice field biodiversity conducted by members and staffs of JA and Co-op under cooperation with Shimane prefecture. These events attract Co-op members and staffs well so that approximately 60 members of Co-op continuously participate per activities. Furthermore, aspiring staffs of Co-op organized a group for intensive farm study from 2008.

Through these efforts, herb rice is highly regarded by the Co-op in terms of its environmentally friendly aspects as well as its good flavor. Co-op Hiroshima conducts farm study in various contracted areas while herb rice production area is the most active one. This is rooted to the environmentally friendly aspects of herb rice farming as well as its good flavor. It could be pointed that the endeavors of farmers and staffs of the regional headquarter towards environmentally friendly farming and enhancement of communication activities contribute to stabilize and expand demand from Co-op Hiroshima.

Towards sustainable agriculture through cooperative cooperation

As seen above, efforts regarding herb rice have developed through deepening cooperation between cooperatives. Herb rice production is considered as a well-balanced agricultural management in terms of ecological and economic aspects. Expansion of herb rice production contributes to sustain abundant ecology. Survey on biodiversity of the herb rice field mentioned before confirmed that there are rich kinds and amounts of living things. From economic viewpoint, in addition, herb rice is profitable than other conventional rice because of its high price and subsidies. The business area of the regional headquarter, Ochi area, is one of typical depopulated areas which urgently needs innovative models to revitalize local economy. Herb rice direct marketing is thought to be a quite suggestive case towards sustainable development in such economically challenged areas.

CASE 3: DEVELOPMENT OF FARM STUDY THROUGH ORGANIZING WIDE RANGE OF COOPERATION NETWORK UNDER THE INITIATIVE OF “JA OHMI FUJI” AND “CO-OP SHIGA” IN SHIGA PREFECTURE

Co-op Shiga runs one of the most popular farm studies in Japan, named “Challenge-Farming Group”¹⁶ mainly supported by JA Ohmi Fuji, a direct marketing partner of the Co-op. Furthermore, these cooperatives have sophisticated the activity through establishment of “intensive course” within the group in 2016 for participants who want to study about agriculture in more depth or plan to be a new entry farmer in the future. The background of such sophistication is based on multilayered relationship among cooperatives and wide range of cooperation networks.

¹⁶ Its original name is “Farmer Challenge Tai” in Japanese.

Formation and developing process of Challenge-Farming Group

“Challenge-Farming Group” is rooted to aspiring rural–urban communication activities conducted by “Ohminchi”, a farmers’ market of JA Ohmi Fuji opened in 2008. In the process of Ohminchi’s endeavors to develop these activities, JA Ohmi Fuji and Co-op Shiga have deepened cooperation.

Ohminchi is not only one of the biggest farmers market in Shiga prefecture but also popular because of its diverse activities putting emphasis on “local production for local consumption (LPLC)”. For example, Ohminchi runs local food restaurant adjoining to Ohminchi and food truck car for local food catering to neighboring schools, etc. In addition, the notable activities are promotion of rural-urban communication activities and green tourism. The trigger of these activities was food stock shortage in the afternoon when Ohminchi was just opened in 2008. In response to the problem, Ohminchi started a service which consumers themselves could harvest vegetables at the farmland managed by Ohminchi. This service became popular and Ohminchi began to focus on diverse rural-urban communication activities based on farming. Farm study project named “Aozora Fitness Club”, which offers the participants one-day farmer experience, is especially known widely so that many come to participate it from inside and outside the prefecture. Moreover, Ohminchi connects various businesses such as farmers’ market, restaurant, and communication activities to green tourism. It offers tourists to enjoy harvesting, cooking and eating as well as shopping at the farmers market. Such tourism plan is popular within and out of the country.

Through Ohminchi’s diverse efforts regarding communication activities and LPLC, the relationship between JA Ohmi Fuji and Co-op Shiga has been enhanced and sophisticated much more than other cases of direct marketing. They have deepened interaction through “Convention for Promotion of LPLC¹⁷” of which both of them were members, and they subsequently signed to “Agreement on Cooperation between Cooperatives for Promotion of Local Agricultural Products¹⁸” in 2012. During the same year, “Group for Promoting Interrelation between Local Farming and Food Consumption¹⁹” which plans farm studies was organized and managed by Co-op Shiga’s secretary generals from its branches and a staff of JA Ohmi Fuji. Furthermore, 2012 was International Year of Cooperatives so that the group offered harvesting activity for Co-op Shiga staffs and members supported by JA Ohmi Fuji in order to deepen cooperative cooperation. This was the beginning of periodic communication through harvesting activity as a part of direct marketing and LPLC.

