The role of collaboration in developing agricultural competitiveness and welfare

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Abstract

Given its high cost, producing and supplying organically grown and naturally cultivated crops is considered a challenge in Japan. The vegetables that *Yamanobu-Shouten Co., Ltd.* sells through its food retailing business *Supermarket Yamanobu* and its affiliated restaurants are produced by an affiliated agricultural production corporation, *Midori-no-Sato*. As a result of *collaboration between agriculture and welfare (CAW)*, *Midori-no-Sato* has successfully achieved low costs while adopting a natural farming method.

The CAW process began by matching the goals of the agricultural corporation, which required farm laborers, with those of a welfare organization looking to rehabilitate mentally disabled people. During the process of setting up the CAW, the two sides built a smooth relationship and launched the partnership under a community concept. With this, the agricultural corporation could manage its mentally disabled workers. Therefore, the CAW has increased the value of the community's internal resources, enabling it to increase production and expand sales channels. We also analyzed the concept of management control system as proposed by Merchant and Van der Stede (2012). Furthermore, this study showed that the success factors of social collaboration, as pointed out in previous studies, are included in CAW.

Keywords

Collaboration, Management Control System, Cost Reduction, Agriculture, Welfare

(1) Introduction

Since the announcement that Tokyo will host the 2020 Olympic Games, there has been increasing attention in Japan on organic farming practices and agribusinesses related to this approach, to cater to the specific needs of players, who are expected to arrive in large numbers as a result of the Games attention in Japan has focused on farming without agricultural chemicals, and agribusinesses related to this approach. health consciousness consumers has also been growing, increasing the demand for agricultural products grown using only

pesticides. However, farming without chemical fertilizers places a heavy burden on agricultural workers, since work that previously relied on chemical spraying using farm equipment is generally carried out manually.

Organically cultivated products are often labeled as "organic" in retail stores and are considered to have been produced with a farming method that does not use chemicals; for example, only organic fertilizer is used to cultivate organic produce (Table 1). However, "naturally cultivated farming" does not have a definition nationally accepted or established standards like organic

cultivation does. Generally, natural cultivation is considered a generic term for agricultural crop cultivation methods that pesticides or fertilizers. characteristic of both organic cultivation and natural cultivation is that the use of agricultural chemicals and fertilizer is low, thus increasing work complexity. In Japan, the aging of the population in general and the shortage of successors in agriculture pose serious issues. This social background further aggravates the complexities of organic and natural cultivations.

This additional effort, in turn, affects selling prices, and organic and natural cultivation results in more expensive products. According to the Ministry of Agriculture, Forestry and Fisheries (2018), the prices of organic products are around 1.5 times as high as the same product using ordinary agricultural methods¹. As for the difference in sales, no figure is available based on a large-scale survey in Japan, but the sales of organic products is generally higher than those of products grown using other methods. Organic cultivation and natural cultivation rely on manual farming for spraying pesticides and fertilizers. Therefore, it is impossible to secure manpower for these agricultural methods unless the sales price increases. A system called collaboration between agriculture and welfare (CAW) can resolve this issue.

In this study, we focus on *CAW*, which uses the community concept to bring together agricultural corporations and welfare organizations, as an approach that

can potentially overcome this situation. Our case company has succeeded in setting up an agricultural production corporation that sells organically grown and naturally cultivated products to its affiliated supermarket business, which in turn sells these products to customers at low prices. We will examine the collaboration between this company's agricultural production corporation and welfare organizations based on the community concept and the determinants of its success. In addition, this collaboration is also affected by certain issues that are peculiar to Japanese society. It is necessary to consider these issues this within the theoretical framework of social collaboration.

(2) Previous research

In recent years, companies have started prioritizing their social responsibility. Companies their management use resources to tackle various social issues through business types or contributions. According to Tanimoto et al. (2013), to tackle social issues, companies sometimes cooperate with other companies and organizations in various sectors, such as NPOs and governments, instead of acting as a single unit.

