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Social Innovation in Organic Agri-food Networks in Japan

A Case Study of Kagoshima Organic Farmers' Association

Yang Lu¹ and Shuji Hisano²

Abstract

A multitude of social innovations (SI) that likely bring up transformation and their corresponding SI ecosystem has been formed and sustained because of organic agri-food networks' efforts in civil society across Japan. In order to transform the current agri-food system, the organic agri-food networks apply several scaling strategies to enhance their influence at the macro level. Against this backdrop, this article aims to examine and analyze 1) the organic agri-food SI-centered ecosystem involving economic and socio-political environments alongside primary actors, 2) the process of the implementation of scaling strategies (i.e., scaling out, scaling up, and scaling deep), and specifically the facilitations or constraints that determine the potential of SI to the transforming agri-food system during the implementation of these strategies. This study employs the case study method and qualitative research methods to investigate the Kagoshima Organic Farmers Association (KOFA). As a result of the study, KOFA's SI ecosystem consists of a gradually favorable socio-political environment at national and prefectural levels alongside a commercializing economic environment, and five groups of actors (i.e., organic farmer members, partners and retailers, governmental bodies, public-private-partnership (PPP) organizations and NGOs/NPOs and others). Among all implementing actors of scaling strategies, the leaders within KOFA, governmental bodies and officials in PPP organizations are the key actors in constraining or facilitating the potential of KOFA for transforming the current organic agri-food system. Furthermore, the authors argue that policymakers and academia should pay more attention to the process and outcomes of SI implementation of "scaling deep" strategies and the changing needs and mindsets of relevant actors because it is an effective way to promote organic agriculture to more actors to encounter organic agriculture in a more direct, equal and diverse manner.

Keywords

Social Innovation, Organic Agri-food Networks, Transformation, Social Innovation Ecosystem, Scaling Strategies

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1. Introduction

Organic agriculture is one of the alternatives that has long been expected to replace the broken conventional agri-food system to ensure food sovereignty (Van der Ploeg, 2020). This is because the current agri-food system has failed to address social, distributional, economic, and environmental issues (de Souza et al., 2021), and the organic vision is geared toward a socio-technical configuration that does not simply seek to replace farming techniques but looks to transform the food system (Smith, 2006). However, even after the implementation of "The Act on the Promotion of Organic Agriculture (Act 112 of 2006)" in 2006, Japan's organic agri-food system has experienced a long period of stagnation. According to data from the 2020 Agricultural Census, the number of entities engaged in organic farming in Japan is 69,309 (just 6.4% of the national total). Compared to other OECD countries, the development of organic agriculture in Japan is far lagged behind. Against this background, the Japanese government has set an explicit policy goal in 2021 to achieve a ratio of 25% of the total arable land area³, or one million hectares, for organic farming by 2050 (MAFF, 2021). This prolonged stagnation in the development of the organic sector, coupled with the government's ambitious policy objectives, has led stakeholders in organic agriculture to initiate dialogues regarding the feasibility of attaining these goals. Additionally, they are exploring potential avenues for advancing the organic sector and facilitating a sustainable transition in Japan's agri-food system. This exploration involves drawing insights from established innovative initiatives currently in operation. A multitude of social innovations (SI)⁴ have arisen as a result of organic agri-food networks that have been launched by citizens across Japan. These organic agri-food networks have been expanding and contributing to the sustainable development of local societies by rebuilding the environmental and social structures destroyed by liberalized capitalist modes of production and retaining the economic benefits of socially innovative practices (McGreevy et al., 2021; Zollet & Maharjan, 2021).

When considering the potential of SI in transforming society, it necessitates an analytical tool to link "micro" (i.e., single SI operation organizations) and "macro" (i.e., countries and societies). Multiple analytical process models, such as the "quadruple helix model" (McAdam & Debackere, 2018) and the six-stage process model (i.e., a. identification, b. proposals and idea development, c. prototyping and testing, d. sustaining, e. scaling and f. systematic change) (Murray et al., 2010) exist in SI studies. Over recent years, the SI ecosystem viewpoint (i.e., an SI developer or operation organization-centered organic ecosystem including economic and socio-political environments and diverse actors) and scaling framework (i.e., scaling out by

³ Currently, the total arable land area (the sum of rice paddies and fields) in Japan is 4,325,000 hectares (2022). Out of the total land area, a small fraction of 0.6% is now being managed under organic farming practices in 2020. This accounts for around 25,200 hectares, which includes both Organic JAS-certified and non-certified farmlands.

⁴ Here, SI is defined by its three primary features: (1) it is both the process and outcome (Murray et al., 2010) where it is often intangible (Neumeier, 2012) and not necessarily bound to a physical space (Terstriep, et al, 2015), (2) it reconfigures social practices (i.e., novelty) as well as meeting social needs and enhancing societal well-being through collective action and civic engagement (Mulgan et al., 2007; Phills et al., 2008; Westley et al., 2009; Howaldt et al., 2014; Polman et al., 2017), (3) it is path-dependent and contextual (Moulaert et al., 2013).

replication and dissemination of SI principle; scaling up to affect formal institutions such as laws, regulations and policies; and scaling deep to change people's mindsets) have garnered significant interest from researchers in the field of SI. They are recognized as a means to organically bridge the disconnections between micro and macro in existing research (Terstriep et al., 2015; Sano, 2020; Aoo, 2022; Westley and Antadze, 2010; Moore, Riddell & Vocisano, 2015, Aoo, 2018). According to the "Structure-Agency" theory (Giddens, 1984), both the influence of "structure" such as institutions and norms and "agency" such as individual or organizational behaviors facilitate or constrain the potential of SI for transforming the organic agri-food system. Following the same vein, this article focuses on the interaction and relationship of actors and the surrounding environments in the SI ecosystem (Terstriep et al., 2015; Sano, 2020; Aoo, 2022), as well as the process of SI's implementation of scaling strategies (Westley and Antadze, 2010; Moore, Riddell & Vocisano, 2015). In addition, this study applies the qualitative research method and case study method to examine Kagoshima Organic Farmers' Association (KOFA), a well-known local organic agri-food network in Kyushu, Japan, as an SI developer and operation organization, .

Specifically, two objectives with six research questions were set in this article in the following.

Objective 1: To understand the SI ecosystem of KOFA.

- 1) What economic and socio-political environments is the KOFA embedded in?
- 2) How is the ecosystem of KOFA being formed and developed?
- 3) Who are the main actors in the KOFA's SI ecosystem?

Objective 2: To examine the scaling strategies employed by KOFA

- 1) What scaling strategies does the KOFA employ?
- 2) Which actors are implementing the scaling strategies? How are they putting the strategies into practice?
- 3) Why are scaling strategies successfully implemented? What actors celebrate the "success" of KOFA?

The remainder of this article is structured as follows: the next chapter of the literature review provides an overview of the current state and meanings of organic agriculture in Japan and the argument about the future directions of Japanese organic agriculture. Then, Chapter 3 presents the methodology and sources of information used in the empirical analysis. Chapter 4 and Chapter 5 show the results of the case study, followed by a discussion and conclusion in Chapter 6.

2. Economic and Socio-political Environments of Organic Agriculture in Japan

This chapter elucidates the current economic and socio-political environments of organic agriculture in Japan through the literature review. The existing research literature on organic agriculture identifies four drivers for its sustainable development: (1) the promotion of

organic agriculture in the public sector (scaling up), (2) recognizing and responding to the heterogeneity of organic farmers and farming styles (scaling out), (3) building support systems for local communities and popularizing successful cases as a model (scaling up and scaling deep), and (4) understanding and responding to the trend of commercialization of organic agri-food systems (scaling out).

First, the promotion of organic agriculture in the public sector, achieved through collaboration with local organic farmers, is generally acknowledged as a crucial factor in ensuring its future viability. Some researchers believe that organic agricultural products should be purchased and provided in the public procurement system, including school lunches at educational institutions such as elementary schools, junior high schools, kindergartens, and nurseries; school canteens at high schools, vocational schools, agricultural colleges, and universities; and canteens and food services at hospitals, welfare institutions, elderly care institutions, government offices, prisons and juvenile detention centers, and other public facilities (Oe, 2020; Sekine, 2021). Some schools in Japan have already introduced such organic school lunch programs. For example, public-private partnership initiatives to promote programs that combine biodiversity conservation with organic rice school lunches have emerged throughout Japan, such as the "Rice that Nurtures Storks" program in Toyooka City, Hyogo Prefecture; the "Rice for Paddy Field Organisms" program in Takashima City, Shiga Prefecture; and the "Rice that Invites Japanese Cranes to Farms" program in Komatsushima City, Tokushima Prefecture (Sameda, 2022). However, the Japanese Society of Organic Agriculture Science further argues that the government procurement system alone is not sufficient to increase consumption of organic agricultural products and that diverse distribution channels should be established by forming regional food supply systems at the municipal and prefectural levels (Japanese Society of Organic Agriculture Science, 2021).

Second, it is important to recognize and respond to the heterogeneity of organic farmers and the diverse approaches they use in their agricultural practices. This heterogeneity has two implications. One notable aspect of this heterogeneity is the diversity within the organic farming community, including both small-scale family farmers and large agricultural enterprises (Vercher, 2022). In recent years, there has been a gradual and consistent expansion of alternative and multifunctional agricultural practices in Japan, despite the prevailing tendency towards commercialized and corporatized agriculture. This phenomenon has emerged partly as a result of socio-cultural influences that compel individuals to engage in cooperative behaviors and establish a sense of belongingness to their own local communities and geographical locations (Hisano et al., 2018). Small-scale family farms are highlighted as having a leading role in practicing organic agriculture (e.g., McGreevy et al., 2021; Zollet & Maharjan, 2021). However, Aikawa (2013) argues that an overemphasis on the role of small-scale family farms and a dichotomous view of small-scale family farmers vis-a-vis corporate farming is not constructive. Instead, we need to see them as complementary and collaborative entities for the survival and development of rural communities and local agriculture (Aikawa, 2013). The second implication of the heterogeneity is that organic farming is practiced by farmers in diverse ways. The extent to which farmers can practice the

ideal organic agriculture, which “improves the function of the agro-ecosystem indirectly, rather than directly by humans working on crops, such as through the application of fertilizers and pesticides, so that weeds and microorganisms can function better” (Japanese Society of Organic Agriculture Science, 2021), is diverse. It also depends on farmers’ understanding of organic agriculture, personal preferences, and capabilities, local acceptance of alternative small-scale farming options, and the presence of pioneering farmer leaders as “attractors” (Zollet & Maharjan, 2021). Organic farming often requires farmers to commit more time, energy, skills, and knowledge to deal with weeds, pests, and soil conservation than the intensive use of large-scale fertilizers and pesticides as in conventional farming. While both academia and the government acknowledge that newcomer organic farmers are key actors in promoting organic farming, the practices required for organic farming present high barriers to entry for newcomers or those who convert from conventional farming (Oguchi, 2018; Rosenberger, 2017; Sekine, 2021). Hence, it is crucial to enhance the dissemination of knowledge among organic farmers across the country through the implementation of diverse methodologies, such as the system approach, participatory approach, and transdisciplinary approach. These approaches entail collaborative research initiatives involving farmers, universities, and research organizations, alongside the extensive utilization of innovations from the private sector (Muramoto, 2019). At the same time, increased learning among farmers and “charismatic leadership⁵” can expand agroecological knowledge and practices throughout a given region (McGreevy et al., 2021, p.3).

