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'CHOKUBAIJYO' AS A WAKAYAMA FRUIT FARMER DIRECT SALES SYSTEM IN JAPANESE AGRI-FOOD NETWORK GOVERNANCE

'CHOKUBAIJYO' SEBAGAI SISTEM PENJUALAN LANGSUNG PETANI BUAH WAKAYAMA DALAM TATA KELOLA JARINGAN *AGRI-FOOD* JEPANG

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ABSTRAK

Gerakan Chisan-chishou (kampanye produk lokal untuk konsumsi lokal) telah memfasilitasi para petani di Prefektur Wakayama, Jepang untuk memperkuat potensi pertanian lokal melalui Sanchoku atau sistem penjualan langsung. Penelitian ini bertujuan untuk mengetahui posisi Sanchoku dalam rantai dan jaringan distribusi pangan Jepang, yang secara struktural terkoordinasi di bawah Nougyou Kyoudou Kumiai atau JA (Japan Agricultural Cooperative) sebagai entitas terkemuka dalam tata kelola jaringan pangan pertanian Jepang. Metode kualitatif dipilih untuk mengkaji peran modal sosial dan jaringan dalam sistem Sanchoku dengan menitikberatkan pada indikator non fisik seperti nilai kepercayaan dan timbal balik dalam jaringan. Berdasarkan data wawancara dengan petani anggota Japan Agricultural Cooperative (JA) Prefektur Wakayama, penelitian ini menemukan bahwa sistem Chokubaijyo berfungsi sebagai platform bagi petani untuk menyelesaikan masalah yang terkait dengan profitabilitas pada sistem Chokubaijyo JA. Selain itu, sistem keanggotaan JA yang tidak mengikat menguntungkan petani dalam memperoleh fasilitas pertanian dan mengamankan jalur penjualan dengan pasar yang lebih stabil dan risiko biaya operasional yang rendah. Sifat saling ketergantungan pada kerjasama relasional dan shinrai atau 'kepercayaan' dilihat dalam penelitian ini sebagai aspek dan atribut modal sosial yang sangat penting dalam mekanisme jaringan agri-food Jepang.

Kata Kunci: *Chokubaijyo; Jaringan Agri-food; Modal Sosial; Sistem Penjualan Langsung*

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ABSTRACT

The Chisan-chishou movement (a campaign on local products for local consumption) has been facilitating the farmers in Wakayama Prefecture, Japan to strengthen local agricultural potential through the *sanchoku* or direct sales system. This research aims to investigate the *sanchoku's* position in Japan's food distribution chain and network, which is structurally coordinated under *Nougyou Kyoudou Kumiai* or JA (Japan Agricultural Cooperative) as a prominent entity in Japanese agri-food network governance. The qualitative method was selected to examine the roles of social capital and network in the *sanchoku* system by focusing on the non-physical indicators such as the value of trust and reciprocity in the network. On the basis of the interview data with the farmers as the members of Japan Agricultural Cooperative (JA) of Wakayama Prefecture, this research argues that the *chokubaijyo* system serves as the platform for the farmers to resolve issues related to the profitability on the *chokubaijyo* JA system. In addition, the non-binding JA membership system benefits the farmers in obtaining agricultural facilities and securing sales channels with a more stable market and lower risk of operating costs. The mutual dependence on relational cooperation and *shinrai* or 'trust' were found to be significant in this agri-food network mechanism and seen as essential social capital attributes.

Keywords*: Agri-Food Network; Chokubaijyo; Direct Sales System; Social Capital*

INTRODUCTION

The study of food has a long history and has become increasingly important in recent decades. The issue of food becomes an interesting topic for various disciplines. Ridenour et al. (2014) review how Mintz and DuBois have revealed that there has been a staggering increase in food studies publication since 1984. They emphasize the importance of food studies, for both its importance to human existence and for its contribution to advancing social theory and research methods, as well as to the creation of economic and political value, symbolic value, and social construction.

Globally, the food system continues to experience changes in response to various dynamics in society, such as consumer behaviors, negotiations, and trade agreements, activities of farmer movements, and changes in agricultural technology, including the phases, process, and distribution (Andrée, 2019h). 'Local Products, Local Consumptions' campaign which reflects various levels of social and economic development and becomes a social movement where farmers, "foodies" and "locavores" build a social network with shared ethos in the community (Diekmann et al., 2017). This network can flourish with proper institutional support and be integrated into local area planning as a regional revitalization program.

The *Chisan-chishou* movement was formally sanctioned by the Ministry of Agriculture, Forestry, and Fisheries (MAFF) and JA (Japan Agricultural Cooperative) in the late 1990s. As part of implementation of the SDG's 2030 agenda, MAFF promotes it as a strategy for national food security, while local governments use it as a policy tool to revitalize rural society. Since the beginning of 2000s, several food issues, such as the incidence of product contamination by BSE (bovine spongiform encephalopathy), imported GMOs (genetically modified

organisms) food products, and adulteration of food labels by major Japanese food companies have boosted consumers' fear of food safety (Nishiyama, M., Kimura, 2005).

At the regional level, Wakayama Prefecture is one of the regions that actively promotes the *Chisan-chishou* movement, together with the JA, which becomes central marketing concept of locality to accommodate sales farmers' products to stimulate the local economy and revitalize rural areas. However, the Wakayama local government survey in 2016 to 2021 involving 3,235 households demonstrates that several problems exist, such as high number of elderly farmers (80% or more who aged over 60 years), shortage of the next-generation (the successors are mostly middle-aged and 90% of them are male), the increasing abandoned land due to aging as well as problems related to the income level of farmers (Wakayama Regional Agricultural Promotion Baseline Plan (2016-2021), 2016).

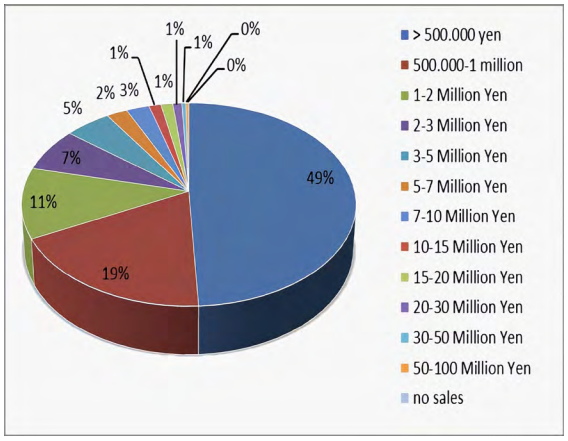

Figure 1. Farmers' income according to the scale of the number of sales of agricultural products in Wakayama Prefecture.