One of these business types is called "social collaboration²," wherein multiple organizations work together to address social issues³. According to Seitanidi (2008), social collaboration involves the selection of partner organizations and mobilization of resources. In the "formation stage" of collaboration, a business plan is

Table 1 Differences in farming methods

	Regular cultivation	Organic cultivation	Natural cultivation
Pesticides	Yes	No	No
Fertilizer	Yes	only use organic fertilizer	No

(Source: by author)

¹ Ministry of Agriculture, Forestry and Fisheries (2018), p.3.

² In previous studies, there are expressions such as "Social Partnership" in addition to "Social Collaboration." All of these are common in terms of "cooperation by multiple organizations for the

purpose of solving social issues." Therefore, in this paper, the notation "*Social Collaboration*" is unified.

³ Waddock (1991), Hartman and Stafford (1997), Austin (2000), Googins and Rochlin (2000), Wohlstetter *et al.* (2005)

formulated and the business is promoted to facilitate smooth collaboration with partner organizations. The "execution stage" consists of several stages for building a simple relationship. Regarding the success factors of social collaboration, the literature has proposed the following points ⁴.

- In the formation of collaboration, it is important to select partners who share the mission of resolving social issues and to secure the resources necessary for the realization of the business, in addition to matching with the management resources of the company.
- In the planning stage—which is the formation stage of collaboration—organizations must achieve both "objective proximity" and "means necessity" for smooth collaboration. "Objective proximity" means the purpose of the project is important for each participating entity. "Means necessity" implies that cooperation among organizations is a means necessary for business execution.
- Given that organizations differ in scale and culture, it is necessary to build a

- trusting relationship through close communication among members at the execution stage of collaboration.
- In the execution stage, it is also necessary to prevent the problem of the partner organization not fully contributing to the business. Therefore, rules must be formulated for managing collaborative relationships and a business reporting mechanism established to clarify accountability from each other.

In light of the above, research on management strategies is important to lead social collaboration to success. However, previous research has rarely examined the development process of collaborative relationships 5; rather, the focus was on either the formation stage or the execution stage as the success factor of social collaboration⁶. Thus, it is clear that there is a need to investigate the success factors of both the formation and execution stages of collaboration, in general, and to examine each stage through comprehensive and detailed case study, in particular. To fill this gap, this study sets the following two research questions.

- Yamanobu-Shoten Co., Ltd. (founded in 1955, Toyota-shi, Aichi)
 - Representative Director and Chairman: Toru Yamanaka
 - Capital stock: 49.99 million yen
 - Number of Employees: 815 (including 117 full-time employees)
 - Net Sales: 10.2 billion ven (Fiscal 2016)
- Business description: Retail (store, in-house farm, and own brand (described later))
 - Supermarkets: Seven stores named "supermarket Yamanobu"
 - Agricultural production corporation: "Midori-no-sato"
 - Limited company: "Nakua" restaurant group; four stores
 - Foods store: "Ruru-Bio-Episurie Hoshigaoka"
 - Wagon retailer "Tokushimaru"
- Management Philosophy: "Freshness and safety of products"
 - Prominent responses during the surveys: "We want to deliver safe products to local customers"

Figure 1 Outline of the Case Company (Source: Created by the authors based on survey results)

⁴ Seitanidi (2008), Reinand Stott (2009), Berger *et al.* (2010), Yokoyama (2017), Hartman and Dhanda (2018)

⁵ Seitanidi (2008), Yokoyama (2017), Hartman and Dhanda (2018).

⁶ Okura (2017), Hartman and Dhanda (2018).

- a) What should companies do in the formation stage of social collaboration?
- b) In the execution stage, how can organizations with different scales and cultures establish a smooth collaborative relationship?

(3) Overview of our Case Company

Yamanobu-Shouten Co., Ltd. operates supermarkets in the seven Prefecture, an agricultural production "Midori-no-Sato," corporation restaurant groups, high-end food shops, and mobile dealers (Figure 1). Established in 1955, its head office is located in Toyota City, Aichi Prefecture. The company's goal is to achieve organizational management that contributes to the local community. Its company philosophy is "freshness and safety of products."

Yamanobu-Shouten has succeeded in realizing CAW with the help of *Midori-no-Sato* and in branding and selling products at its supermarkets—its main business.

The company has the following features.