In addition to the availability of technology and knowledge that would otherwise constrain the entry and network formation of new organic farmers, the support of local communities and the role of successful cases as a model cannot be ignored. The ability of organic agriculture to take root in the local area has a positive effect on the development of organic agriculture itself and the local community. Taniguchi and Sawanobori (2021) suggest that the “socialization of organic agriculture” is beneficial to regional revitalization as it not only contributes to solving regional problems but also allows the results to spill over to the whole region. Organic agri-food systems are also expected to contribute to communication between producers and consumers, the revitalization of local communities, and the rebuilding of the relationship between humans and nature (Iwahashi, 2021; Iwamoto, 2008, 2012; Nakagawa, 2018; Oguchi, 2012, 2018; Yasue & Shimoguchi, 2018). On the regulatory side, the Act on the Promotion of Organic Agriculture stipulates that not only the national government but, more importantly, also local governments are required to take primary responsibility for supporting organic farmers, improving consumer understanding and interest, and promoting research and development in organic agriculture. We have also seen that although the overall attitude of Japanese agricultural cooperatives (hereinafter referred to as JA)⁶ towards the

⁵ According to the article, it refers to the farmers who are charismatic, inclusive, open-minded, and generous, and often attract people to come to their place to learn their techniques and philosophy (McGreevy et al., 2021, p.10).

⁶ JA has dominated the agri-food system in Japan since the postwar period, because most farmers rely on a full set of farming and selling necessities provided by JA, such as inputs, information, loans, and market access.

promotion of organic agriculture is not proactive, some local JAs have played crucial roles (Organic Agriculture Entry Promotion Council, 2016). Taniguchi and Sawanobori (2021) argue that as organic agriculture can play such an important role in the sustainable development of local communities, policies should be developed in a way that central government delegates more autonomy to local authorities, with the view that organic farming can be a useful tool for the survival and development of local communities.

The last point is the need to capture and respond to the trend of commercialization of organic agri-food systems. This trend may lead to the growth of organic markets (Hu, 2021; Kim et al., 2008; Ojima et al., 2013; Sakai, 2016). However, the commercialization of organic agriculture is also a double-edged sword for its own sustainability. This is because commercialization tends to exclusively benefit large food processors and retailers, who have more economic and social capital to take advantage of the expanding organic market without benefiting marginalized local organic farmers and alternative food networks (AFNs) (Hu, 2021). Large companies are displacing or squeezing out local small-scale actors. For example, in the 1980s, the emergence of citizen-led distributors such as Radishbo-ya, DAICHI wo MAMORU KAI and Biomarche, which specialized in organic or low-chemical products and processed foods without additives, played a key role in popularizing and encouraging organic AFNs. However, two of these leading organic distributors, DAICHI and Radishbo-ya, merged with Oisix, a Japanese online home delivery company, in 2017 and 2018, respectively, to create a new and largest online and catalog retailer specializing in "organic vegetables, specially cultivated produce, processed foods without additives, and other food and ingredients." Even before the merger, Daichi and Radishbo-ya had formed business ties with Lawson, one of the largest convenience store chains, while Oisix was actively working with a number of agri-food and other business corporations.

In addition, the Japanese government is playing a role as a facilitator in the commercialization of organic agriculture. In the "Basic Policy for the Promotion of Organic Agriculture" (2020), MAFF has set a clear goal to expand the domestic organic food market to achieve approximately 328 billion yen by 2030 and to increase the proportion of domestic supply from 60% in 2017 to 84% in 2030 (MAFF, 2021). As part of the plan's strategy, the government has launched a project to promote the establishment of a value chain for domestically produced organic agricultural products, involving organic food companies and food and beverage manufacturing companies as "Japanese Organic Supporters"⁷. As of September 2023, the project involves a total of 103 firms, including Chikyubatake (KOFA), Biostyle⁸, Biomarche (organic food), Seven & I Holdings Co. (supermarket chain), Ito-Yokado (supermarket chain), and Watami Co. (restaurant chain) (MAFF, n.d.). In the same vein, MAFF

⁷ https://www.maff.go.jp/j/seisan/kankyo/yuuki/supporters/suppoters_top.html, last accessed on October 10, 2023.

⁸ Biostyle Co., Ltd. is a corporate entity affiliated with the Keihan Group, a conglomerate mostly associated with the Keihan Electric Railway, a transportation network that facilitates connectivity between the cities of Kyoto and Osaka. The commercial complex known as "GOOD NATURE STATION" was established in December 2019 and is situated in Shijo Kawaramachi, Kyoto. It includes a hotel, a store, and houses many brands like the cosmetics brand "NEMOHAMO," the sweets brand "RAU," and the cuisine brand "SIEZN TO OZEN."

is promoting “Organic JAS certification” among farmers to promote the growth of the organic market.

We can see that the most critical actors in the four drivers are the national and local governments, organic farmers, local communities, and organic market actors. It is local organic agri-food networks, among others, that link all these actors at the local and regional levels. In this sense, it is necessary to study the ecosystem and scaling processes of organic agri-food networks which are relevant to the sustainable development of organic agriculture in Japan.

3 Methodology

3.1 Organic Agriculture in Japan

In 1999, the Ministry of Agriculture, Forestry and Fisheries (MAFF) started a domestic organic agri-food certification system, known as the Organic JAS certification, based on the FAO/WHO Codex Alimentarius guidelines. According to the JAS law, organic farming is supposed to exclude the use of chemically synthesized fertilizers and pesticides, as well as genetically modified technology, and instead use a form of agricultural production that is the least harmful to the environment. It is this kind of organic agriculture under the certification system that the Japanese government is currently promoting in its policy.

In addition to this officially promoted definition of organic agriculture as applied to international and mainstream markets, there is also a popular way of looking at organic agriculture as an alternative definition of agriculture among Japanese people, such as the International Federation of Organic Agriculture Movements (IFOAM)'s definition of organic agriculture and the FAO's definition of agroecology, among others. These two definitions share a consistent position on respecting ecology, and differ only in the extent to which they intend to change the food system and in their vision of solving social problems (FAO, n.d.; IFOAM, 2015). According to the “Ten Principles of Organic Agriculture” proposed by the Japan Organic Agriculture Association (日本有機農業研究会, JOAA) in 1999, the Japanese civic organic agriculture community's understanding of organic agriculture is basically in line with both the IFOAM and FAO. Following this vein, the Japanese Society of Organic Agriculture Science (日本有機農業学会) stresses that organic agriculture is not just meant for the replacement of chemical fertilizers with organic fertilizers but rather for the process of balancing the improvement of agricultural productivity and the conservation of natural ecosystems (Japanese Society of Organic Agriculture Science, 2021). That is, organic agriculture should be an operational mechanism that starts from reducing the use of pesticides and chemical fertilizers, gradually improving the diversity of farm ecosystems, then achieving sustainable crop production through efficient material cycles in ecosystems, and finally achieving stable production of delicious and nutrient-rich crops while also protecting farm ecosystems (Japanese Society of Organic Agriculture Science, 2021). In fact, most of the organic farming and food networks that began to evolve in Japan in the 1970s and 1980s do have the characteristics of agroecology, emphasizing both the governance of ecosystems and

the expectation of rebuilding social relationships through the *Teikei* relationship (CSA) between producers and consumers. At the same time, many alternative farming networks associated with social movements share the bottom-up character of agroecology and the belief that practicing organic farming is the key to building sustainable and equitable food systems and solving social problems. In this sense, as many researchers have done, the concepts of organic agriculture and agroecology are applied interchangeably (e.g., McGreevy et al., 2021). Therefore, this article also applies organic and agroecological concepts without distinction in understanding the environmental, social and economic aspects of innovative agri-food initiatives (see **Table 1**).

Table 1. Four Definitions of Organic Agriculture in Japan

Organization	Definition
IFOAM (2015)	organic agriculture is a production system that sustains soil, ecosystems, and human health. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than using inputs with adverse effects. Organic farming combines tradition, innovation, and science to benefit the common environment and promote equitable relationships and a good quality of life for all participants.
FAO (2020)	agroecology is an integrated approach that applies both ecological and social concepts and principles to the design and management of food and agricultural systems. It seeks to optimize the interactions between plants, animals, humans and the environment, while taking into account the social issues that need to be addressed in order to create sustainable and equitable food systems. It is based on a bottom-up territorial process that helps to provide locally adapted solutions to local problems. We can see that these two definitions have a consistent position in respecting ecology but differ in the extent to which the vision of changing food systems and solving social problems.
JOAA (1999)	The Ten Principles of Organic Agriculture: (1)Farmers should produce an adequate quantity of safe, high-quality food to contribute to sound eating habits; (2)By minimizing pollution and environmental destruction resulting from agriculture, we ensure a healthy ecosystem for all microorganisms, plants, and animals; (3)Efficient use of regional renewable resources and energy better utilizes the production power of nature; (4)A truly closed system includes both regional food self-sufficiency and renewable resource and energy independence; (5)Cultivating better soil fertility creates living soil; (6)Plant and animal diversity, whether cultivated or wild, is a key component of sustainable organic agriculture; (7)Sound management of livestock and poultry includes respect for their natural behavioral instincts; (8)A safe and healthy working environment ensures financial self-sufficiency and a feeling of satisfaction through adequate remuneration and fair work; (9)The goals of organic agriculture are advanced through friendly relationships between producers and consumers based on mutual understanding and trust; (10) Value must be placed upon the societal, cultural, educational, and ecological significance of agriculture and farming communities; respect for life by all citizens is essential.
Organic JAS (1999)	organic agriculture should exclude the use of chemically synthesized fertilizers and pesticides, as well as genetic modification technologies, and instead employs agricultural production practices that minimize its harm to the environment. Generally, chemical fertilizers and pesticides should not be used for at least two years before sowing/planting and throughout cultivation (at least three years before harvesting for perennial crops). The certified farmers are obligated to submit a document review, consisting of an annual production plan, production management record, grading results, and receive an on-site inspection each year.



Figure 1. Location of KOFA in the Kyushu region in Japan

Note: The oval shape represents the approximate location of KOFA's operation.

Source: Author's elaboration on the base map by Kyushu Regional Development Bureau, Ministry of Land, Infrastructure, Transport and Tourism (http://www.qsr.mlit.go.jp/s_top/soshiki/map/index.html, accessed on April 22, 2022).