Source: Survey and Statistics Division, Planning and Policy Bureau, Planning Department, Wakayama Prefecture (2016)

The above data shows that among 2,173 farmers who sell agricultural products, approximately 50% have a low income of under 500,000 yen/month. Another problem that emerges in the survey is the low price of agricultural products (Wakayama Regional Agricultural Promotion Baseline Plan 2016-2021, 2016).

One of the strategies to strengthen the economic potential of local agriculture is securing the sales channel of agricultural products. *Sanchoku* or 'Direct Selling', is the concept of selling agricultural products that are distributed through a network of 'Direct Selling Outlets' or known as *'Chokubaijyo'*. This system is managed under the management of the JA Agricultural Cooperative which functions as a direct point of sale for second-class products, and it cannot be sent to the central regional agricultural cooperatives on a small scale.

This distribution system is a development from the previous conventional system. Agricultural products are distributed through a central market by JA that focuses on large-scale and full-time farmers for mass production purposes in a contract system with supermarkets and other wholesale retailers. Relationships based on 'trust' keep the cooperation in direct selling networks smooth, and this is the reciprocity of social networks. Dependency works are vital because cooperators can form a mutually consistent motivation, which allows the coordination of individual members' behavior to be centralized. This research aims to address the following research question: "How do social capital and

network in *Chokubaijyo* system play a role in promoting sustainability of the collaboration between the farmers and the JA Agricultural Cooperatives in the management of the agri-food network in local area?". This research further explains how substantial efforts are made to encourage agricultural promotion in the distribution mechanism of local products. Therefore, this research focuses on elaborating how it functions through this case study of the *Chokubaijyo* system for sustainable cooperation between farmers and the JA Agricultural Cooperative in governing a regional agri-food network.

METHOD

Qualitative method can play an important role in understanding epidemics like COVID-19, the people involved in them, and effective solutions and strategies (Teti et al., 2020). Using a qualitative method, the researchers conducted a case study of fruit farmers who are members of the *Nougyou Kyoudo Kumiai* or JA (Japan Agricultural Cooperative), and take part in the *Chokubaijyo* direct sales system network in Wakayama Prefecture.

Japan is a major *mikan* (oranges) producer, and the *mikan* is one of a few Japanese fruits to be exported in considerable quantities. Wakayama Prefecture is Japan's top *mikan* producer. According to 2019 Wakayama Regional Government data, Wakayama was ranked first at the national level as the biggest producer of fruits, especially several types of oranges (such as, *Hassaku*, *Seminole, Jabara*), persimmon, peach, fig, and *ume* (plum). However, Wakayama farmers have been facing several problems related to the agriculture issues, such as the low amount of farmers' income and the low selling price of agricultural products. Lately, business competition between *Chokubaijyo* and supermarkets is getting higher. If the competition gets tougher, there is a possibility that the number of *Chokubaijyo* will decrease.

The COVID-19 pandemic has brought about many changes and disruptions that are unprecedented and difficult to predict, while qualitative researchers face challenges as well as unique opportunities in data collection. The need to comply with health protocols and social distancing measures limits the ability of researchers to conduct investigations and forces to shift from face-to-face data collection to other forms of data collection such as video or internet-based desk research. As a general rule, computer-mediated communication offers greater flexibility in the timing and location of data collection which can also adapt to health and security restrictions.

To overcome research problems during the COVID-19 pandemic, zoom as a video conferencing platform was chosen for interviews with Wakayama farmers, which was conducted in Japanese language. The researchers also conduct internet-based desk study to observe how *Chokubaijyo* activities and practices at the JA Kinan branch were guided by related JA staff. Several barriers were found during the data collection period, such as, finding and approaching informants who have never met in person

and gaining the trust for online interviews as well as technical constraints during the interview process with time adjustments to farmer's business, especially during the growing season (February-April 2021), and understanding Japanese culture and language with multiple dialects. Despite some of these challenges, online interviews via video conferencing were successful and provided a valuable data to this research.

How Does Direct Sales System *Chokubaijyo* work?

Comparison of the characteristics of the distribution channel of sales of conventional food products in general with the direct sales system *'Sanchoku'* Ordinary cooperative and JA can be seen in the following figure.

According to the above-mentioned figure, we can see that the conventional or mainstream sales distribution generally has a long groove, with low profit, however relatively stable. The *sanchoku* distribution other cooperatives in general, the flow is shorter, higher profit, but the risk of selling is on the cooperative. Moreover, the *sanchoku* sales flow through *Chokubaijyo* JA has the advantages of producers and consumers becoming close (connected), farmers bear the selling risk, can be more profitable because of low operating costs, and not for big party sellers.

In the conventional market distribution process, a vast complex mechanism with many parts carries and distributes the product from the farmer's field to the point of sale. Although in terms