The harvesting activity mentioned above is the precursor of Challenge-Farming Group. Since witnessing the popularity of “Aozora Fitness Club” mentioned above, Co-op Shiga also became to have an intention to develop the harvesting activities into more active farm studies. In addition, JA Ohmi Fuji no longer had capacity to accept more participants from Co-op Shiga because there were rapidly growing numbers of the Co-op members who were interested in harvesting activity. In response to these situations, JA Ohmi Fuji and Co-op Shiga organized “Challenge-Farming Group” in 2015 thanks to new cooperation by JA Koka as a host of participants from Co-op Shiga, and they started more active farm studies. The group provides two courses per year and each course implements farming activities such as planting, weeding, and harvesting for several times. Due to high evaluation towards these efforts, this farm study received subsidy from Ministry of Agriculture, Forestry and Fisheries regarding contribution to food education in 2015. Furthermore, this project was enlarged thanks to new entries of JA Higashi Biwako and JA Nishi Biwako as the hosts in 2016, and

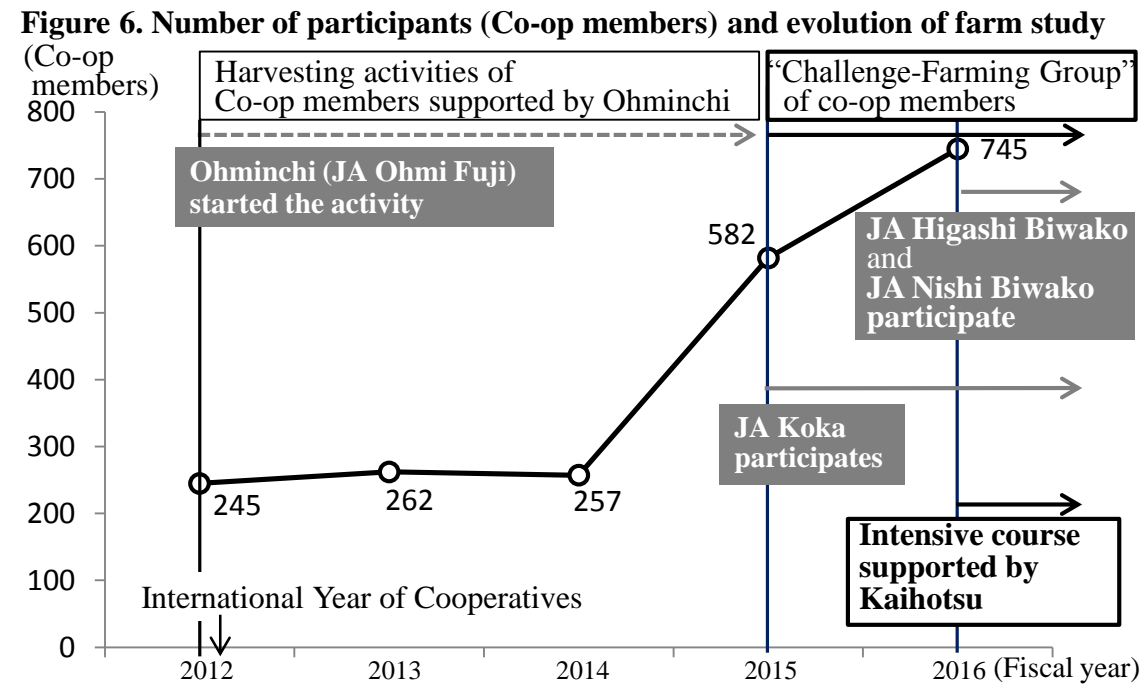
¹⁷ Its original name is “Chisan Chisho Suishin Kyogi Kai” in Japanese.

¹⁸ Its original name is “Jibasan Teikei Ni Kansuru Kyoudou kumiai Kan Kyoudou No Kyoutei” in Japanese.

¹⁹ Its original name is “Shoku To Nou Wo Tsunagu Kai” in Japanese.

the number of participants increased even more (figure 6).