3.2 Data collection and analysis

This research employed three qualitative methods to collect data: (1) unstructured and semi-structured interviews, (2) on-site participant observation, and (3) document and media analysis for the case study of the Kagoshima Organic Farmer's Association (KOFA: かがしま有機生産組合) (see location in **Figure 1**).

First, thirteen interviews were conducted on-site or online as shown in **Table 2**. Eleven on-site interviews took place at affiliated farms, the café (see **Figure 2** right below), and the warehouse during the field research at KOFA in February 2022. Informants include five farmers, two trainees, three employees, a representative director, new organic farmers, as well as a KOFA's senior manager who introduced all other informants. In addition, on March 8 and 16, 2022, the author had a chance to have two further interviews with the junior employees in KOFA's directly managed farms via virtual tools of WeChat and the Facebook Messenger application. Each interview lasted for 30 minutes to 2 hours. Most interviews were conducted in an unstructured manner and notes were taken during the interviews.

Second, apart from the interviews, the author conducted a two-week fieldwork at KOFA's farms and shops for participatory observation. Together with part-time workers, full-time

employees, and technical trainees, the author worked for 8.5 days on processing (see **Figure 2** left up) and packaging, seeding, fertilizing, weeding, trimming, and soil testing.

Finally, the author conducted a grey literature-based document and media analysis (Chikyubatake, n.d.-b, n.d.-a; Iwamoto, 2008, 2012; KOFA, n.d., 2005; Yasue & Shimoguchi, 2018). In particular, essays written by farmers, local government officers, consumers, and retailers were sourced from the KOFA's book (2005) as well as 40 volumes of AiraView⁹ (2013-2022) and Chikyubatake periodicals (地球畑通信, 2011-2022) for the narrative analysis. The book has the stories of 2 representative directors, 6 consumers, 3 leaders of partners and retailers and dozens of organic farmers, while the periodicals include first-hand and second-hand writings about 27 organic farmers. In total, the author collected first-hand and second-hand materials of about 40 farmer members out of a total of about 160 in KOFA (see Figure 2).

Table 2 Outline of interviews

No	Date	Location	Informants	Form	Record	Hour(s)
1	Feb. 13	KOFA's warehouse	Senior manager K	Semi-structured	Record, Note	1.5
2	Feb. 16	a village in Yibusuki	New organic farmers	Unstructured	Record, Note	2
3	Feb. 16	Farm in Yibusuki city	Farmer A	Unstructured	Record, Note	0.5
4	Feb. 16	KOFA's warehouse	Senior employee S	Unstructured	Record, Note	0.5
5	Feb. 16	KOFA's warehouse	Farmer B, former trainee	Unstructured	Record, Note	0.5
6	Feb. 16	KOFA's warehouse	Trainee A	Unstructured	Record, Note	0.5
7	Feb. 16	KOFA's warehouse	Farmer C	Unstructured	Record, Note	0.5
8	Feb. 19	Farm	Farmer D	Unstructured	Record, Note	1
9	Feb. 19	KOFA's cafe	Representative director Y	Unstructured	Note	0.5
10	Feb. 24	Kirishima city	Senior manager K	Unstructured	Note	2
11	Feb. 24	Farm in Kirishima city	Farmer E	Semi-structured	Note	1
12	Mar. 8	Virtual, Messenger	Junior employee Z	Semi-structured	Record, Note	1.5
13	Mar. 16	Virtual, WeChat	Junior employee P	Semi-structured	Note	1.5

⁹ "AIRAvIEW" is a public periodical issued by Aira City, Kagoshima Prefecture, once a month from 2010. From 2016 to 2022, there is a separate column for organic farmers that has introduced 40 organic farmers in Aira city. <https://www.city.aira.lg.jp/airaview/index.html>, last accessed on 12 January 2022.



Figure 2. Field Research at KOFA

Source: photos owned by the author.

4. SI Ecosystem

This chapter outlines and elucidates the prefecture-wide economic and socio-political environments surrounding KOFA, the history of KOFA's development, and the five groups of main actors in the SI ecosystem.

4.1 Economic and Socio-political Environments in Kagoshima Prefecture

Kagoshima prefecture, consisting of 19 cities, 20 towns and 4 villages, is the second most important region, after Hokkaido, for both overall agricultural production and organic farming. It has 500 farm households and 964 ha of farmlands applying organic farming methods, including 742 ha certified as Organic JAS in 2018¹⁰. Over 60% of the Organic JAS farmland is dedicated to tea cultivation. In terms of the number of Organic JAS-certified farmers in 2022¹¹, Kirishima city with 28 (most are tea) and Aira City with 25 lead the prefecture. In particular, Aira City has been actively and effectively cultivating new organic farmers. For example, Aira City had 35 organic farmers in 2016 (14 of whom were under the

¹⁰ Data refers to Kagoshima prefecture. http://www.pref.kagoshima.jp/ag04/sangyo-rodo/nogyo/gizyutu/kankyo/yuuki/documents/71177_20190315151011-1.pdf, last accessed on 13 January 2022.

¹¹ AiraView vol. 233.

age of 40) out of 398 organic farmers in the prefecture. Fourteen of the 20 new farmers, whom the city accepted between 2012 and 2016, have adopted organic farming methods¹².

Socially speaking, people who practice organic agriculture used to be called “Henjin” (which means “weirdo” in Japanese). The socially marginalized situation has changed recently, however. There is a widespread saying “Once 'Henjins', now pioneers¹³” that indicates a shift towards friendlier and more understanding social environment for organic agriculture in general.

Kagoshima Prefectural government set the first "Kagoshima Prefecture Organic Agriculture Promotion Plan (鹿児島県有機農業推進計画)" in 2008 and revised once in 2015. In response to the national government's "Basic Policy on the Promotion of Organic Agriculture" revised in April 2020, Kagoshima Prefecture also set three numerical targets in 2021. They are to (1) expand the acreage of organic agriculture from 999 ha in 2019 to 2,000 ha in 2031, (2) increase the percentage of consumers buying organic agri-food from 10% in 2019 to 25% in 2031, and (3) raise the percentage of certified Organic JAS products from 80% in 2019 to 90% in 2031 (Kagoshima Prefecture Organic Agriculture Promotion Plan, 2021, p.3). Especially, the Prefecture aims to provide support for new organic farmers in terms of farming techniques and administration, by collaborating with municipalities, local JAs, and other related organizations, utilizing the national government's programs and subsidies, and making use of the organic farming manual. For organic groups in civil society, the Prefecture provides information, guidance, and advice alongside works in partnership and cooperation to promote organic agriculture.

4.2 KOFA's Development Phases

The Kagoshima Organic Farmer's Association (KOFA) has been promoting organic agriculture in Kagoshima Prefecture as a grassroots organization before and after the enforcement of the Act on the Promotion of Organic Agriculture in 2006. There are three phases of KOFA's development from the formation phase, the growing phase, to the maturing phase. This section presents the main events of each phase.

Formation Phase (1980s~90s)

During the 1970s and 1980s, an environmentally oriented consumer movement flourished. Against this backdrop, the establishment of the Kagoshima Organic Farmer's Association (KOFA) began with a citizen-led organic farming study group organized by a former Kagoshima City Mayor Sanetake Hirase in 1978. In the beginning, the group consisted mainly of consumers, school teachers, and government officials, with only a few producers. After many local organic farmers joined, the study group members established a *Teikei* or CSA

¹² AiraView Vol. 82, 162, and 233.

¹³ Chikyubatake periodical (2014), vol. 183.

system called “*Kagoshima Tadashii Tabemono wo Tsukuru Kai*”¹⁴ (which means the Right Food Production Association in Kagoshima, hereafter *Tsukuru-kai*), delivering organic rice and vegetables twice a week initially to about 100 local consumer households since 1981. The number of consumers grew to about 300 households and then stagnated. This was because it was difficult for urban consumers, who usually prefer to shop at supermarkets that offer a wider range of choice, to satisfy their needs with a limited variety of vegetables provided by organic farmers. Recognizing such difficulties, the male representative director of KOFA stressed as follows:

If you are isolated in your community and you are the only one engaged in organic farming, but the surrounding farmers use large amounts of pesticides and chemical fertilizers, environmental pollution will only increase. In order to appeal for a switch to organic farming, we must first become self-reliant. While aiming to produce better quality vegetables is a matter of course, they must also secure sales channels. We also want to supply organic vegetables to urban consumers. (Male, representative director of KOFA, Y)

With this motivation, at a meeting of the *Tsukuru-kai*'s Producers Committee in 1984, 10 farmer members decided to establish KOFA to secure outlets for local organic farmers to sell their organic vegetables collectively, not only to local consumers but also to consumers in other urban areas. This is how today's KOFA started to take form. The farmers' association then became incorporated in 1991.

Growing Phase (1990s~2010s)

Against the backdrop of the economic crisis and decline in the 1990s, the collaborative relationships between KOFA and its partners, especially the Kyouseisha Co-op Union¹⁵, urged KOFA to secure new market channels. In 1992, KOFA established its inaugural specialty shop, Chikyubatake (地球畑), which drew inspiration from the Kansai Yotsuba Liaison Association's (KYLA¹⁶) strategy of opening small stores alongside its joint purchasing. The name “Chikyubatake,” meaning “Earth's Farmland” in Japanese, was chosen to reflect the concept of “Think globally, act locally.” The first shop (Nishida branch) was strategically situated within a convenient walking distance of less than 10 minutes from Kagoshima Central Station. Today, there are three shops located in Kagoshima city, with the second one (Arata branch) opened

¹⁴ It developed to an NPO serving 300 households, <http://www.shokunokazoku.com/>, last accessed on 12 January 2022.

¹⁵ They merged with Fukuoka Regional Co-op Union to become the current Co-op Union Green Coop, <https://www.greencoop.or.jp/cooperative/>, accessed on 16 January 2022.

¹⁶ The “Kansai Yotsuba Liaison Association/Yotsuba Home Delivery” began operations in 1976, during the growth of the “Organic Agriculture Movement” and the “Consumer Movement to Eliminate Food Pollution” at the time. The organization serves approximately 40,000 households in the Kansai area and operates its own farm and food processing business. Its mission is more transformative in that it aims to change the current broken social system regarding food by connecting production, distribution, and consumption processes. Official website of Yotuba, <https://www.yotuba.gr.jp/>, last accessed on 12 January 2022.

in 2001 and the third (Taniyama branch) in 2008. KOFA's first cafe, named 'A Ship over the Meadow (草原をわたる船)', was opened in the Arata branch specialty shop in 2006.