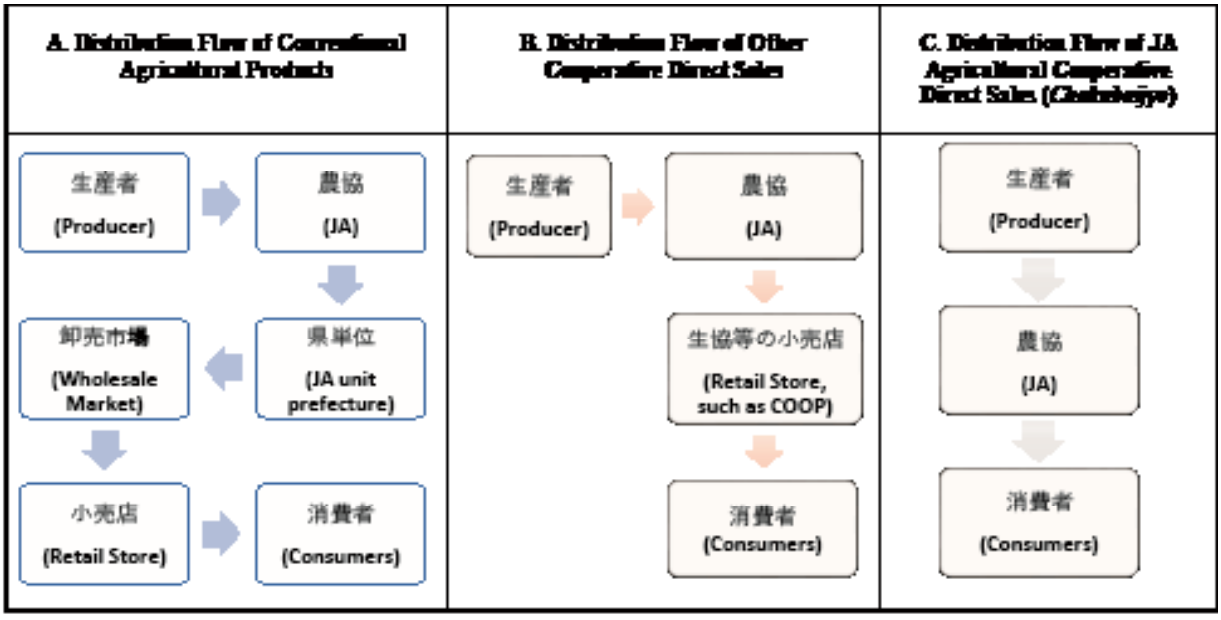

Figure 2. An illustration of the comparison of the flow of distribution types of agricultural products in the *'sanchoku'* system, JA Zenchu (Central Association of Agricultural Cooperatives)

Source: Yamamoto (2015)

of demand stability, conventional markets possess market opportunities with a broader reach and not only limited to local areas. It also allows greater product demand, especially at certain times. However, this distribution channel has a weakness, namely increasing the margin of intermediaries because many business actors are involved in the process from producers to consumers. Costs are cut at each chain and the revenue earned by producers is reduced.

Meanwhile, through the shorter Chokubaijyo distribution chain, the percentage of profit received by producers is higher, and farmers make their own deliveries. In addition, producers can understand consumer preferences directly, or vice versa, consumers can get more information about farmers through the information listed on product packaging. JA as the cooperator is responsible for managing Chokubaijyo to get a profit in the form of a fee of 15-20% from the sales margin of quality products and gets a permanent supply network from farmers as partners with product standards mutually agreed in the contract.

This 'contractual safeguard' pattern allows cooperators to provide means to test willingness to commit and to ensure some continuity based on a relationship of trust which in Japanese society is called "Shinrai kankei" or a "relationship of trust" in the consignment contract. In this cooperative, they have a prerequisite function to collaborate with supply chain subjects, guarantee sales, and form an agreed network carrying out all other related activities. *Chokubaijyo* as direct selling outlets are generally classified into two types, i.e., privately owned direct selling outlets and those operated by groups and companies.

1. *Chokubaijyo (Direct selling outlet).* This type is privately owned direct sales outlet operated by individual manufacturers where producers or farmers who wish to sell their products can start by using the location where they live or specific locations and can sell their products without a manager.
2. *Groups and companies operate Chokubaijyo (Direct selling outlet*). In this type of direct sales, farmers as producers cooperate with certain organizations or trading companies that are responsible for selling products that are distributed based on consignment agreements. Furthermore, this type is classified in several forms as follows:

Table 1. *Chokubaijyo* classification in general, and some of its advantages and disadvantages

グループや企業が運営する直売所 (Direct sales outlet operated by groups and companies)	Advantages and Disadvantage
a) 地産地消型／*Chisan-chisho* community type (Local production for local consumption); This is a type of direct selling outlet that provides local agricultural products to local people. Farmers voluntarily form and run communities.	(+) This type has several advantages of minimal shipping costs (characteristic of *chisan-chisho* or local production for local consumption), creating a platform for the elderly and women to play an active role. Even small-scale farmers can easily produce and ship according to their own working capacity and farm situation. (-) A limited trading area.
b) 組織運営型／Organizational management type; The operators are *Chokubaijyo* (direct selling outlet) companies or producer groups, such as *Chokubaijyo* managed by the Japanese Agricultural Cooperative (JA).	(+) Can expand sales opportunities because it captures a broader range of consumers with a standardized system and promotional facilities. (-) Local producers of the same area produce the same types of agricultural products simultaneously, as sales opportunities develop, more people ship, which will create increased competition.
c) マルシェ型／Marche type; This model is typical of Marche (the concept of a place to eat or restaurant that provides a menu with fresh ingredients and can be enjoyed directly by consumers), which is often seen in cities, and generally, this model was chosen because the producers and the *chokubaijyo* are far apart.	(+) There are many consumers from a more expensive and varied market so that demand is stable. (-) The distribution costs are high due to the relatively far distance between the producer and the direct sales outlets.
d) インショップ型／In Shop type; This type sells agricultural products from individual producers in an area that resembles a supermarket.	(+) Many consumers can take it directly according to taste (-) In terms of price, it is generally more expensive than ordinary *Chokubaijyo*.
e) 観光地型／*Chokubaijyo* at a tourist location; This type refers to direct selling outlets that are generally located in station areas, roadside areas in public facilities, and agricultural products and processed products and local souvenirs are the main commercial products.	(+) It sells according to the demand for tourism objects. (-) Tourists are the main consumers in the tourism business, making it difficult to get regular customers.

Regarding the constraints of *Chokubaijyo*'s management, according to MAFF data (2005), there are at least 77.4% of the obstacles faced by *Chokubaijyo* as one of the Japanese local product sales systems, namely the problem of quantity (member farmers) which has decreased (due to high depopulation). Besides, the sluggish number of buyers was 42.7%, and followed by maintenance and expansion of production areas and facilities related to marketing problem by 32.6% (Ministry of Agriculture Forestry and Fisheries, 2005). Through interviews with Wakayama fruit farmers, several obstacles were found in increasing production factors and problems in distributing agricultural products through the *Chokubaijyo* network. Among them are product quality standards that demand a more specific and difficult production process for farmers, low prices of fresh and good products, and other obstacles that have also been confirmed by JA such as mismatch problems in supply quantities in certain seasons, handling of leftover products that cause food loss, and sales strategies to face competition in the increasing e-commers platform in the digital era.

Theoretical Frameworks: Social Capital and Network

Economic phenomena, especially the ones related to the production, distribution, exchange and consumption of goods and services as resources are widely discussed as part of the economic sociology. In a perspective that includes personal interactions, groups, social structures, institutions, and social control, then develops rapidly and contributes in critically analyzing how issues related to socio-economic development continue to develop. In particular, this research aims to explain sociological ideas in community economic development, particularly in Wakayama Region, Japan.