It focuses on its regional contribution, which is influenced by the founder's philosophy. The founder continued to work after retirement, interacting with customers on the sales floor to stay

connected to his/her community. Additionally, the company actively donates to local educational organizations⁷.

The company's brand that has fulfilled its philosophy is "Gonbei-no-Sato," which primarily procures from its directly managed farm and major supplier, Midorino-Sato. The farm cultivates agricultural crops, mainly using organic cultivation and natural cultivation farming methods and sells or supplies food to group restaurants. All products are composed of agricultural crops of organic and natural cultivation. It is necessary to clear the private brand's own examination criteria. Additionally, the brand's staff has "Junior Vegetable & Fruit Meister' qualifications 8 and provides information to customers at the time of customer service. Initially, this private brand was purchasing and agricultural crops by sourcing high quality crops that met the expectations of external suppliers and vendors. However, they now have their own farms. Most major agricultural crops are supplied from their own farm, "Midori-no-sato."

Their own brand, "Gonbei-no-Sato," produces organic vegetables through natural cultivation, and, as shown in Figure 3, sales have grown significantly in

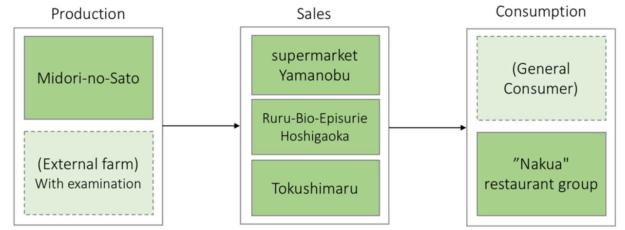


Figure 2 Realization of "Production-Sales-Consumption" Cycle for the "*Gonbei-no-Sato*" Brand (Source: Created by the based on survey results)

⁷ Donation activity as a part of regional contribution: Donation totaling 786,600 yen to local parent-teacher association groups (The 28th result; from November 21, 2018 to May 20, 2019)

⁽Source: author, based on survey results)

⁸ It is the private accreditation given by *the Japan Vegetable Sommelier Association*.

recent years. The reason is that the prices of the organic and natural products of the brand are lower than the prices of general products. Their price is generally set at 1.2–1.3 times the price of general products, which is much lower than the country's average price difference of 1.5 times (see Section 1). This is because the company does not have operate in large metropolitan areas such as Tokyo and Osaka; therefore, organic crops can be sold only at prices lower than their average price in Japan.

The company farm "Midori-no-Sato" has successfully realized such a sales price. "Midori-no-sato" produces naturally grown crops to be provided to "Gonbei-no-Sato," the main brand of the group. It was established in 2008, with five employees, including Mr. Shingo Nonaka, the farm director. Their major crops are rice and strawberries and other crops blueberries and vegetables. The biggest feature is that they cultivate all the crops by natural cultivation. As mentioned above, natural cultivation is extremely difficult to commercialize due to labor requirements and soaring prices of sales. However, they succeeded in commercialization. achieved the world's first successful commercialization of naturally cultivated strawberries without using agricultural

chemicals and fertilizer.

This is the reason behind the strong feelings and commitment to naturally cultivated foods held by the founder. The founder believes that agricultural workers, including those involved in natural cultivation. can create high quality agricultural crops; but if there is no place to sell them, there will be problems, including failure. By having places such as supermarkets and restaurants consume the products in the business group, there are places to sell the agricultural crop products, making it possible to for them to flow within the company (Figure 2).

The company believes that realization of this flow has created marketing channels for agricultural workers so that they can concentrate on agricultural production. *Yamanobu-Shouten Co., Ltd.* has been able to sell these products at a low price. These lower selling prices are attractive to customers and sales of their own brand *Gonbei-no-Sato* have risen over the years (Figure 3).