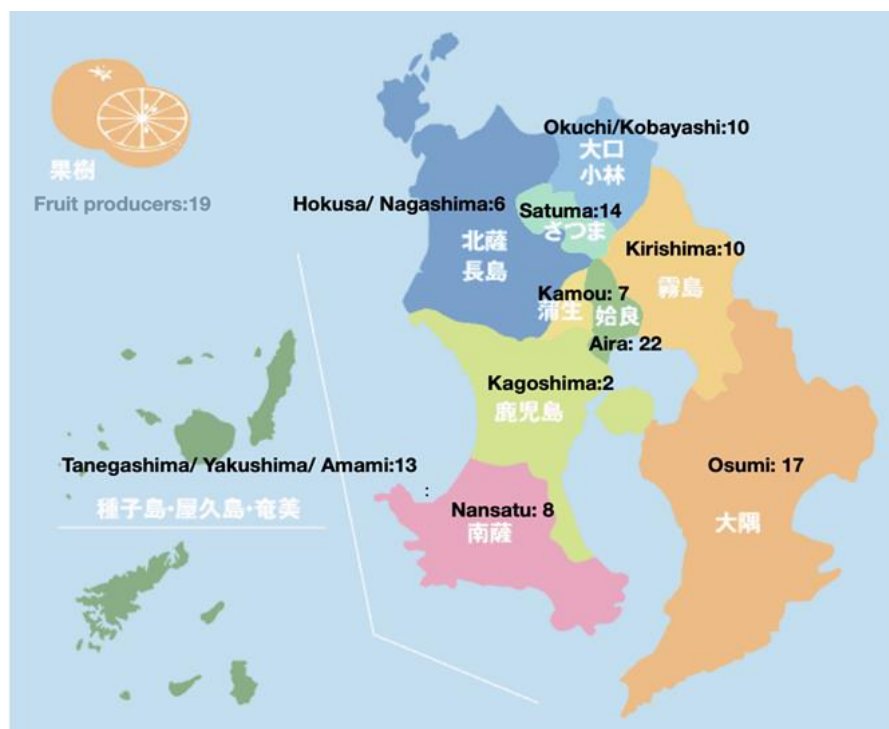


Figure 3. The locations and the number of farmer members in KOFA.

Note: the number attached to each region represents the number of households that joined KOFA within Kagoshima pref. without those in other prefectures. The total member extends to about 160 according to KOFA's own data.

Source: Elaboration by the author based on the map of KOFA (<http://www.chikyubatake.jp/producer-index.html>, accessed on 24 April 2022).

Maturing Phase (2010s~the present)

In addition to specialty shops, KOFA has also established directly-managed farms in 2012. This was triggered by the aging of Japanese agriculture and the lack of successors. Although about five new young farmers join the association every year, the number of member farmers has stagnated at around 160 over recent years (see **Figure 3** for their distribution). Currently, KOFA has three core bodies: organic farmers' association, specialty shops and café, and directly managed farms. The scale of KOFA has grown to 162 organic farmers (including 102 organic JAS-certified farmers) with 275 ha of farmlands. KOFA employs 75 people in total, 45 full-time and 30 part-time. In addition, KOFA was led by two representative directors¹⁷, who are husband and wife. They both have carried multiple crucial duties in diverse organic

¹⁷ The male director was born in Kagoshima prefecture and became a social activist concerning Minatama disease when he was a student. A former Administrative Vice Minister of MAFF, Edamoto Masaaki attended the same high school with the male representative director. Edamoto is the one of conveners of a memorial meeting for the male representative director. <https://newstokuba.jp/44167/10/04/>, last accessed on August 21, 2023. The female director is from Rikuzentakata City, Iwate prefecture, which heavily suffered from the "3.11" Tohoku earthquake and tsunami disaster.

organizations, including Kagoshima Organic Agriculture Association (鹿児島有機農業協会), Zen-yukyo (National Organic Agriculture Promotion Council 全国有機農業推進協議会), and Organic Congress Japan (日本オーガニック会議).

The following words of the female representative director clearly show that the meaning of organic agriculture for KOFA is similar to that of FAO and IFOAM.

In such a capitalist society that prioritizes efficiency and economic considerations above all else, organic activities can be sustained only because of the love and passion of the people engaged. Not only a passion for meeting people but also for encountering agricultural products such as vegetables, rice, and fruits, as well as each of our products, has brought us here. All food is created by life. We should remind ourselves once more that food has a history, a culture, and the people and nature who give it birth [...] Organic is not a brand. Organic is the very essence of life. Organic is a way of life. [...] We still have a long way to go before organic principles of health, environment, social justice, and concerns for the future become common sense.¹⁸
(Female, the representative director of KOFA, A)

4.3 Primary Actors in the SI Ecosystem

As a result of the above series of developments, the KOFA's ecosystem is made up of various actors, which can be categorized as follows: (1) organic farmer members, (2) partners and retailers, (3) governmental bodies, (4) PPP organizations and (5) non-government organizations (NGOs), non-profit organizations (NPOs), media and individual stakeholders, such as newcomers, trainees, and consumers of specialty shops and the café.

(1) Organic farmer members

KOFA has about 160 member farmers and most of them used to be conventional farmers or are new to the region. The top four reasons for them to start organic farming are: (a) a significant change in life stage such as marriage, the birth of their first child, retirement from their previous jobs, or taking care of their parents; (b) having themselves or family members suffering from atopy or allergies; (c) rethinking of their lifestyle prompted by external shocks such as the Covid-19 pandemic; and (d) being inspired by their first encounter with organic farming. Almost all new entrants have been able to become independent organic farmers thanks to technical and informative support from the Kagoshima Organic Agriculture Technical Support Center (鹿児島有機農業技術支援センター, hereafter the Support Center) and KOFA's farms, the mediation and assistance of veteran member farmers, as well as the sales channels and close interaction with consumers created by KOFA and Chikyubatake.

Regarding how to describe their farming livelihoods, the terms “trial and error (試行錯誤)”, “high risk”, “for livelihood (生計のため)”, and “hardship (苦勞)” are often mentioned by

¹⁸ Chikyubatake periodical (2018), vol. 193.

organic farmers regardless of how many years they have been working on farms. Why farmers refer to these terms can be explained by the following comment of one skilled employee who has been trained and worked in organic farming for six years:

*Too many variables in farming will influence the outcome. Climate, sunlight, water, soil, you name it. As a result, every year feels like a fresh start [...] (The names of the senior manager K and staff S) are far superior to mine (on farming). They have been in the sector for a long time. If something goes wrong on the farm, they know exactly what happened and how to fix it.*¹⁹ (Male, late 20s, junior employee Z)

This viewpoint is likewise supported by the author's observations during the 'field research.

At the same time, "consumers' praise", "encouragement from the Chikyubatake specialty shops' staff", "more healthy food for their family", "intimacy with nature", "joy (楽しみ)", and "satisfaction derived from work" are commonly highlighted by member farmers.

*I've been organizing harvest experience events at my greenhouse to interact with consumers (since 2013). Although it takes time and effort to schedule the harvest of organic vegetables with the event date, as well as to prepare and set up everything, it is my greatest satisfaction as a producer to hear many pleasant voices from the participants[...] Organic farming entails significant risks, such as insect pests and crop diseases, but we are always developing our abilities and cultivation techniques in order to provide plentiful vegetables to all consumers*²⁰ (Male, farmer member M).

In addition to consumers, the staff of specialty shops play another important role in motivating organic farmers to set and fulfill their mission.

*Supermarket employees deal with vegetables but know nothing about the farmers and their families. They simply consider these products as commodities. Chikyubatake specialty shop staff, on the other hand, are distinctive. They frequently assist me in harvesting or weeding. We can really talk during that period. They know where I live, and how many people are in my family, and they even know that I farm after I take my mother to the hospital every day. We have a very great bond*²¹ (Female, farmer member W).

(2) Partners and Retailers

The second group of actors includes KOFA's collaborated organic retailers and distributors, such as Oisix Ra Daichi, Bio Marche²², Kansai Yotuba Liaison Association (KYLA), Fūsui

¹⁹ The Interview on 18 February 2022.

²⁰ Chikyubatake periodical vol. 193.

²¹ KOFA (2005), pp.77-78

²² Bio Marche has initially sought to create a society rich in harmony and diversity by developing new production and consumption methods based on the organic farming philosophy that harmonizes and resonates with life and the environment. They highlight that organic agriculture reduces the load on people and the natural environment while also having the ability to sustain the environment. <https://biomarche.jp/company>, last accessed on 16 January 2022.

Project²³, Tohto Co-op²⁴, Polan Organic Foods Delivery (POD)²⁵, Akikawa Foods and Farms²⁶, and Hokkaido Organic Agricultural Cooperative²⁷. Among them, POD, KYLA, Bio Marche, and Oisix ra Daichi are the four main and long-term collaborating retailers for KOFA. Similar to Daichi-wo-Mamorukai, which was merged with other two organic home delivery service and e-commerce companies to become the Oisix ra Daichi in 2018, Bio Marche once was a bottom-up AFN but was acquired by a big transport company, Keihan Holdings in 2014. The other two partner distributors, on the other hand, have not yet been fully commercialized by large business acquisitions. KOFA began its relationship with POD in 1985 and KYLA in 1984.

(3) Governmental bodies

KOFA has also actively connected and collaborated with national governmental bodies, such as the Ministry of Agriculture, Forestry and Fisheries (MAFF), Ministry of Economy, Trade and Industry (METI), Consumer Affairs Agency (CAA), Ministry of Environment, Japan International Cooperation Agency (JICA), and Japan External Trade Organization (JETRO). Furthermore, KOFA collaborates with prefectural and local governments, mainly by providing technical support, including Kagoshima Prefecture Agricultural Administration Department, and Minamitane Town Agricultural Policy Department. In 2019, KOFA was awarded by MAFF for its continuous contributions to the promotion of organic agriculture and environmental conservation (農林水産大臣賞).

(4) PPP organizations

The fourth group of actors involves public-private partnership (PPP) organizations, such as the Kagoshima Organic Farming Promotion Council (かごしま有機農業推進協議会, KOFPC), Aira City's Organic Agriculture Promotion Council, and Minamitane Council for the Promotion of Organic Farming (南種子町有機農業推進協議会).

(5) NGOs/NPOs and Others

Finally, the representative directors and core founding members of KOFA have actively been serving as core members for Organic Congress Japan (日本オーガニック会議), Zen-yukyo (National Organic Agriculture Promotion Council 全国有機農業推進協議会). In addition, KOFA has been collaborating with Kagoshima Organic Agriculture Association (鹿児島県有機農業協

²³ <http://www.fu-suijp.net/>, last accessed on 16 January 2022.

²⁴ <https://www.tohto-coop.or.jp/index.php>, last accessed on 16 January 2022.

²⁵ POD's mission is to promote organic distribution and sales to support organic agriculture-based sustainable production and processing. <https://www.e-pod.jp/hd/>, last accessed on 16 January 2022.

²⁶ <https://www.akikawabokuen.com/>, last accessed on 16 January, 2022.

²⁷ <https://yu-kinokyo.net/>, last accessed on 16 January, 2022.