Social capital has a positive influence on actions taken collectively with potential cost efficiency, fostering a strong norm of reciprocity; access to the flow of information such as how the actor's reputation in the past; and become a consideration and foundation for future cooperation (John Field, 2008). Social capital has a value in social relationships, but reciprocity is required to support such relationship. Rules of behavior such as norms and trust are required. One of the essential characteristics dealing with social capital is how people use and generate social capital to socialize collective goals, values, and identities.

They can be grouped into 3 key points: first, as a resource for local development and poverty alleviation capital; second, as a source of social change; and third, to define new and measure social capital to include contextual factors, such as value, strength, and collective identity (Christoforou & Davis, 2014). Putnam based the idea of social capital as a starting point as well as an end goal, providing a control system to ensure collective (organizational) action goes together while minimizing opportunism (Van Dijk et al.,

2019). While Putnam makes social capital an organizational feature, Granovetter uses networks as a tool to construct social structures and works to provide quality information access to potential resources, which can also have an economic impact (Granovetter, 2005). Karantininis (2007) argues that 'solidarity,' 'altruism,' 'loyalty,' 'reciprocity,' and 'trust' are some of the most appropriate elements that best describe why a 'network' exists and functions in a cooperative mechanism.

Since there is a connection between reciprocity and 'trust', it is, therefore, considered necessary to connect between those two in a dynamic context where cooperatives are formed and developed in specific ways. Members can maintain 'freedom' along with 'reciprocity' and 'trust' that determine how cooperatives evolve (Olesen, 2007) because some members will exit the cooperative before the full benefits from their investments are harvested (the horizon problem.

Prayukvong (2005) analyzes the concept of social capital and its urgency in the relationship among conventional marketing systems of agricultural products in Japan and comparisons between conventional and alternative marketing systems in the *Sanchoku* (direct sales) and *Teikei* (community-supported agriculture) schemes. There is a difference between conventional and alternative markets, such as the level of accumulation of social capital in each system. Japan has a large amount of cognitive social capital in the form of norms and values that allows the country to be a group-oriented society. These elements of social capital are also embedded in mainstream markets helping the performance of exchange systems and reducing complex environmental uncertainties (Prayukvong, 2005).

However, along with market dynamics, the mechanisms driven by profit-oriented businesses and maximizing economies scale have also diminished the importance of social capital. On the other hand, alternative market systems such as *Sanchoku* provide opportunities for the accumulation of social capital as a platform for creating humanity, ecological, and societal value of local community.

The case study in Saitama Prefecture (Shigeyuki Naito et al., 2005) reveals that the local government agricultural policies play a fundamental role to promote local agriculture to improve rural life, producers and farmers, with all components involved in local communities ranging from processing, retail, and consumption. However, local budget constraints are tight and small scale, demanding that local governments and stakeholders with the jurisdiction of MAFF encourage *Chisan-chishou* by making it practical to access information, establish networks, promote and improve production and distribution systems (Shigeyuki, N. Takehiro, F., Kajiura, 2005).

DISCUSSION

Wakayama Prefecture JA Agricultural Cooperative

In Japan, some studies verify that a new

type of social capital has increased since the 1980s (Inoguchi, 2000, 2002). This situation appears to be different from what was found in the United States (Putnam, 1995). In Japan, the study of social capital has a micro-level where the individual is the unit of research and a macro-level approach where the group or society is the unit.

In the economic context, there is a peculiarity in the Japanese-style business-to-business relationship called "affiliation". The relationship of '*shinrai*' (trust) is based on goodwill, which is a mutual trust relationship with a written contract agreement, which is a unique and robust reciprocal relationship between companies. In business relationships and inter-organizational relationships in corporate management, trust is a key concept when it comes to business sustainability (Wakaba, 2016).

There are various definitions of *'shinrai'* as social capital indicator. Kanemitsu in Nishihide (2006: 31) for instance, refers social capital as "an effort to build social networks and an emerging relationship asset that is acquired through power and brings benefits and advantages to individuals and groups." Yamagishi & Misumi (1994) defines 'trust' as "an expectation of the other party's abilities" and "expectation of the other party's intentions". In other words, general trust that develops in situation where there is no information about the other party will be reciprocally based. Reciprocity therefore cannot be built without trust. He points out that for the norm of reciprocity to take root, it must be supported by social intelligence (Yamagishi & Misumi, 1994).

Furthermore, it is necessary to collect information about the reliability of interaction partners to improve social intelligence. It is also required to assess credibility to create a common norm of reciprocity. Information is therefore essential. The general norm of reciprocity is "supported by a close network of social exchanges" (Kitami, 2009). The partnership cooperation JA has promoted since 1951 is known as the "JA Joint Sales System Campaign," has three main principles; (1) unconditional consignment, (2) average price, and (3) calculation of joint profit. The partnership aims to provide appropriate take-home payments for farmers, adjustments to seasonal price fluctuations, eliminate brokerage profits deemed unreasonable for traders, and develop sound organizational management.

However, since the mid-1980s, the distribution system for agricultural products has been liberalized due to free-market policies. The growing deregulation has made competition for the sale of agricultural products tighter (Tanaka, 2013). Most of the prefectural cooperative and agricultural associations were chosen to serve as *Chokubaijyo* (direct selling outlets) to solve the problems in the agricultural cooperative sales business, mainly when it comes to the competition among production areas at the prefectural level. In addition, JA responsible

for product development, and the Economic Unit for marketing activities. Therefore, the distribution power of agricultural cooperatives was highly dependent on Japanese cooperative dispatches, especially those coordinated by the rural headquarters in each prefecture.

In recent years, according to statistics data from the consignment sales center, there has been a gradual decline in the volume of JA sales transactions. There are two reasons. Firstly, JA have the rights to accept consignment sales from union members, to subcontract sales to federations, or to sell independently to the wholesale market. JA income is the amount of sales times the commission rate, meaning the highest possible sales will increase the cooperative's income. However, as market sales prices fluctuate wildly, there are an increasing number of cases where individual customers (e.g., mass retailers, restaurants) sell at a fixed price as per the previous contract.

Therefore, to keep the supply chain of local agricultural products stable and sustainable, farmers' role as suppliers is critical. Secondly, the sales ratio of agricultural cooperatives and the transactions volume of agricultural products is 49%. This number shows a gradual downward trend as shown in the following figure.