This rise in sales is the reason behind the strong feelings and commitment toward naturally cultivated foods held by Shouten Co., Ltd. He made it possible for entities using agricultural products, such

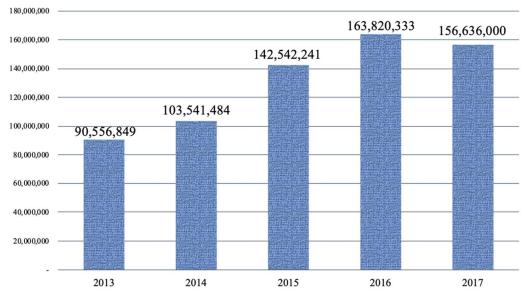


Figure 3 "Gonbei-no-Sato" annual sales (unit: JPY) (Source: Created by the author based on survey results)

Differentiation strategy (from a position-based perspective)

- Provide customers with high quality, high value-added products from the viewpoint of "safety."
- However, since Toyota City is a small city, a realistic selling price must be set to keep prices lower (around 1.2 times of Practical Cultivation) than the sales price in the metropolitan area (Tokyo, among others, around 1.5 times of the practical cultivation)

Enhancement of internal resources (from a resource-based perspective)

• Realization of internal resources that can lead to products that can generate customer satisfaction

Figure 4 Strategy of the Case Company (Source: author)

as directly operated farms, dealers, and restaurants, to be part of the group. Mr.Toru Yamanaka, Chairman Yamanobu-Yamanaka believes that agricultural workers, including involved in natural cultivation, can create high-quality agricultural crops. However, if there is no place to sell them, then there will be problems, including farm failure. Setting up outlets, such as supermarkets and restaurants, which consume the products in the business group, allows sales of agricultural crop products, facilitating the flow of profits within the company. The company believes that the realization of this flow has created marketing channels for agricultural workers, ensuring their focus agricultural production. This is one of the policies ofmanagement Yamanobu-Shouten Co., Ltd.; it is unlike the policy of setting high prices, which was witnessed for products cultivated using traditional, natural farming methods.

To ensure success of the aforementioned level of crop yield. Since chemicals are not used in natural cultivation, securing the method, it is necessary to realize a certain appropriate harvest quantity through this method becomes very difficult. However, they have solved this problem through the development of *CAW*. This was made

(4) Research Method

Relevant actors (i.e., founders and companies) adopt the strategy shown in Figure 4. CAW is effective in realizing this strategy. Therefore, to clarify how CAW functions in the field, we conducted an interview-based qualitative study by implementing the following procedure (Figure 5).

Based on the findings, we assume that CAW's management strategy is based on the Management Control System (MCS) framework of Merchant and Van der Stede (2012). However, in a previous study on MCS, Simons' framework was found to be mainstream⁹. Based on previous research, we consider the difference between these two frameworks as follows¹⁰:

 Merchant: Emphasis is placed on how to control the behaviors of people in all levels of the organization based on individual objects

this paper is a case study, we kept the description concise to avoid confusions on research topics. ¹⁰ Ohtani (2017), pp. 55-56.

possible as "Midori-no-Sato" collaborated with welfare organizations outside the group. In summary, "Midori-no-Sato" has succeeded in providing farm products to its own supermarket at a low price through natural cultivation, which tends to be more expensive than general farming methods. Therefore, we decided to conduct a case study on the group.

⁹ In our research project, we have been conducting surveys of previous research and recording theoretical progress in another research. Please also refer to the discussion about the framework. Since

Simons: Emphasis is placed on how top managers select and use MCS to maintain or change organizational behavior

We adopted Merchant's framework because of its focus on individual objects. Mr. Nonaka ("Midori-no-Sato") views the disabled persons of welfare corporations as individual workers. He also emphasizes how we can work with them "happily" (i.e., they are interested in improving their performance).

(5) Initiatives of Midori-no-Sato: On-site management through CAW

Within Gonbei-no-Sato, one of the main product categories comprises naturally cultivated agricultural crops from a direct-managed farm called Midorino-Sato. To manage this cultivation, Midori-no-Sato utilizes the collaboration between agricultural groups and welfare organizations that form the CAW. In this context, it must be noted that Midori-no-Sato communities are primarily composed of patients who have mental illnesses.

Midori-no-Sato. the agricultural production corporation, has been pursuing a mechanism for selling its products through the CAW over the past six years. This mechanism is based on the natural cultivation farming law that they have been working on for 11 years, which is still ongoing. Definitions and other guidelines have generally not yet been established with CAW, but it broadly refers to the collaboration between agricultural groups and welfare organizations. Mr. Shingo Nonaka of Midori-no-Sato regards it as the creation of a community by combining agriculture and welfare.