会, KOAA²⁸) since 2000, PHD Foundation²⁹ since 1999, Kagoshima Organic Festa Committee³⁰ since 2007, and local children's kitchen ³¹ (森の子ども食堂) since 2016. Kagoshima University³² and Kagoshima City Tourism Agricultural Park (鹿児島市観光農業公園) are also important actors in KOFA's ecosystem (see **Figure 2** left below).

5. Scaling strategies

This chapter elucidates KOFA's scaling strategies in terms of "scaling out", "scaling up" and "scaling deep". It also points out two unconformities and even conflicts among organic farming partners during "scaling out".

5.1 Scaling Out

The main "scaling out" strategies implemented by KOFA are (1) developing multiple organizational forms and involving more farmer members, staff, and newcomers, and (2) developing multiple sales channels and innovating new organic food products.

Scaling out by increasing organizational forms and members

There are three types of organizational forms in KOFA: the Organic Farmers' Association, specialty shops and café, and directly managed farms. First, the KOFA's headquarters consists of ten departments that oversee the management of the farmers' association of about 160 members. Across Kagoshima Prefecture, Kumamoto Prefecture and Miyazaki Prefecture, farmer members organize workshops by their region, or by specific crops. These organizations play an important role in KOFA's annual production decisions and technology promotion. In terms of decision-making and agenda-setting, the association's governance board committee, which consists of eight members including three employees, three farmer members, and two representative directors, is responsible for organizing an annual meeting once a year. A new plan must be agreed upon by no less than half of all members (in person or delegated to others).

²⁸ KOAA was established in 2000 as a registered certification body for organic agricultural products and as an organization to promote and educate the public about organic agriculture. It is the oldest NPO organization in the prefecture. Its purpose is to promote organic agriculture as well as to save lives and protect the environment. The female representative director of KOFA is one of the founding members of KOAA.

²⁹ A civil association based in Kobe that created a network between Japan and Asia and the South Pacific region. <http://www.phd-kobe.org/>, last accessed on 12 January 2022.

³⁰ Each year, the Organic Festa in Kagoshima employs over 50 volunteers and attracts over 50,000 visitors. Homepage of organic festa in Kagoshima, <https://organic-fiesta-kagoshima.amebaownd.com/>, last accessed on 12 January 2022.

³¹ It was the first established social kitchen in Kagoshima City, (<https://www.city.kagoshima.lg.jp/kodomofuku/kodomosyokudou.html>, accessed on October 24, 2023). Chikyubatake periodical vol.188.

³² According to the material obtained from KOFA, its farm cultivates traditional Kagoshima vegetables in collaboration with Kagoshima University.

Second, Chikyubatake has experienced several times of new shops opening and closing, and now it has three specialty shops and a café in Kagoshima City. The female representative director was the first actor to propose the idea of selling the surplus of farmer members in an organic specialty shop. Members showed mixed reactions to the idea: “It’s interesting, let’s try it”, “No way, it will just fail and create debt”, and “I want to have our own shop, and complete on the quality of our own vegetables”. Eventually, the director’s strong insistence that “we definitely want to establish a direct sales store as a place to promote organic farming locally” was echoed by even those members with cautious opinions³³. The rationale for the establishment of an organic specialty shop was slightly different from the initial intention of those in charge, who hoped to solve the problem of surplus vegetables, and ended up being “to promote organic farming in the local area by making people aware of the good taste of local organic vegetables and connecting producers and consumers.” Accordingly, the first specialty shop³⁴ was open in the center of Kagoshima City in 1992. It was reported in the local newspaper Minami-Nihon Newspaper under the title “Organic farmers open a direct sale store” and subsequently introduced in the newspaper and on TV for several days³⁵. Today, each of the Nishida, Arata, and Taniyama branches of specialty shops has its own unique concept based on its location and target customers. Each shop employs three to five people. The number of daily customers visiting these three shops amounts to approximately 500 to 700. Aiming to create a space for local people to have organic meals produced by local organic farmers, KOFA’s first café, named ‘A Ship over the Meadow (草原をわたる船)’, was opened in the Arata branch specialty shop in 2006.

Third, KOFA launched directly managed farms in 2012. It started with 14 young people from different backgrounds who had no farming experience, land, or capital, but wanted to work independently in organic farming and fulfill the needs of society. In 2022, KOFA has a Kiire farm and a warehouse in Chiran town of Minami Kyushu City and an Okuchi Farm in Okuchi area of Isa City. The former primarily grows onions, green scallions, and sweet potatoes, whereas the latter grows root vegetables like turnips, carrots, and potatoes. Each farm is managed by two to five people, including two staff, part-time workers, and technical trainees.

Scaling out by developing sales channels and innovating new products

KOFA expands its sales channels to urban markets outside of Kagoshima Prefecture by collaborating with multiple retailers and distributors. Throughout the three development phases, diverse actors, including organic farmers and consumers, KOFA headquarters staff, NGOs/NPOs, PPP organizations and governmental bodies, play key roles in the expansion of these sales channels. During the formation phase, for example, through the introduction of a

³³ KOFA (2005), pp.138-9.

³⁴ The rent at the time was approximately 230,000 yen with 130 square meters of area. In order to save money, part of the construction and arrangement of the store was made by the hands of the farmer members using materials from a nearby closed supermarket.

³⁵ KOFA (2005), pp.138-9.

Tsukuru-Kai's consumer member who moved to Kagoshima from Osaka, KOFA connected with the head of KYLA. KOFA's supply to KYLA started with autumn citrus oranges, then, root crops, mainly sweet potatoes, taro, carrots, and onions. At the same time, KOFA supplied mandarins and oranges to school lunches in Takatsuki City and Ibaraki City, Osaka Prefecture via KYLA in 1985. Although school lunch supplies did not continue long due to the challenges in meeting the volume and size criteria set by the school lunch program, the partnership with KYLA still continues. It was with KYLA's experience and help that the first specialty shop opened successfully in 1992.

In 2021, KOFA's annual revenue reached 864 million JPY³⁶ (about 6.75 million US dollars) in total. KOFA's farms and its farmer members are producing more than 120 items each year, including 300 tons of carrots, 150 tons of onion, 140 tons of potato, 130 tons of turnip, and 110 tons of sweet potato. Over eighty percent of these products are sold to the Kanto (Mega Tokyo region) and Kansai (Osaka, Kobe, and Kyoto region) metropolitan regions. In 2015, an innovating and processing group in KOFA furtherly built its own brand, "Chikyubatake Original", for new processed products, such as juices, dressings, baby meals, and vegetarian sauces. Specifically, the products of organic baby meals have won the NPO Kagoshima Products Association's President Award (鹿児島県特産品協会理事長賞) in 2018. In addition, KOFA launched an export business with the help of JETRO Kagoshima and participated in a local exporter fair in 2018³⁷. Since then, the KOFA's export department has actively participated in overseas fairs. It exports sweet potato and processed foods valued at 4.57 million yen to nine countries in Asia, the Middle East, and Europe in 2021³⁸. KOFA also launched an e-commerce business in 2019, accounting for one percent of its annual sales through its own branding online shop and two major e-commerce platforms, Rakuten and YAHOO shopping.

5.2 Scaling Up

KOFA implements three forms of "scaling up" strategies: advocacy for the advancement of the organic promotion law and involvement in new policy-setting, public-private partnership (PPP), and the application and use of subsidies.

Advocacy for the advancement of the law and the development of new policy

On December 15, 2006, the Act on the Promotion of Organic Agriculture was unanimously passed as a parliamentary bill by the Cross-Party Diet Members' Federation for the Promotion of Organic Agriculture (有機農業推進議員連盟), comprising 45 members of House of

³⁶ According to the US Organic Trade Association, the organic market in Japan was worth 602.6 million US dollars in 2021, which indicates that KOFA's yearly volume accounts for 1.1 percent of the whole domestic market.

³⁷ https://www.jetro.go.jp/case_study/2020/7354.html, last accessed on 19 August 2023.

³⁸ https://www.maff.go.jp/j/shokusan/export/gfp/attach/pdf/yusyutsu_keikaku_kohyo-290.pdf, last accessed on 12 January 2022.

Representatives and 38 members of the House of Councilors³⁹. KOFA's representative directors were invited to a study meeting of the Diet Members' Federation for the Promotion of Organic Agriculture in Tokyo about the current state of organic agriculture in Kagoshima and the vision for its promotion⁴⁰.

Furthermore, the male representative director attended the national strategy-setting meeting⁴¹ on behalf of the organic agri-food sector, even though the end goal didn't reflect his opinion. When the author asked him about his thoughts on this policy, he expressed his discontent and criticism as follows:

[The objective] is far too gentle. The goal for organic farming should be boosted to 50% by 2050. (The ultimate goal is 25%). We did everything we could to persuade MAFF of the need of supporting organic agriculture [...] It would be a reasonable target if we could solely supply organic food as school lunches. In Isumi City, Chiba Prefecture, 100% of the rice served in school lunches is organic, and agriculture acreage has expanded dramatically. Why can't we promote it on a national scale? We will continue to promote organic agriculture in this region (in the Southern Kyushu area) regardless of the target in the policy.

Public-Private Partnership

KOFA has actively engaged in public-private partnership (PPP) with prefectural and local governments under national government-led projects, for example, the MAFF's Global Farmers and Food Manufacturers Project for export (GFP グローバル産地づくり推進事業 since 2020), Comprehensive Organic Agriculture Support Measures (有機農業総合支援事業), and a Comprehensive Collaborative Agreement on Regional Revitalization (地域活性化に関する包括連携協定), centered on organic agriculture, with Minamitae Town in 2021. Among them, this subsection takes the case of PPP with local governments of Kagoshima Prefecture, Aira City, and Minamtane Town as examples.

First, KOFA is one of the founding members of the Kagoshima Organic Farming Promotion Council (かごしま有機農業推進協議会, KOFPC⁴²). KOFPC, comprising three municipalities in Kagoshima Prefecture (Kagoshima City, Minami-Satsuma City, and Aira City), four producer and consumer groups (Aira Organic Group, MOA West Japan Sales, Kagoshima Consumer Cooperative, and KOFA), and KOAA, was established in 2008. It aims to respond to

³⁹ See Honjo (2017a, b) for details.

⁴⁰ Chikyubatake periodical vol. 189.

⁴¹ The 13th Meeting for the Exchange of Opinions on the MIDORI Policy-setting. <https://www.maff.go.jp/j/kanbo/kankyo/seisaku/midori/attach/pdf/team1-44.pdf>, last accessed on August 21, 2023.