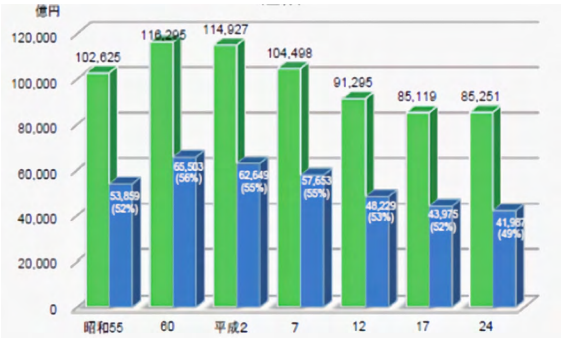

Figure 3. Total agricultural products and changes in the supply of agricultural cooperatives of all types of agricultural products, Ministry of Agriculture, Forestry and Fisheries

Source: Okayama (2016)

The above statistical data from 1980-2012 (Showa 55 to Heisei 24) illustrates the steady decrease in both the total agricultural income from all type of agriculture product (shown by blue bars) and the number of JA/cooperative agricultural transactions (shown by green bars) since the 1990s. In response to the declining sales of agricultural products experienced by JA over the last ten years, JA conducted a nationwide survey in 2020 on the impact of the corona pandemic on sales business through *Chokubaijyo* JA, especially how the pandemic has affected sales of agricultural products. The survey was conducted from June 15 to 30, 2020 and 193 JA participated as correspondents. The data on "Impact of the Corona Pandemic on the organization, business and operation of agricultural cooperatives" indicates that 54 JA or more than half of the participating

Chokubaijyo (53.5%) experienced decreases in sales rate. Among the highest number, 23 JA (22.8%) and 7 JA (6.9%) recorded "10% or less" and "31% or more" sales decrease respectively.

The challenges faced by JA made them carry out several policy reforms and group optimization in each prefecture in general. One of them is the JA Wakayama Prefecture. JA carries the vision of becoming an agricultural cooperative that can contribute to agriculture and regional development with the trust of local communities through a comprehensive project centered on agriculture. JA reform the business and management and collaborate with regional organizations to achieve sustainable local agriculture.

There are 8 JA branch offices in each city of Wakayama Prefecture, namely, JA Wakayama, JA Nagamine, JA Ki no Sato, JA Kihoku kawakami, JA Arida, JA Kishu, JA Kinan, and JA Mikuma, with the total number of regular members of 63,576 people, and members of the association is 150,534 people. Several JA *Chokubaijyo* branches actively promote superior regional products, agricultural headquarters, petrol stations, and agricultural machinery centers. Farmers can become regular members of each local cooperative unit, and non-farmers can join the association.

All members, be the regular (*seikai-in*) or associate (*junkai-in*), and those who have experience with small, medium and large-scale farms or the complete beginners could take some privileges. They include access to information sources related to agriculture, guidance, counseling, and the opportunity to participate in the local empowerment program and activities, such as those carried out by *Joseikai* or the women's association at the Wakayama Prefecture JA Agricultural Cooperative. In the interview with the Head of JA's Sales Division, he gave an explanation of some advantages of being a *Chokubaijyo* member, as follows:

> *"Farmer who is a member of JA can sell at Chokubaijyo JA. If they are not a JA member, they cannot supply their products to JA, but about 80% of farmers in this area are members. The advantage is that farmers can introduce the appeal of their products and determine the price themselves, and there is no minimum product limit. For the elderly who are interested in farming after retiring, they can distribute their agricultural products, and get information related to the results of direct sales from JA". (I7)*

In addition, JA members also have the flexibility to distribute their agricultural products to any partners or create individual *Chokubaijyo* routes. This was also confirmed by informants 4 and 5 in the interview, along with the excerpt:

> *"I am a regular member of JA. I have been doing organic farming for almost three years and continuously sell it in Chokubaijyo. I was a teacher at the Special School for people with disabilities. Being a JA member allows me to get much information, such as how the process and stages in agriculture. JA is helpful in connecting farmers and officers from technical institutions to provide direction on agricultural technology, and because other farmer colleagues participate, it makes it easy for fellow farmers to connect. Yes, information exchange." (I4)*

Van Dijk explains how important social capital is for collective management by empowering appropriate resources and for examining the 'trust' and reciprocity (as a pre-attribute of social capital) in the performance of a cooperative organization (Van Dijk et al., 2019). This becomes an essential requirement for smooth member cooperation and reduced transaction fees. This factor is closely related to the reputation of JA, where farmers as a member are very concerned about their social reputation and how to engage, and make a strong mutual obligation, and are more active in cooperative activities. Even the farmers are easily trusted other members for their reputation in the cooperation at that time.

> *"I am a member of the association. It has been 55 years of farming oranges. The advantage is that they get information and take advantage of the subsidy system. For example, farmers will open land to grow oranges in several locations in their area. They report to local officials beforehand, and farmers can get 40% of the required cost. There is no need to own shares or savings funds, and there is no need to return aid funds when the farm is productive and profitable or there is a need to distribute agricultural products to JA. "(I5)*

This claim was confirmed by the Head of JA's Marketing Division. JA members will benefit from the farm and can buy agricultural raw materials from JA, get a subsidy of 10% or more, and receive direct guidance from JA instructors for free while in the field. According to him, only JA has this kind of program. Barton defines cooperative as 'member owned' operation as its user, and the controlled business 'distributes benefits' on a 'utilization agreed'. The three components of this definition show that cooperatives are related to the concept of social capital. The cooperative's purpose is not to profit the particular capital owner or benefit to a group of members only.

This benefit is distributed proportionally and based on a democratic concern of protecting the right of all members. Ownership, profit sharing, and control all indicate the social relationships between cooperatives and members as well as among the members. Its members run their agricultural businesses, not anonymous financiers (Nilsson et al., 2012).

Another convenience for farmers interested in opening their *Chokubaijyo* can be done independently, for example, by starting at home or in agricultural areas to locations in public places such as on station roads. However, according to farmers, this has several shortcomings, including the need for more human resources and *h*igher operational costs. Farmers must be fully responsible for sales, including promotions and practical yet efficient ways to find consumers that match their market.