In addition, it is noteworthy that “Group for Promoting Interrelation between Local Farming and Food Consumption” mentioned above has continuously made efforts to feedback participants’ opinion about farm study to producers and JA. This effort is thought to be one of the key factors to maintain farm studies. Their opinions are valuable for the host producers and the JA because they not only cheers and motivates producers’ sides but also allows producers’ sides to access the details of consumers’ demands for farm products which are essential information to improve trade situation.



Source: Website of Ministry of Agriculture, Forestry and Fishery and Co-op Shiga
 1. <http://www.maff.go.jp/j/syokuiku/attach/pdf/torikumi-146.pdf> 2. <http://www.pak2.com/spiral/pdf/1701.pdf>

Establishment of intensive course through expanding cooperation network

In the process of enhancing these farm studies, there have been growing number of participants who intend to study more about vegetable production. Responding to the situation, JA Ohmi Fuji organized “intensive course” within Chalange-Farming Group in 2016 thanks to practical supports from community-based farming corporation named “Kaihotsu” located nearby Ohminchi.

Intensive course is divided into summer and winter vegetable cultivation programs, just started in winter of FY 2016. So far, 16 participants in winter FY 2016 and 24 participants in summer FY 2017 were welcomed. This course is only hosted by JA Ohmi Fuji cooperated by Kaihotsu offering training field and instructors. Implementation of this course requires highly complicated works such as farming practice at training fields and lectures about usage of agricultural materials etc., and these course works are basically held once or twice a month. In order for efficient implementation of these intensive coursework contents, JA Ohmi Fuji outsources provision of technical advice and training fields to Kaihotsu and mainly take responsibility in coordination between participants and Kaihotsu.

Behind the establishment of intensive course, there have been efforts towards enhancing interrelation between JA Ohmi Fuji and Kaihotsu aiming at local agricultural development

through vitalization of farm study by non-farmers. Their activities named “Agri-education Project” have been funded by “Agriculture, Forestry and Fisheries Future Fund” in 2015. The project offers wide range of plans, from a simple harvesting activity to more intensive farm trainings for those who wish to start farming. It is considered that Intensive course of Challenge-Farming Group has been actively and efficiently managed because of these efforts by JA Ohmi Fuji and Kaihotsu.

Function of farmers’ market as a connecting point between various local actors

Farm study which was originally started as a part of communication activities of direct marketing finally became an important opportunity to bring up new entry farmers in this area. It could be pointed that the farm study has been sophisticated in parallel with development of cooperation networks.

JA Ohmi Fuji and Co-op Shiga have played role of coordinators which actively connect farmers and consumers. Above all, it should be emphasized that the function of Ohminchi which is farmers’ market of JA Ohmi Fuji is regarded as an aspiring coordinator of diverse communication activities. Farmers’ market is not only a sales place but also a connecting point between local farmers and consumers. Ohminchi is one of outstanding farmers’ markets which fully brings out its potential to connect producers and consumers.

Development of Farm study conducted under strong initiative of JA Ohmi Fuji and Co-op Shiga is an outstanding case that cooperatives played role of coordinator which connect producers and consumers.

FINDINGS AND IMPLICATIONS OF CASE STUDIES

Contents of each case mentioned above are different, however, it can be implied that three points below are quite effective to sophisticate direct marketing and to develop agriculture through cooperative cooperation.

Effects of trust building among cooperatives on stabilizing products trade

Enhancement of communication activities contribute to build trust between staffs of JA and Co-op, which is quite important to stabilize trade condition of products. This effect could be clearly observed in Case 2 of herb rice direct marketing that trustful relationship between cooperatives stabilizes herb rice direct marketing in spite of its yield fluctuation risk.

Communication activities based on environmental study such as “Survey on Paddy Field Biodiversity” shown in Case 1 and 2 are also noteworthy because producers and JA can directly appeal their efforts to produce farm products with environmentally friendly way to Co-op. This appeal from producers’ side builds trust from Co-op, and it boost demands for their products from Co-op members. In addition, activity of “Group for Promoting Interrelation between Local Farming and Food Consumption” in case 3 is also noteworthy in the viewpoint that they put emphasis on feedback of participants’ opinions to producers’ side. It is effective to improve trust relationship among both producers’ and consumers’ sides and to clarify their information such as demands or difficulties about communication activities and direct marketing.

These effects of communication activities could be regarded as analogy with “relationship marketing” which indicates strengthening relationship with consumers contribute to stabilize trade²⁰. This perspective fits well in the case of direct marketing

²⁰ For example, Sakurai (2003) discusses on marketing strategy for development of agricultural production area in terms of

among cooperatives putting emphasis on “face to face relationship.”