According to Mr. Nonaka, in the five years the corporation has been established, it has been believed that mass production of naturally cultivated crops is necessary for management stability. However, as previously noted, the natural cultivation agriculture method creates a very heavy burden because it does not use pesticides or fertilizers. The company faced situation where expansion of agricultural land area was essential, but there was not enough manpower. At this time, they accidentally launched CAW through a chance acquaintance with the staff of a welfare corporation company.

Initially, Mr. Nonaka offered farm work to mildly disabled people and paid them an hourly wage (Figure 6). This corresponds to the formation stage of social collaboration. While working with them, Mr. Nonaka witnessed the power of people with disabilities, who performed similarly to healthy people, and realized that he could help them. Mr. Nonaka began working with more people with disabilities. In addition, he began working with

Survey method: Continuous survey from October 2017 to the present October 12–13, 2017 (Toyota, Aichi, Japan)

Interview and visit to the farm

Mr. Toru Yamanaka, Founder and Chairman of Yamanobu-Shoten Co., Ltd.

Mr. Shingo Nonaka, Farm Director, "Midori-no-Sato"

Analysis of materials provided by Mr. Nonaka (financial documents, internal documents, and publications, among others)

January 20, 2018 (Hirosaki, Aomori, Japan)

Mr. Toru Yamanaka and Mr. Shingo Nonaka at the Hirosaki University Forum "Response of agricultural crops naturally cultivated in supermarkets and agricultural cooperation" (Recorded at the time of visit and lecture)

Subsequently, multiple surveys are being conducted via e-mail

Figure 5 Procedure of Case Study (Source: author)

severely disabled people. For him, a labor force to undertake the difficult natural cultivation was a necessary resource. While securing such a workforce, it was to provide an agricultural possible experience to persons with mental disabilities. Mr. Nonaka worked at the Japan International Cooperation Agency before becoming a farmer and wishes to contribute to resolving social issues. For him, the advantage of collaboration with a welfare organization was that he would have a partner who shared the mission of solving social issues while securing the resources necessary to realize his business. As shown in Figure 6, the two parties can establish a win-win relationship and help each other fulfil their purpose, indicating that they experience "objective proximity." Moreover, the collaboration itself was a "means necessity" for both parties to conduct business. In particular, welfare organizations were essential to provide a workplace experience to help rehabilitate mentally disabled people. Thus, this case secured the success factors of the formation stage of social collaboration.

Mr. Nonaka then came up with the idea to compensate workers with crops instead of money. When farmers sell crops to provide money for people with disabilities, the amounts that can be paid become small because it costs more to sell and develop sales channels. However, if

you decide to sell agricultural crops using people with disabilities, the costs can be reduced. Of course, since the farmers provide the crops, money is not taken from the welfare organization as an intermediate margin. As a result, disabled people receive more money if sales go well. This is the reason for establishing a "community."

Mr. Nonaka realized that this system increased the motivation of disabled people from welfare organizations. This seems to be the case, because the results of the process of individuals cultivating their own crops and selling them jointly with farmers can be visibly observed.

Next. Mr. Nonaka's task was to raise people with for disabilities. Specifically, he sold nonstandard products that could not otherwise be sold as crops and processed items. By further adding value and increasing sales prices, the price of labor for people with disabilities was raised. Furthermore, since 2017, he has created a "harvesting team," with a relatively mildly disabled person in charge. He sold agricultural crops to the group at lower wholesale prices and delegated harvesting and selling. This is an effort to welfare have associations handle agricultural crops in connection with welfare organizations. By doing this, Mr. Nonaka made mass production possible. As a result, the CAW of the community

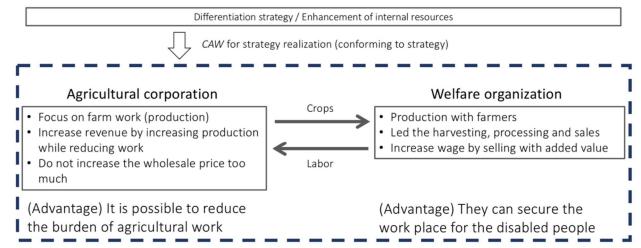


Figure 6 Outline of CAW at early stage (Source: author)

enabled mass production of naturally cultivated crops, expansion of distribution channels, and stabilization of selling prices. His approach is not to move money, but to take advantage of people's coming, increase production, and return that production as agricultural products. It can also be said that Midori-no-Sato created a management control system (MCS) that is very different from the usual MCS.