> *"No permission is needed. All it takes is name and registration only. I think it is easy to do. I can do it, but I have been very busy farming. In that Chokubaijyo way, I had to come and bring home the unsold, sometimes the much time-consuming ones. So I sell them through Chokubaijyo online. Oh yes, there is an obligation to pay retribution too. " (I2)*

> *"In Chokubaijyo, I set the price myself, there is no problem in selling, but I have to bring the product, pick up the unsold items, make the delivery, and bring it home again. The*

farmer works from 5 am, so I have no choice but bring it. If many family members are at home, one will bring them or apologize when they cannot because the farm is busy. And if it does not sell, sometimes it cannot be picked up by my truck". (I3)

"I think one of the problems is, and it takes much time because I have to pack it up and label it, and set a night's sleep every day so that many products can be delivered on time." (I2)

According to Fukuyama, 'trust' appears in the community through regular, honest, and cooperative behavior based on shared norms. This value of trust has an economic effect because it cuts transaction costs (Van Dijk et al., 2019). Trust as social capital becomes the starting point for healthy relational relationships in the *Chokubaijyo* JA network. On sales cooperation through the *Chokubaijyo* system, the business between farmers and JA's sales adopts "three principles".

1. *Unconditional consignment sales*. Unconditional consignment sales are those in which farmers consign sales to JA without any conditions. When Mr. A ships tomatoes to JA, he leaves it to JA's free judgment without specifying the selling price, timing, and sales destination. JA aims to realize a favorable price by collecting a large number of tomatoes and shipping them in a planned manner.

2. *Joint calculation*. It means that even if the quality of agricultural products is the same, the price will differ depending on the day and market, so the average price within a certain period will be settled to the union members.

3. Full system utilization. It means selling all agricultural products sold by farmers through JA.

Furthermore, this social capital makes it easy to understand contract systems, or complex technical matters, protects against risks or unforeseen possibilities, minimizes disputes, and avoids certain things that have the potential to become a problem. This 'trust relation' (*shinrai kankei*) also facilitates its members to 'innovating in the organization' to allow the emergence of various kinds of social relationships.

In JS sales system, distribution is systematized and standardized, with facilities provided through regulations and contracts that have been agreed. *Chokubaijyo* JA selling fresh and good quality products are not always accompanied by high selling prices farmers as suppliers. Profit-sharing system in *Chokubaijyo* JA and of other types of cooperatives are varied. *Chokubaijyo* JA ranges from approximately 15-20%. *Chokubaijyo* of other types cooperative reach 40%, and this depends on the type of product and the facilities offered.

"In Japan, we have a kind of consumer cooperative in called "Seikatsu-kyoudougumi" or COOP. In COOP, orange farmers and local consumers join the group and producers receive orders. For example, today, what consumers want, farmers would supply it at Cooperative. So, I produced oranges and sent them to consumers." (I5)

The presence of other competitors

of the JA agricultural cooperative in the sales business such as consumer cooperatives (COOP) which have a more specific target market, offers opportunities for members to expand the sales network as well as accessibility to certain facilities from the cooperative. In terms of quantity, the results of similar local products with a large number of supplier farmers on the same season, making the level of supply excess and impacting the competitiveness of farmers because they cannot sell at a high price as they want, while the production cost is increased to produce good products that can compete in the market.

Meanwhile, through *Chokubaijyo* outside JA, such as the online *Chokubaijyo* sales platform through free or paid SNS applications (Tabechoku, Merukari, Sutoa, Instagram, and others), farmers need to respond to direct complaints from buyers immediately. This makes farmers have the opportunity to establish communication, build a network with consumers, create the branding of its superior products, and determine market segmentation that can provide high profit. Market access is precious for cooperative members who have difficulty finding the right market because with this access, farmers reap significant tangible benefits on economies of scale and greater motivation. Moreover, what is also very important with this market access is that farmers will realize that their efforts to maintain or improve product quality and production processes in response to consumer demand have been appreciated (Van Dijk et al., 2019).

Chokubaijyo System: Challenges and Opportunities During Pandemic Times

Then, how durable is the current state of the *Chokubaijyo* system when the COVID-19 pandemic has generally affected economic activity and weakened global and regional supply chains? Overall, the business volume of JA product sales, especially agricultural products through *Chokubaijyo* was directly affected by the pandemic.

This is also confirmed by JA survey data in 2020 regarding the impact of corona on the decline in business volume-selling JA products and its impact on agriculture and the lives of union members. The most common problem for union members regarding farming and living was 95 agricultural cooperatives (52.5%) saying that "agricultural produce is not selling well because of declining consumption and sluggish prices."

Although sales activities experienced difficulties during the pandemic, as shown in the results of the JA survey, among the *chokubaijyo* operations at most 67 JA (43.5%) had "operations as before". It also makes JAs, which provide safe and secure agricultural products, have strong ties to the local population, and half of the agricultural cooperatives are trying to operate as before, which is the largest number. "Restricted admission (priority for the elderly, etc.)" followed by 34 JA (22.1%), and "closed" followed by 15 JA (9.7%).

Stagnation of the tourism sector and

restrictions on office and school activities for some vegetable farmers significantly drop sales. However, it does not affect the sales of fruit products of online *Chokubaijyo*, even increased significantly. This expressed by one of Wakayama farmers in the following interview:

> *"Since I sell fruit via the internet (online Chokubaijyo), and buyers consume it at home, I do not think it matters... if I send the product to JA, it will affect, even for fruit. We sold half of our fruits product by the sanchoku application, and the rest was sent to JA Chokubaijyo. Due to the pandemic, the number of users of online applications like sanchoku has significantly increased, so our sales are better than before." (I1)*

Most of the informants are farmers who practice organic and environmentally friendly farming. According to the interview results, they are not affected by this crisis because they have built a stable market through alternative networks. The farmers tried not to rely too much on the *Chokubaijyo* distribution network managed by JA.

All informants developed sales channels in various ways, such as online sales, through the Consumer Cooperative (COOP) or individual *Chokubaijyo*. The crisis impact can vary according to the scale of agriculture and the level of occurrence of the COVID-19 virus cluster that is casuistic in each region. Oranges farmers in an area of Wakayama Prefecture, such as Arida, face difficulties in distributing their produce. The farmer expressed it in the interview:

> *"In my case, in Japan, the Corona cluster is in our area Arida. At Saiseikai Arida Hospital, initially, 15 people were infected in the summer of February 2020. Furthermore, because this is the first cluster, even though we sell various types of oranges to various places, however, because of this rumor, if my area (Arida) is listed, customers will not buy it, and our products will be returned. Yes, we are in that kind of a situation, so we are so affected by Corona." (I6)*

Wakayama is the largest producer of *Hassaku* oranges in Japan, including persimmons and plums, which is tend to sell higher. In an interview, one of the novice farmers revealed that one of the difficulties in competing with fellow local products was that types other than superior local products, such as decreased sales of vegetables and rice, and the distance factor that makes it less efficient to ship directly to JA's *Chokubaijyo* branch in the area. So, the logical choice for farmers to strengthen competitiveness is to expand the network through an alternative network such as online *Chokubaijyo*, which provides more comprehensive access to a promising market.