⁴² The main goals and activities of KOFPC are to provide guidance and advice to newcomers and those in conversion to organic farming, to promote the distribution and sales of agricultural products produced by organic farmers, and to educate consumers and promote communication between organic farmers and consumers. For example, the KOFPC organizes events such as Bokashi seminars, public lectures, Organic Festa, and farm tours. The establishment and development of both KOFPC and KOAA are inseparable from the efforts of KOFA and its leaders.

the national policy for the promotion of organic agriculture, by establishing a model town as the core project of organic farming promotion in Kagoshima Prefecture and then expanding the production and consumption throughout the prefecture. The KOFPC was subsidized by MAFF as a model town project for FY 2008 and FY 2009.

Second, KOFA has been collaborating with Aira City⁴³. Since 1989, a founding member of KOFA has served as the first leader of the "Aira Organic Farming Method Study Group," and has initiated and played an important role in the city's promotion of organic agriculture. Since then, it has about 40-year history of promoting organic farming in the region. The Support Center) was established in Aira City in 2009, as one of the first projects selected for the "Regional Organic Agriculture Facilities Building Project (地域有機農業施設整備業)" under the policy of "Comprehensive Organic Agriculture Support Measures (有機農業総合支援事業)" launched by the MAFF in 2008. The facility of the Support Center is a wooden two-story building with a total floor area of 276 square meters, equipped with accommodation, training facilities, a nursing facility, and a soil analysis room, and is operated by KOFA to serve as a base for supporting local farmers, including newcomer farmers. At present, Aira City has a mechanism for exchanging organic information on a regular basis with JA Aira, Kagoshima Prefecture, and other cities; sharing the most recent market conditions, farming methods and techniques, and sales promotions; and supporting organic farmers through the Support Center and the city's own financial incentive measures⁴⁴. New entrant organic farmers' experiences highlight the crucial roles of the local JA and local and prefectural governments in providing them with access to land and accommodations (Iwamoto, 2012, p.60) as well as the role of KOFA in offering technical supports and information (AiraView, vol.233, p.7).

Third, KOFA has established the Minamitane Council for the Promotion of Organic Farming (南種子町有機農業推進協議会⁴⁵) and reached a Comprehensive Collaborative Agreement on Regional Revitalization Centered on "Organic Agriculture" (「有機農業」を軸とした地域活性化に関する包括連携協定⁴⁶) with Minamitane Town in 2021. It aims to promote organic farming, revitalize the community through the restoration of abandoned farmland and the recruitment of new farmers, and create a sustainable community through

⁴³ As a pioneer and principal public advocate for organic farming in Kagoshima Prefecture, Aira City has been working closely with KOFA. To the city, organic agriculture is "a type of farming that is close to nature and beneficial to both the soil and the human body" (AiraView vol. 163, p.3). In 2019, for example, the prefectural government published an organic farming manual based on Aira City's original version to facilitate new and current organic farmers' farming practices.

⁴⁴ AIRAview, Vol. 162, p.4

⁴⁵ It includes Minami-Tane Town, agricultural commission (農業委員会), Board of Education (教育委員会), Minami-Tane Town Community Development Corporation (南種子町まちづくり公社), Minami-Tane Town Community Center Liaison Council (南種子町公民館連絡協議会), JA Tanegayaku, Tourist Product Center Tongmee Market (観光物産館トンミー市場), Minami-Tane Town Chamber of Commerce and Industry (南種子町商工会), Environmental Conservation Agriculture Promotion Council (環境保全型農業推進協議会). <http://www.town.minamitane.kagoshima.jp/industry/agriculture/organic/council.html>, last accessed on August 20, 2023.

⁴⁶ Organic Agriculture Implementation Plan. <http://www.town.minamitane.kagoshima.jp/assets/files/pdf/yukisuishin/20230328organic-plan.pdf>, last accessed on August 20, 2023.

organic farming. The numeric goal of this agreement is to increase organic farming acreage to 2 ha or more (potatoes and vegetables) by 2024. In particular, KOFA organizes the trials of the *Aigamo* robot in the rice paddy, organic agricultural experience events, organic school lunch projects, and workshops and seminars for new farmers. A video titled “Recycling in Minamitane Town⁴⁷” about the project made by the Minamitane Council for the Promotion of Organic Farming and KOFA has won the Minister of the Environment Prize for “2022 Sustainer Award: Communicating Japan's Sustainability to the World”⁴⁸.

Subsidies

KOFA has received multiple government subsidies, including the KOFPC-led Organic Business Practice Center Development Project (オーガニックビジネス実践拠点づくり事業⁴⁹) of MAFF in 2020, Japan Brand Development Support Program (Japan ブランド育成支援等事業費補助金⁵⁰) of METI in 2020, New Product Sales Expansion Support Program (新製品等販路拡大支援事業⁵¹) of Kagoshima Industry Support Center in 2023, Project to Power-up the Production Base in Producing Areas (産地生産基盤パワーアップ事業⁵²) of MAFF in 2021, and Program for the Establishment of a Support System for Securing Agricultural Human Resources and Farming Employment (農業人材確保・就農サポート体制確立支援(地域の就農支援サポートタイプ)) of MAFF in 2021.

Take the "Program for the Establishment of a Support System for Securing Agricultural Human Resources and Farming Employment" as an example. KOFA has made use of this national government subsidy to establish a trainee program to help newcomers succeed in farming after studying in the facilities. In 2021, KOFA established a special committee with the aim of reaching out to more people with the potential to become organic farmers and launching a training and follow-up program. The program consists of six parts⁵³: (1) organizing farming events and field trips, (2) providing training in agricultural techniques, (3) arranging and securing farmland for new farmers; (4) offering follow-up support for new entrant farmers, (5) supporting their daily life; and (6) facilitating capacity building after entry into the agricultural sector. To date, more than 30 college and high school students have participated in the program's farming experience events, ranging from one-day to two-week.

⁴⁷ “Recycling in Minamitane-town” on MAFF YouTube Channel.

<https://www.youtube.com/watch?v=LfP1Bawe2kl>, last accessed on August 20, 2023.

⁴⁸ MAFF, CAA and Ministry of the Environment implements the “AfunoWa 2030 Project(あふの環)” as part of the MIDORI policy. In this project, MAFF awards videos of sustainable initiatives related to food and the agriculture, forestry, and fisheries industries.

⁴⁹ 1,104,405 yen.

⁵⁰ 1,842,182 yen.

⁵¹ Up to 500,000 yen for Expansion of sales channels for organic vegetable baby food produced in Kagoshima Prefecture in the 8th Organic Forem JAPAN Organic Lifestyle EXPO 2023.

⁵² 24,182,000 yen.

⁵³ https://www.maff.go.jp/j/keiei/nougyou_jinzaiikusei_kakuho/attach/pdf/roudouryoku-30.pdf, last accessed on October 11, 2023.

And two of them have become full trainees and are being supported in their own agricultural activities.

5.3 Scaling Deep

In addition to the aforementioned issues of periodicals, workshops by farmer members, communication and collaboration with civic organic organizations (e.g., PHD foundation and Organic Festa) and the establishment of a trainee and internship system, KOFA's "scaling deep" strategies also include teaching organic farming techniques in urban areas and abroad, organizing producer-consumer communication and organic promotion events, and providing part-time work opportunities for students to experience organic farming.

First, KOFA's directly managed farms provide technical assistance to individuals through the collaboration with PPP organizations. For example, from 2012 to 2021, the KOFA operated organic farms in the Kagoshima City Tourism Agricultural Park for the Kagoshima City government. This project aimed to allow urban families to experience farming over the weekends. In addition, a group of organic experts of directly managed farms visited Nepal in 2017 and Vietnam in 2020 through a program of Japan International Cooperation Agency (JICA).

Second, farmer members in KOFA have more opportunities to interact with consumers thanks to events, such as "farmer's selling day", in which various farmers are invited to sell in the shops by themselves, harvest activities on farms, and annual festivals managed by KOFA's specialty shops and café. Also, seminars and workshops on organic agriculture, health, and sustainable lifestyle are regularly organized for citizens. As shown in **Figure 4**, the specialty shops display promotional materials of organic products, post notice of events of the International Film Festival on Organic Farming (IFOF) in the shops and Chikyubatake periodicals, and encourage staff to watch documentary films⁵⁴ such as "Revolution began with school lunch (『給食からの革命』)", "Itadakimasu ~This is a fermentation paradise (『いただきますここは発酵の樂園』)", and "Too good to waste (『もったいない』)".

Finally, KOFA also creates a caring and inclusive network for part-time workers to experience organic farming more easily. They are paid more than average.

The minimum hourly wage in Kagoshima Prefecture is 821 yen. Normally, farmers in this area pay part-time workers 856 yen per hour, while we pay 900 yen. We aim to encourage more people to participate in and learn about organic agriculture so that we can convey its principles through such practices⁵⁵. (Male, 40s, senior manager K)

A student club in Kagoshima University has collaborated with KOFA to organize a weekend farming event occasionally. Some of college students and high school students in the neighborhoods often come to work on weekends as part-time workers. Even high school

⁵⁴ Chikyubatake periodical vol. 186 and vol. 196.

⁵⁵ The interview on 24 February 2022.

students, who usually earn less in most cases in Japanese society, also earn a relatively higher hourly salary.



Figure 4 Promotional materials and posts in the specialty shops

Source: photos owned by the author.

5.4 Divergent opinions during “scaling out”

KOFA has also faced discrepancies in opinion among organic farming partners, especially between staff of directly managed farms. They are invoked by different understandings of organic farming and different ways of implementing it.

First, leadership, personal social and financial pressures, and the desire to fulfil the functions of the farmers’ association cause disagreements and even conflicts among staff. The male representative director of KOFA refers to its ecosystem actors as “Nakama (仲間, meaning a “partner” in Japanese)”. However, not everyone is welcome in KOFA. When encountering those who see organic agriculture merely as a means of making greater profits, for example, he always tells them that organic agriculture is not a vehicle for making money. Instead, he is willing to work with those who can feel grateful for nature’s gift (KOFA, 2005). Such kind of leadership creates a filtering mechanism in the implementation of scaling strategies. In addition, the various financial and social pressures felt by KOFA’s employees of different generations with diverse backgrounds at various stages of life naturally shape the

filtering mechanism. Employees with fewer than three years of experience at KOFA gain a salary of about 120,000 yen per month, with a ten thousand yen increase every year. Employees in the headquarters earn slightly more than those on the farms. This amount of salary is not sufficient to support a traditional Japanese nuclear family usually with a full-time housewife and one or two children. Therefore, young, foreign, and single male employees are more likely to experience work-life balance difficulties and financial stress if they are not sufficiently determined to become an organic farming “partner” in KOFA. On the other hand, highly experienced, often male⁵⁶ employees are satisfied with their job and life, regardless of whether they are married or not:

I'm pleased with my job... I simply need the money to get by. Individuals, in my opinion, do not need much money if they have enough food and a good job⁵⁷. (Male, 40s, senior employee S)

KOFA's commitment to its responsibility as a farmers' association has led to conflicting views on farm management between a senior manager and the directors. KOFA prioritizes meeting the needs of its farmer members over making profits. For example, during the harvest seasons each year, plenty of labor, skills, and time are distributed from KOFA's directly managed farms to help member farmers in need, and farmers are only charged a minimal service fee. During the two-week field research, the author witnessed a skilled employee visiting one farmer and helping him collect carrots, even though this skilled employee's own farm lacked labor to prepare and pack green scallions to guarantee daily profits. As such, offering the harvest service lowers the profit that KOFA could have made by processing and selling their own products to retailers. The manager of the farm told me,

I feel this type of service is one of the reasons my staff are paid so little. I used to dispute with our company about this issue and the management concept. I advised cutting such services... and increasing the business that may provide us with higher income. However, it did not work... I made a compromise... I respect our representative's idea.⁵⁸ (Male, 40s, senior manager K)

Second, disagreements and conflicts could arise from KOFA's attitude toward conventional farming and distribution practices that rely more on mainstream organic fertilizer, seeds, and machines, and pay more attention to products' appearance and package (see **Figure 5**) under the promotion of the Organic JAS certification system. According to one former employee, “such commitment to market logic is inconsistent with the concept of organic agriculture⁵⁹”. It could also increase the labor of certified organic farms and narrows the opportunities for already marginalized small-scale farmers. The mere standardization of organic agricultural

⁵⁶ Gender bias is still prevalent in agriculture and rural areas in Japan. This is not to say that the author only focuses on the issue from a male perspective, but I met more male full-time employees on the farm than women.