(6) Case analysis using the MCS framework

In this section, we consider the CAW's management using the MCS framework of Merchant and Van der Stede (2012). In recent years, there have been active discussions about MCSs. Previous research has shown that they provide organizations with sustainability and effectively fulfill the role of supporting corporate social responsibility (CSR) 11 . By properly an MCS, employees creating appropriate actions and increase the probability that the organization will achieve its goal¹². Merchant and Van der Stede (2012) list the following four types of MCSs.

$1.1 \; Results \; Controls^{13}$

Results controls provide employees with the desired degree of accomplishment as a goal. These controls are used by those who intend to manage behavior by providing external compensation (such as cash or stock) for goal accomplishment, or by satisfying internal rewards (such as a target crime rate inside police). By giving employees high autonomy, results controls are indirect controls that do not focus on actions and decisions. In other words, you may not be able to control the actions taken to achieve the goal.

Results controls is supplemented or replaced by the following three controls.

2.1 Action Controls¹⁴

Action controls are attempts to manage actions by confining employee actions to those that are beneficial to the organization, or by determining the actions that are known not to be beneficial. In most cases, action controls are used to prevent undesirable behavior.

3.1 Personnel Controls¹⁵

Personnel controls are intended to increase employees' appropriate self-esteem and self-satisfaction by making suitable personnel assignments, offering education and training, job design, and resource provision, consequently managing their behavior.

4.1 Cultural Controls¹⁶

Cultural controls are attempts to manage the behavior of employees through an organizational code of conduct, mutual monitoring by employees, and influencing each other. The organization's code of conduct is an organizational culture. Specifically, it is built on the traditions, norms, beliefs, values, ideologies, opinions, and actions shared by the organization. According to Merchant and Van der Stede (2012), personnel controls and cultural controls are becoming more important as "soft controls."

Merchant and Van der Stede's (2012) categories are used to analyze Mr. Nonaka's approach.

1.2 Analysis using the concept of Results Controls

Midori-no-Sato has a "target," but recognizes that the target is not a work norm. They try to enjoy thinking about how everything has gone so far rather than focusing on the aspect of completing work norms. They appreciate that they could evolve by more than just achieving their goals. They also often do not present

¹¹ Ito (2009), Sumita (2015), Nagano (2015), Shinoda and Maruta (2017)

¹² Merchant and Van der Stede (2012), p. 5

¹³ *Ibid.* (2012), pp.35, 40, 81.

¹⁴ *Ibid.* (2012), pp.81, 85

¹⁵ *Ibid.* (2012), p.81.

¹⁶ Ibid. (2012), p.81

"targets" to people with disabilities. Instead, they encourage them to try doing the first job for the time being, and then encourage them in the form of "I hope you can do better tomorrow."

Mr. Nonaka and other officials are included in the workforce as appropriate, especially when the work of the disabled is unlikely to be completed, such as pot clogging work or strawberry harvest packing. Sometimes, they all work together until they finish. In these circumstances, there are cases where each goal is determined by the individual without getting permission. As people disabilities become more willing to be able to do more than their nature and in their past, they sometimes create quotas in their hearts with the goal of exceeding past performance. This way, as much as possible, the spontaneity of people with disabilities is encouraged.

As mentioned earlier, remuneration may not only be in the form of money, but also internal crops, such as actual farm products and work and sales achievements by everyone. Therefore, regarding results controls, those that lead to an internal sense of accomplishment are considered to be functioning effectively.