Among the various challenges faced by farmers and cooperators in the practice of the *Chokubaijyo* system, the conceptualization of the essential values of social capital tends to start to shift due to the impact from the economic side implied by the sale of *Chokubaijyo* JA, where this system is still considered not providing an appropriate profit for farmers. We can assume it can indicate decreasing social capital in its vertical and horizontal integration, creating a gap between members and cooperatives, leading to less mutual trust and weakened democratic management, and more difficult, solving problems in collective action, since changing markets

very often requires the processing of value-added agricultural products. Without such expansion, cooperatives may not be competitive enough.

Network in Local Food Governance

Networks can be used as an analytical tool, as a form of governance. One literature in which the concept of "network" is used in economic sociology (Smith-Doerr & Powell, 2010) distinguishes the two main approaches to studying networks. This approach through the concept network is based on the fact that financial activities and their results are embedded in financial entities. It is said to be strongly influenced by the relationship between tissue and structural characteristics (Granovetter, l992: 33).

Automatic mechanisms include competition between two *Chokubaijyo* subjects, the influence of JA's reputation, and other informal organizations that enter the food distribution chain such as factoring' association,' multi-party governance support, supplier associations, franchises, consumer cooperatives (COOP) and others.

In this kind of agri-food governance, members and cooperators implement interdependence through 'co-investment. This investment can be interpreted as physical capital value or non-physical (which refers to the social capital such as 'trust') in the membership system in an open relational contract, without any very burdensome sanctions.

Second, the complexity of the assignment between the two partners and coordination across borders or between organizations (e.g., JA and the COOP/ Consumer Cooperative) requires joint planning and governance to ensure the effectiveness of ongoing contracts. Third, an adequate information system between recipients and resource managers becomes central power for sustainability network governance that is healthy. With several issues faced, there is no doubt that JA's transaction volume of agriculture products has decreased, but the positive impact is that both management lines (*Chokubaijyo)* managed by JA organizations and individuals) continue to grow into major players in the local community.

Networks and Cooperatives

Ménard in Olesen (2007) because some members will exit the cooperative before the full benefits from their investments are harvested (the horizon problem defines cooperative as a hybrid because cooperators pool resources, use contracts for coordination, and incorporate competition and cooperation. Cooperatives become vehicles for achieving their goals by integrating contract, coordination, and membership systems that allow passaging another alternative, such as *Chokubaijyo*. In this scheme, fellow farmers and JA become not only partners but also competitors in the distribution chain of agricultural product sales. Then what about the inter-organizational network? Does JA have an advantage when forming or participating

in the network at this level? A network between companies is a way of managing interdependence between companies (Grandori, 1997).

According to Yamada (2017)'s study on collaborative cooperation between Agricultural cooperative unions and Consumption Cooperatives in Miyagi Prefecture, the problem of decreasing farmers in production are getting worse due to aging population and competition among *Chokubaijyo* at the regional level. The coordination and cooperation among cooperative organizations in advancing regional agriculture, with exchange agreements between union members, are therefore highly recommended.

A case study on the cooperation among cooperatives in supporting environmentally-friendly rice farming shows that the deepening of relations between the two unions would lead to the development of *Chisan-chishou* (local product consumption), maintain the stability of direct production transactions and the efforts to increase consumer interest in agriculture as well development of various Agricultural Consumer Cooperatives (COOP) direct sales in the future (Yamada, 2017) 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).

According to the researchers, the present case study can refer to two possibilities. These collaborative efforts can be strategies for both business unions to overcome unfair competition in the same market or become a catalyst for the competition from the two unions' business behavior, which then could turn to be joint action to share risks. However, managing this network is crucial to activate the activities of members of the two unions to support cross-product distribution and improve the efficiency of local businesses. *Chokubaijyo* appears as a form of agri-food network governance that has advantages over the market and hierarchical patterns in which they can adapt, coordinate and carry out a 'safeguard exchange.'

It is reflected in two characteristics of agricultural cooperatives that are important in the functioning of the network, namely the dependence of cooperatives on reciprocity and how 'trust' and dependence are carried out. The positive impact of coordination and integration between social networks can also be seen in the rural area revitalization project through empowering local agriculture, which turns out to be able to support green tourism in terms of providing staple food products to tourists. Successful tourism promotion will bring in more tourists and stay longer, so there will be more demand for staple food products which will come to the agricultural sector (Bhakti & Iskandar, 2020).

CONCLUSION

To advance regional agriculture comprehensively, *Chokubaijyo* JA Wakayama system could be the right way to improve the welfare of its members, as well as an instrument to increase the bargaining position of farmers in facing competition with big capitalist businesses. With a more reasonable price system and better risk management in the future, farmers can get social and economic justice, through distribution of income in a direct sales business network that helps farmers survive and excel in the local area. For JA Wakayama, who maintains its characteristics of local products as fresh, quality and inexpensive products, maintaining a network by keeping the trust of farmers as suppliers in healthy relational relationships is a crucial way to increase the sales margins of JA products which have decreased in recent years.

The *Chokubaijyo* system supports local farmers in accessing alternative distribution networks to reduce risk, build resilient food systems during times of crisis, and reduce producers' and consumers' dependence on global food markets with vulnerable supply chains.

For JA, the regional market, which is increasingly full of competition and the effects of a series of crises during the pandemic on the vulnerable sales of its direct sales system, makes JA have to re-evaluate its direct sales system and develop a more effective marketing strategy to promote a more differentiated sale of products to minimize surplus agricultural products. It is also important to provide the type of *Chokubaijyo* that offers the solution for farmers in facing the unpredicted condition of a broader market caused by pandemic, and this becomes alternative for local farmers for distributing their products. It also cuts the distribution chain from long, time-consuming, and high cost, in order to reach their consumers, to a shorter time, cost-less and small risk, avoided additional cost of a long distribution chain.