⁵⁷ The interview on 16 February 2022.

⁵⁸ Interview on 24 February 2022.

⁵⁹ Interview on 16 March 2022.

products through the certification system not only disconnects consumers from producers, but also results in waste, overpacking, and wear and tear on farmers' energy, time and passion. During the two-week field visit, the author experienced the four-step procedure for processing scallions⁶⁰ on KOFA's farms. All these steps are required for green scallion farmers seeking to enter mainstream markets, such as supermarkets and specialty stores, to meet the standards of the Organic JAS certification system and those set by retailers. However, despite laborious one-year farming efforts and complex processing operations, the purchase price for each pack of two scallions is approximately 80 yen, close to the price of conventional agricultural products (**Figure 5** up left).

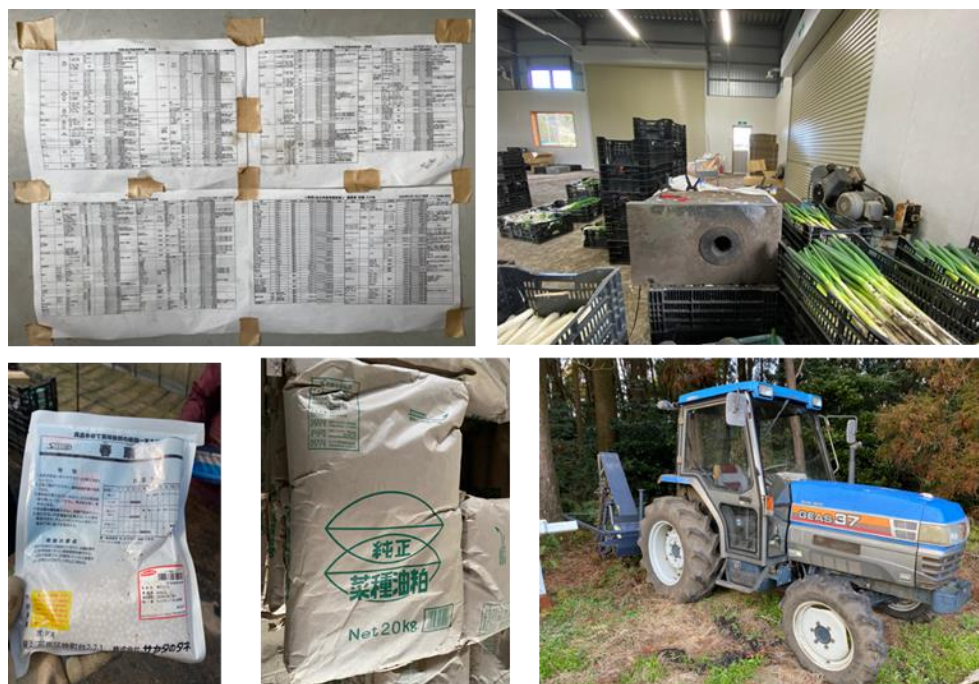


Figure 5 About farming and processing methods

Source: photos owned by the author.

6. Discussion and Conclusion

6.1 SI Ecosystem

KOFA began as a social movement in the late 1970s when organic agriculture remained a niche. Organic farmers used to be marginalized and called “weirdos”. Over the recent two

⁶⁰ The processing of scallions is as follows: the first stage removes most of the yellow and damaged leaves and roots. The rough processed green scallions must be cut to the same length and put in a square basket (see Figure 5 up right). The remained old layer of leaves will be removed until three to four perfect green leaves are left in the second phase via an extremely noisy blowing-leaf machine, which is the most critical stage in achieving a flawless look. According to merchants, such perfection is “needed by customers shopping at the supermarket.” Each pack of two green scallions must weigh a range of 200g to 230g. They must be wrapped in one plastic bag labeled with the JAS Organic logo. The root parts are wetted before being wrapped in order to keep them looking fresh. The organic label should also be attached to the cardboard boxes with 20, 25, or 30 packs. These boxes will be delivered by mainstream distribution firms.

6.2 Scaling strategies

This sub-section summarizes and examines the scaling strategies employed by KOFA, with a focus on the discussion among actors within the ecosystem who carry out the strategies and those who praise KOFA's practices.

Scaling Out Strategies

The "scaling out" strategies used by KOFA take several approaches, such as the development of diverse organizational designs, augmentation of employee and farmer membership, expansion of novel sales channels, and the introduction of innovative organic food products. In KOFA, three forms of organizations have been established, namely the Organic Farmers' Association, specialty shops and cafés, and directly managed farms. These entities were initially established primarily to address the economic challenges associated with surplus products from farmer members, as well as to ensure the long-term viability of organic farming practices within the KOFA community. These organizational forms overlap in many places, hence generating further relationships and interactions involving numerous stakeholders. The multiple sales channels and novel organic food products enable KOFA to reach out to consumers inside and outside Kagoshima Prefecture and even overseas.

The actors in the implementation of "scaling out" strategies are KOFA's representative directors, staff in all departments in the headquarters, and farmer members, as well as the actors of partners and retailers, national, prefectural and local governments, and media and individual consumers. NPOs with the character of industry associations, and other actors in the economic environment, such as retailers and consumers, have praised KOFA's practices. In particular, the original brand of organic baby food has won a President Award of the NPO Kagoshima Products Association. Partners and retailers, representative directors and senior members of KOFA, among others, have more power in decision-making. However, the way leadership is exercised, the social and financial pressures on individuals, and the inclination of the Farmers' Association to fulfill its functions, could lead to disagreements and even conflicts among staff. In addition, excessive compromises on commercialization could drain the energy and enthusiasm of new organic farmers and other stakeholders, thus undermining the sustainable growth of organic agriculture. In this context, KOFA's multiple sales channels are crucial for maintaining diversity and equity in the organic agri-food sector.

Scaling Up Strategies

KOFA's "scaling up" strategies involve advocacy for the enactment and implementation of the Organic Agriculture Promotion Law, involvement in setting new policies, participation in public-private partnership (PPP), and utilizing subsidies. KOFA, as a founding member, collaborates with local governments and other stakeholders to establish a promotion council and develop a 5-10 year plan with specific numerical targets in the common form of public-private partnerships. During the implementation phase, KOFA primarily provides technical assistance and coordinates promotional activities for the general public, sometimes making use of grants and subsidies.

Actors in the implementation of “scaling up” strategies are KOFA’s representative directors, several founding organic farmer members and staff in the three bodies of KOFA, as well as various levels of governments and PPP organizations. Among these actors, it is the governmental bodies and PPP organizations that have more power in decision-making and goal-setting, while KOFA is the actor for implementation. In particular, the leadership of the two representative directors plays a major role in driving these strategies. In addition to the directors, some of KOFA’s founding members and senior managers are implementing actors in the application of grants and subsidies and in the initial phase of PPP, along with employees of the relevant KOFA departments in the operational phases of PPP. Among the national governmental bodies that have praised the “success” of PPP practices MAFF, CAA and the Ministry of Environment have given awards to KOFA under the MeaDRI policy (Green Food Systems Strategy).

Scaling Deep Strategies

KOFA’s “scaling deep” strategies include publishing periodicals, distributing promotional materials, setting up trainee and internship programs, teaching organic farming techniques, organizing and participating in producer-consumer communication and organic promotion events, and offering part-time job opportunities. The actors implementing the strategies are all members of KOFA, including employees of the headquarters, specialty shops and café, and directly managed farms; farmer members of the association; PPP organizations and NGOs/NPOs; and others including trainees, interns, part-time workers, consumers, organic consumer and producer organizations, media, and some governmental bodies in partnership with KOFA. Most of these actor groups are involved in the implementation of the scaling deep strategies, even if they may have different motivations and understandings of organic agriculture. It is noteworthy that without government subsidies and PPP with government bodies, it would be difficult for KOFA to effectively implement these strategies in its overseas projects or in projects related to the construction of technical facilities. In this sense, multiple levels of governmental bodies and PPP organizations also play a major role in shaping the potential of KOFA’s “scaling deep” strategies for the promotion of organic agriculture.

When it comes to the scale and diversity of actors inside and outside Kagoshima Prefecture and even overseas, the implementation of “scaling deep” strategies is a key factor in forming a more inclusive and relatively more equitable KOFA-centered ecosystem and beneficially fulfilling its social functions. In addition, the encounter with organic agriculture was one of the key reasons that led the youth to become new organic farmers in this case study. New farmers are crucial for the future and sustainable development of organic agri-food systems. Therefore, the practice of “scaling deep” strategies needs to be more appreciated and brought to the attention of the general public.

6.3 Conclusion

In conclusion, KOFA has involved diverse actors from the market, government and civil society sectors to form a complex and organic ecosystem that transcends the local, regional

and even national scales. This is owing to KOFA's implementation of scaling strategies in terms of "scaling out", "scaling up" and "scaling deep". These strategies sometimes intertwine and multiply each other's effectiveness. This ensures diversity and dynamics in the development of the SI ecosystem. Among all implementing actors, the two representative directors, senior managers and farmer members have more say than others in decision-making and goal-setting. However, the final numerical and non-numerical targets and financial resources are determined by multi-level government bodies and government officials within PPP organizations. This means that they are key actors with the power to constrain or facilitate KOFA's potential to transform the current organic agri-food system, and scaling strategies can be successfully implemented only when the ideas of bottom-up SI are aligned with the interests of these governmental bodies and officials.