Virtuous circle of business profit and communication activities

Implication derived from these cases is that business profit and communication activities are inseparable and balanced promotion of both aspects is required to maintain and develop direct marketing between cooperatives. Although communication activities can be seen not as a profitable section at a glance, stable trade of farm products is supported by communication activities. In addition, business profit from active trade is transferred into implementation of communication activities. This virtuous circle is clearly shown in case 1 and 2.

In case 3 of JA Ohmi Fuji, however, it is not always the most active trading partner of Co-op Shiga because it is located to relatively urban area where agricultural production is not so active. It should however be emphasized that JA Ohmi Fuji actively makes effort to acquire funds for implementing diverse communication activities. As mentioned in the chapter of case 3, these communication activities are funded by “Agriculture, Forestry and Fisheries Future Fund” and subsidized by Ministry of Agriculture, Forestry and Fisheries for their contribution to food education. This case can be regarded as a successful model to promote communication activities by inspiring cooperation from wide range of organizations.

Recently, however, increasing number of JA has been merged and has enlarged their business area, and Co-op has also actively established business federation organized by several of Co-op from some prefectures. These allow improving operational efficiency of their management, but on the other hand, it is concerned that locality-based membership activities may decline due to dilution of locality-based relationship between members and cooperative²¹. Cooperatives are now required to have well-balanced perspectives of efficiency and membership more than the past.

Enhancement of cooperation network within cooperatives and outside of them

As mentioned above, enhancement of relationship within cooperatives and their members is essential to implement wide range of communication activities. Under increase and sophistication of consumers’ demand toward food and farm study, cooperatives are also required to implement more highly specialized projects. In this situation, strengthening wide range of cooperation networks is also required along with enhancement of cooperation within cooperatives.

In recent years, words such as “biodiversity” and “sustainability” have been actively spotlighted while environmental awareness has been rising especially after the Great East Japan Earthquake hit in 2011. In this situation, contribution towards environmental conservation is also valuable information of farm products. “Survey Project on Paddy Field Biodiversity in Tajiri Area” in case 1 conducted under wide range of cooperation networks is responding well to consumers’ growing interest in sustainable agriculture. In addition, intensive course of Challenge-Farming Group in case 3 is also regarded as an outstanding project, which attracts aspiring consumers who are highly interested in agriculture or plan to

relationship marketing. Fujishima and Iwasaki (2010) is an empirical research which indicates positive effects of consumers’ participation in farm study on high consumers’ preference towards direct marketing products regardless of how many times they have participated it.

²¹ As mentioned at the beginning part of this paper, branch offices of JA have often been continuously based on local community although business area of each JA has enlarged. However, in the decrease trend of farmer, it has been gradually difficult to keep locality-based close relationship between members and JA staffs.

be new entry farmer in the future. This project could be implemented thanks to practical supports by community-based farming corporation “Kaihotsu.”

It could be pointed that multilayered and wide range of cooperation structure has been getting more important to maintain and improve situation of agriculture as well as direct marketing between JA and Co-op.

CONCLUSION

As considering development of food production and distribution from global perspective, there are many kinds of efforts analogically regarded as direct marketing.

Above all, community supported agriculture (CSA) which is actively conducted in Western countries highly connects producers and consumers. Its notable idea is that production risk is distributed between consumers and farmers by means of consumers' advance payments to products which they want. This system requires consumers to well-understand about agriculture which has yielded risk caused by climate, and to actively participate in production process such as exchanging opinions with producers and supporting farming activities. The system regarding CSA is not still popular in Japan, however, groping for creation of risk distribution system between farmers and consumers is gradually underway among JA and Co-op.

In Asian developing countries, efforts toward improvement of food value chain with regard to direct marketing can be seen nowadays. In case of Vietnam, it is not major yet but gradually developing and that some corporations are making contract with farmers' groups which strictly keep safe condition in production process and deliver their products to registered consumers. This business is thought to be appreciated by aspiring farmers and consumers because general food supply chain in Vietnam has problem of severe information imbalance as mentioned in the beginning.

Sophistication of wholesale market system is continuously needed for development of agriculture in Asian countries, but direct marketing is also an effective way to improve agricultural management, especially for small-scale farmers. It could be pointed that Japanese cases of direct marketing which put emphasis on the role of cooperatives and intercommunication among them are the suggested models to consider development of food value chain in Asian countries.

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