Through the analysis of *Chokubaijyo* relational contract, this research argues that 'trust' as a fundamental attribute of social capital is a prerequisite for building networks between farmers and JA to achieve common goals. In this context, 'trust' is redefined as 'willingness to accept' each party's actions in achieving its economic and social roles and 'granting' access to resources that allow the network to benefit both parties with clear rules of the game. On the one hand, this indicator of social capital and networks is a 'safety guard' that maintains the sustainability of the network's governance. On the other hand, this may also lead to a tendency for business behavior to lead to opportunism by cooperators, in this case, JA with multipurpose businesses and a more favorable market position.

This can indirectly be a threat to the essential concept of the cooperative, namely the value of loyalty and solidarity within the group, where these values were born from the diversity and willingness of farmers to accept common goals. Maintaining and nurturing this network is an effective way for the two important subjects of the

agribusiness distribution chain to support the distribution of local products and increase the efficiency of local businesses. Farmers can easily and successfully develop alternative pathways to maintain the sustainability of their business, and JA with a small volume of direct sales accepts this as farmers' efforts to maintain the stream of their source of income.

With the similarity of the character of the Japanese people who maintain social and cultural values in promoting a sustainable agriculture-based economy, Indonesia with the big potential of human resources has a great opportunity to utilize extraordinary natural resources to be more profitable. This could be targeted, especially, for the welfare of the agricultural community through the adaptation and implementation of direct selling strategies with a more relevant and effective system.

REFERENCES

Andrée, P. (2019). *Civil society and social movements in food system governance.* London & New York: Routledge

Ayu Saraswati Bhakti, B., & Iskandar, K. (2020). Cultural and tourism attraction in workaway projects as a sustainable agriculture development attempt in rural area: A case study of a Workaway Project in Yufuin. *E3S Web of Conferences*, *211*, 1–13. https://doi.org/10.1051/e3sconf/202021101030

Christoforou, A., & Davis, J. (Eds.). (2014). *Social Capital and Economics: Social Values, Power, and Social Identity (1st ed.).* London: Routledge. https://doi.org/10.4324/9780203505014

Diekmann, L., Bennaton, R., Schweiger, J., & Smith, C. (2017). Involving extension in urban food systems : An example from California. *Journal of Human Sciences and Extension*, *5*(2), 70–90.

Grandori, A. (1997). An organizational assessment of interfirm coordination modes. In *Organization Studies, 18(6)*. https://doi.org/10.1177/017084069701800601

Inoguchi, T. (2000). Social capital in Japan. *Japanese Journal of Political Science. 1. 73 - 112. 10.1017/S1468109900000141*

Japan Ministry of Agriculture Forestry and Fisheries. (2005). *Interim report of local production for local consumption promotion study group. Retrieved from https://www.maff.go.jp/j/study/tisan_tisyo/pdf/20050810_press_5b.pdf*

John, F. (2008). *Social capital 2nd edition key ideas (1). New York, Routledge*

Ministry of Agriculture Forestry and Fisheries. (2005). *Interim report of local production for local consumption promotion study group*.

Nilsson, J., Svendsen, G. L. H., & Svendsen, G. T. (2012). AAre large and complex agricultural cooperatives losing their social capital? *Agribusiness*, *28*(2), *187–204.* https://doi.org/10.1002/agr.21285

Nishiyama, M., Kimura, A. (2005). *Alternative agro-food movement in contemporery Japan (The technical Bulletin of the Faculty of Horticulture, Chiba University)*

Okayama, N. (2016). 日本の農業協同組合 Japanese Agricultural Cooperative, 株）農林中金総合研究所. *Norinchukin Research Institute, pp. 1–34*

In K. Karantininis & J. Nilsson (Eds)., *Vertical Markets and Cooperative*

Hierarchies. Springer, Dordrecht. https://doi.org/10.1007/1-4020-5543-0_14

Prayukvong, W. (2005). Alternative marketing systems for organic agricultural products in Japan: Accumulating social capital to protect the ecology. Kasetsart J. (Soc. Sci) (26)

Rencana Dasar Promosi Pertanian Wilayah Wakayama (2016-2021). (2016).

Ridenour, L. M., Carolan, M., Cross, J., Reynolds, L., & Miller, J. (2014). *The sociology of local food and transformational engagement: A case study of the rise of the local food movement (Thesis Corolado State University, Corolado)*

Shigeyuki, N., Takehiro, F. & Kajiura, N. (2005). Development and role of "local production for local consumption" promotion measures in local governments. (miring) Agricultural Market Research 14(1)

Smith-Doerr, L., & Powell, W. W. (2010). Networks and economic life. *The Handbook of Economic Sociology*, 379–402.

Tanaka, Y. (2013). *Koperasi antara organisasi koperasi modern dan masyarakat lokal dalam pengoperasian Direct Selling Outlet, Penelitian Berfokus pada kasus Prefektur Fukuoka,* (Repository Tokyo University of Marine Science and Technology. Retrieved from http://id.nii.ac.jp/1342/00000631/ (Repository Library Tokyo Univ. of Marine Science & Technology)

Teti, M., Schatz, E., & Liebenberg, L. (2020). Methods in the time of COVID-19: the vital role of qualitative inquiries *International Journal of Qualitative Methods*, *19*, 1–5. https://doi.org/10.1177/1609406920920962

Van Dijk, G., Sergaki, P., & Baourakis, G. (2019). *Cooperative management the cooperative enterprise practical evidence for a theory of cooperative entrepreneurship. Switzerland: Springer*

Yamada, Y. (2017). *Agricultural development through cooperation between agricultural cooperatives and consumers cooperatives In Japan: Focusing on direct marketing of agricultural products (ga miring) (International Seminar of Enhancing Agricultural Cooperatives Roles in Response to Changes Food Consumption Trends, September 8-22, Taipei, Taiwan)*

Yamagishi, T. & Yamagishi, M. (1994). *Trust and commitment in the United States and Japan. Springer Link. Retrieved from https://link.springer.com/article/10.1007/BF02249397#citeas . doi.org/10.1007/BF02249397*

Yamamoto, M. (2015). *Current status and issues of agricultural product distribution (ga miring) (Report JA Central Union of Agricultural Cooperatives). Retrieved from https://www.mlit.go.jp/road/ir/ir-council/automatic-driving/pdf04/01.pdf*