The aforementioned scenario led to the division of labor and to the emergence of the community concept. The thorough division of labor led to the clarification of roles and the development of mutual (Figure 7). community aid This corresponds to the execution stage of social collaboration. In this effort, welfare organizations created a shift from an attitude of working alone to an attitude of "working collaboratively" (to the ablebodied farmers developed a respect toward the self-motivation of disabled people). This changed the consciousness of disabled people (voluntary target setting). In addition to the given goals, they started to set voluntary working norms like "I want to be able to do better than I what I did in the past" (Staffs are not concerned nor involved at all.)

2.2 Analysis using the concept of Action Controls

There are rules for agricultural work at Midori-no-Sato; for example, "Do not walk on the ridge" and "Do not harvest strawberries that are not mature yet." In fact, there are a lot of finer details, depending on the work being done, that are taught while working. Therefore, they do not hold separate training or study groups.

If problem behavior, such as throwing things to people, occurs, they do not ignore it. Such instances provide teaching opportunities, such as saying that "their behavior is wrong" and nurturing values.

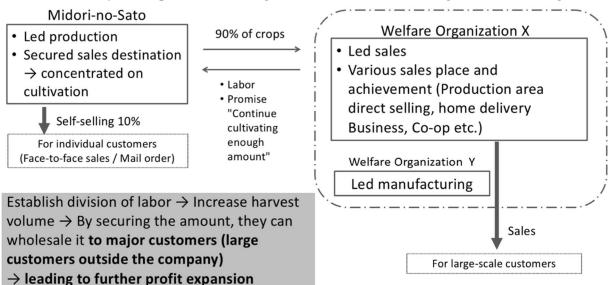


Figure 7 Outline of CAW at the community stage (Source: author)

Prioritizing actions and teaching rules as appropriate are used as action controls, rather than behavior management and prevention policies.

The above approach shows that the focus is on taking corrective actions irrespective of particular roles responsibilities. Furthermore, from the viewpoint of persons with disabilities, it is understood that measures for examining work performance are provided at the work site (farm or workplace). This approach reduced their sense of burden and responsibility. In other words, they execute farm work with little ease. These efforts contribute to the formation of a workable environment for persons with disabilities. It is also obvious that these ideas are influenced by collaboration and the community concept.

3.2 Analysis using the concept of Personnel Controls

As much as possible, Midori-no-Sato keeps the same person in charge of the agricultural work, trying not to change workers; this is very characteristic. At the CAW site, they arrange people considering the different talents and disadvantages of disabled people and other workers. However, Midori-no-Sato has not been able to secure workers that already possess talent at the desired level. Therefore, they prioritize allowing individuals to adapt to work. Once they are accustomed to work, they then focus on improving work skills. To accomplish this, Midori-no-Sato also requests the cooperative welfare organization to consistently use the same personnel.

As a result of personnel fixation, professional abilities of persons with disabilities improved, thereby improving product quality. People with mental disabilities who had difficulty consistently attending the facility have improved on self-esteem and are actively working. Enhancing expertise contributes toward improving the quality of agricultural crops and the efficiency of agricultural work. This initiative also results in the

realization of the "right place for the right person" agenda: resolving the question of which work is suitable for which person leads to close communication with each member. This is one of the success factors of the execution stage of social collaboration.

Furthermore, as a side effect, the change in consciousness of workers with disabilities became clear. Disabled persons, who used to come to welfare facilities once a week, now come to welfare facilities every day. Additionally, they are actively engaged in farm work. This enhances the performance of disabled farmers and helps them achieve organizational objectives.

4.2 Analysis using the concept of Cultural Controls

Midori-no-Sato is trying to ensure that people with disabilities do "not perform meaningless work." Mr. Nonaka said that by having disabled people do only meaningful work, they can reflect and think that "I was able to spend the day contributing to the organization and society." They are focusing on making their workers are aware of their contribution through their work. Their sense of accomplishment is thought to function as the driving force of action.

Agricultural corporations' staff have changed not only how they work, but also improved efficiencies within their facilities for disabled working people. This improved the quality of employees (strengthening internal resources). Transitioning from a workplace that overly focused on improving work efficiency to a workplace that accommodates failure and facilitated amicable relationships enhanced the social contribution of staff and instilled in them a sense of pride.

This community concept not only increased their productivity, but also improved internal human resources. It must be noted that realizing an environment that enhances the work environment for mentally disabled persons enabled the disabled to lead and contribute to the profit of the community. Through

this process, each staff gained pride and a sense of social awareness within their organization.

We also wish to note that this community concept is based on the division of labor. This division of labor is established by mutually acknowledging the expertise of co-workers in each business and business process. The division of labor not only improves productivity, but also strengthens mutual trust. Enhancing mutual trust accelerates communication between members. This is cited as a success factor of the execution stage of social collaboration.

In addition, due to the increase in productivity, stable crops can be secured. Therefore, it became possible to develop sales channels, other than their own brands. This led to the expansion of the welfare organizations' existing sales channels. As a result, CAW enabled a simultaneous increase in production volume and expansion of sales channels as a company.

In Japan, due to changes in the agricultural environment, local rural farmers are especially required to devote time to agricultural work, making it difficult to foster management skills and collaboration outside the organization. One of the reasons for this is the weakening of the regional network. Therefore, it is necessary to create a local community that is the core of regional value creation. CAW is a management system based on the community concept; it also connects people with disabilities to communities and utilizes the skills of people with disabilities. Therefore, there is a possibility that it will strongly influence the future development of the region and the Japanese society. In that sense, this research is a subject of agriculture and cooperation, which has not been studied in previous research. It is not limited to the introduction of valuable practical case examples in the field of management accounting and providing verification materials as materials for examination and criticism. It highlights new development to further improve the

future of Japanese society, most especially in the discussion of regional contribution and regional creation through farmers, social welfare, and local communities.

(7) Conclusion

A characteristic of CAW is that an agricultural organization and a welfare organization are working in a community platform. They reap mutual benefits through their collaboration at CAW. This collaborative advantage increases the value of internal resources within the community, considering the organizations activities from the community's perspective. Additionally, organizations can increase production and expand sales channels, which would inevitably increase the power of appeal to customers and increase sales. Next, we finally answer the research questions posed in Section 2 based on our overall analysis.

a) What should companies do in the formation stage of social collaboration?

The CAW process at Yamanobu-Shouten began with matching the goals of Midori-no-Sato, the group's agricultural corporation that required labor for working on the farm, and those of a welfare organization looking to rehabilitate mentally disabled people. In other words, at the earlier stages of CAW, laborers worked in exchange for crops. Gradually, farmers recognized the value that disabled people contributed to the workforce and the thus community and created environment to accommodate them. As a result, expertise has increased thorough the division of labor and maximum employment of the community's skillset. By tapping individual ingenuity, they succeeded in increasing yield through the community concept. Additionally, such management policies attracted human resources that conformed to the founder's focus on local contribution and food safety. This approach facilitated an environment that accepted people with disabilities. In this case, the choice of the partner

organization during the formation of social collaboration was accidental. In addition, because of the nature of rehabilitation for people with mental disabilities, it is not possible to actively utilize external resources for the purpose. Therefore, internal resources must be strengthened at the formation stage. It is necessary to consider what is important for the collaborator and to make it happen. When CAW was functioning in our case study, the following features were noted:

- Fostering specialized skills through complete division of labor
- Increasing the quality of shipping crops by improving skill and expertise
- Thinking of how to make work easier
- Changing consciousness of workers with disabilities

b) In the execution stage, how can organizations with different scales and cultures establish a smooth collaborative relationship?

By constructing an environment taking into account the aforementioned values, CAW improves the value of internal resources of the community and production enables increased expansion of sales channels of corporates. This is important to build smooth collaboration in the execution stage. The involved parties will strengthen their unity as a community as they expand their business. This promotes communication among community members, which leads to mutual recognition, trust, and further strengthening of internal resources. In other words, CAW contains all the success factors of social collaboration.

However, as noted before, one of the success factors of the execution stage of collaboration was clarifying the rules and responsibilities of the members of collaborative relationships. In this case, there was no such approach. In addition to the fact that both are indispensable as a community in CAW, it is thought that the reason is that the organization is now small and communication among top

leaders is easy. Considering these, it is necessary to conduct research on future business expansion of companies.

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