It is also worth noting that only when KOFA implements "scaling out" and "scaling up" strategies, do they tend to receive visible "success" results in the form of honorary awards from national government bodies and industry associations. In comparison, the literature review indicates that the implementation of "scaling deep" is often neglected by powerful governmental bodies and economic actors as well as academia, and that the sustainable development of organic agriculture relies on "scaling out" and "scaling up" strategies. In this sense, "scaling deep" practices are the most neglected by powerful actors, but are an effective way to promote organic agriculture at scale and depth. It is the "scaling deep" strategies that give most actors inside ("Nakama") and outside the ecosystem the opportunity to encounter organic agriculture in a more direct, equal and diverse manner than other strategies. Therefore, in addition to the practices and outcomes of "scaling out" and "scaling up" strategies, policymakers and academia should pay more attention to the process and outcomes of SI implementation of "scaling deep" strategies and the changing needs and mindset of relevant actors in the SI ecosystem in order to transform organic agri-food system.

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Reference

- Aikawa, Y. (2013). Mountain village agriculture utilizing local resources [Chiiki shigen o ikashita sanson nōgyō]. In: Iguchi, T. and Masugata, T. eds., *Local Self-Sufficiency Network [Chiiki Jikyu no Network]*. Commons (Vol. 81, p. 133). [in Japanese]
- Aoo, K. (2018) An Analysis of the Social Innovation Scaling Processes in Selected Asian Countries. Doctoral Dissertation at the University of Tsukuba.
- Aoo, K. (2022) How do historical and cultural contexts affect social innovation initiatives and local ecosystems: Cases from Okayama, Japan. *The Japan Social Innovation Review* 2, pp.3-14.
- Bock, B. (2016). Rural marginalisation and the role of social innovation; a turn towards nexogenous development and rural reconnection. *Sociologia Ruralis*, 56(4), 552–573.
- de Souza, J. C., da Silva Pugas, A., Rover, O. J., & Nodari, E. S. (2023). Social innovation networks and agrifood citizenship. The case of Florianópolis Area, Santa Catarina/Brazil. *Journal of Rural Studies*, 99, 223-232.
- FAO. (n.d.). Agroecology Knowledge Hub. Retrieved May 22, 2023, from <https://www.fao.org/agroecology/overview/en/>
- Giddens, A. (1984). *The Constitution of Society: Outline of the Theory of Structuration*. Berkeley: University of California Press.
- Giddens, A. (1998). *The Third Way*. Cambridge: Polity Press.
- Hisano, S., Akitsu, M., & McGreevy, S. R. (2018). Revitalising rurality under the neoliberal transformation of agriculture: Experiences of re-agrarianisation in Japan. *Journal of Rural Studies*, 61, 290–301.
<https://doi.org/https://doi.org/10.1016/j.jrurstud.2018.01.013>
- Honjo, N. (2017a). Enactment and enforcement of the Organic Agriculture Promotion Act, their achievement and remaining issues (I): Reviewing the past ten years' operation of the act. *Japanese Journal of Organic Agriculture Science*, 9(2), 6–18. [in Japanese]
- Honjo, N. (2017b). Enactment and enforcement of the Organic Agriculture Promotion Act, their achievement and remaining issues (II): Reviewing the past ten years' operation of the act. *Japanese Journal of Organic Agriculture Science*, 9(2), 19–28. [in Japanese]
- Hu, B. (2021). Will Organic Agriculture Expand Significantly in Japan?- An Examination of the Current Status and Farmers' Behavior in Organic: Sustainable Agriculture. *Japanese Journal of Agricultural Economics*, 92(4), 299–316. [in Japanese]
- IFOAM. (2015). Into the Future. Consolidated Annual Report. IFOAM-Organics International.
- Iwahashi, R. (2021). Orientation of Local Farmers' Organization toward Introducing Organic Agriculture: A Case of Kinokawa Agricultural Cooperative in Wakayama Prefecture. *Journal of Rural Studies*, 27(2), 1–12. [in Japanese]
https://doi.org/https://doi.org/10.9747/jars.27.2_1

- Iwamoto, I. (2008). The Profiles of Organic Farmers in Kagoshima Prefecture. *Kagoshima University Research and Education Center for Lifelong Learning Annual Report*, 10, 56–65. [in Japanese] <http://hdl.handle.net/10232/20486>
- Iwamoto, I. (2012). Kagoshima no yūki nōgyō I: Yūki nōsanbutsu no kōiki ryūtsū to jiba ryūtsū — Kako shima yūki seisan kumiai no jirei [Organic Agriculture in Kagoshima I: Wide-area Distribution and Local Distribution of Organic Agricultural Products-Case of Kagoshima Organic Production Association]. *Kagoshima University Research and Education Center for Lifelong Learning Annual Report*, 9, 1–7. [in Japanese]
- Kim, R., Suwunnamek, O. & Toyoda, T. (2008) Consumer Attitude towards Organic Labeling Schemes in Japan. *Journal of International Food & Agribusiness Marketing*, 20:3, 55-71, DOI: 10.1080/08974430802157622
- KOFA. (2005). Michi~yottemiyanse minamikyūshū kara yūki seikatsu: Kagoshima yūki seisan kumiai 20-nen no teian [Organic Life from South Kyushu: 20 Years Proposal of Kagoshima Organic Farmers' Association]. Shizen-shoku Tsushin-sha. [in Japanese]
- MAFF. (n.d.). Japanese Organic Supporters Project. Retrieved April 29, 2022, from https://www.maff.go.jp/j/seisan/kankyo/youki/supporters/suppoters_top.html
- MAFF. (2020, March). Summary of the Basic Plan for Food, Agriculture and Rural Areas: To pass Japan's food and vigorous agriculture and rural areas on to the next generation. https://www.maff.go.jp/e/policies/law_plan/attach/pdf/index-13.pdf
- MAFF. (2021, May). Strategy for Sustainable Food Systems, MeaDRI. MAFF. <https://www.maff.go.jp/j/kanbo/kankyo/seisaku/midori/index.html>
- McAdam, M. and Debackere, K. (2018). Beyond 'triple helix' toward 'quadruple helix' models in regional innovation systems: implications for theory and practice. *R&D Management*, 48, 3-6.
- McGreevy, S. R., Tamura, N., Kobayashi, M., Zollet, S., Hitaka, K., Nicholls, C. I., & Altieri, M. A. (2021). Amplifying agroecological farmer lighthouses in contested territories: navigating historical conditions and forming new clusters in Japan. *Frontiers in Sustainable Food Systems*, 5, 699694.
- Mulgan, G., Ali, R., Halkett, R., & Sanders, B. (2007). *In and Out of Sync: The Challenge of Growing Social Innovations*. NESTA. National Endowment for Science, Technology and the Arts. UK. <https://www.youngfoundation.org/wp-content/uploads/2013/03/In-and-out-of-sync-the-challenge-of-growing-social-innovations-Sept-2007.pdf>
- Muramoto, J. (2019). Research Approach [kenkyū apurōchi]. In: *Organic Agriculture Encyclopedia. [Yūki Nōgyō Taizen]*. pp. 22–24. [In Japanese].
- Murray, R., Caulier-Grice, J., & Mulgan, G. (2010). *The Open Book of Social Innovation: Ways to Design, Develop and Grow Social Innovation*. London: Young Foundation.

- Moore, M. L., Riddell, D., & Vocisano, D. (2015). Scaling out, scaling up, scaling deep: strategies of non-profits in advancing systemic social innovation. *Journal of Corporate Citizenship*, (58), 67-84.
- Moulaert, F. (ed.). (2013). *The International Handbook on Social Innovation: Collective Action, Social Learning and Transdisciplinary Research*. Edward Elgar Publishing.
- Nakagawa, M. (2018). Who will Make Agri-food System Better? -Farmers, Consumers and Mediators. *The Study of Sociology*, 102, 65–92. [in Japanese]
https://doi.org/https://doi.org/10.50980/shakaigakukenyu.102.0_65
- Neumeier, S. (2012). Why do Social Innovations in Rural Development Matter and Should They be Considered More Seriously in Rural Development Research? - Proposal for a Stronger Focus on Social Innovations in Rural Development Research. *Sociologia Ruralis*, 52(1), 48–69.
- Neumeier, S. (2017). Social innovation in rural development: identifying the key factors of success. *The Geographical Journal*, 183(1), pp. 34-46.
- Oe, M. (2020). *The Power of Organic Farming: Wisdom for Living in the Corona Era [Yūki nōgyō no Chikara: Korona jidai o ikiru chie]*. Commons. [in Japanese]
- Oguchi, K. (2012). Establishment of the Regional Relationship and the Development of Organic Agriculture: A Case Study of Saitama-Prefecture Hiki-Country Ogawa-Town. *Journal of Rural Studies*, 18(2), 36–43. [in Japanese]
- Oguchi, K. (2018). Shinki san'nyū sapōto o tsūjita yūki nōgyō no soshiki-teki tenkai to sono igi — nōji kumiai hōjin-san bu yasai nettowāku o jirei to shite — [Organizational development of organic farming through support for new entrants and its significance-Agricultural cooperative corporation Sanbu Vegetable Network as an example-]. *Chiba University of Commerce Review*, 56(2), 217–228. [in Japanese]
- Ojima, K., Satoh, T., & Datai, H. (2013). Sales of Organic Farm Products Using Various Distribution Channels: Circumstances and Problems. *Journal of Rural Problems*, 191, 173–178. [in Japanese]
- Organic Agriculture Entry Promotion Council. (2016). Let's start organic farming! Development of regional agriculture and the role of JA [Yūki nōgyō o hajimeyou! Chiiki nōgyō no hatten to JA no yakuwari]. [in Japanese].
- Riddell, D., & Moore, M. L. (2015). *Scaling Out, Scaling Up, Scaling Deep: Advancing Systemic Social Innovation and the Learning Processes to Support it*. The J.W. McConnell Family Foundation & Tamarack Institute.
- Rosenberger, N. (2017). Young organic farmers in Japan: Betting on lifestyle, locality, and livelihood. *Contemporary Japan*, 29(1), 14–30.
<https://doi.org/10.1080/18692729.2017.1256974>
- Sakai, T. (2016). Changes in Japan's organic produce market and consumer positioning. *Japanese Journal of Organic Agriculture Science*, 8(1), 26–35. [in Japanese]

- Sameda, S. (2022). Self-analysis of the Use of Organic Rice in School Lunches and Efforts to Establish an Organic Rice Production Area in Isumi City, Chiba Prefecture. *Japanese Journal of Organic Agriculture Science*, 14(1), 30–34.
- Sekine, K. (2021). Farming Systems and Operations Contributing to a Sustainable Society and Their Multi-Dimensionality: An Essay at Planning Scenarios for Japan in 2040. *Japanese Journal of Agriculture Economics*, 23, 47–52. https://doi.org/https://doi.org/10.18480/jjae.23.0_47
- Taniguchi, Y., & Sawanobori, S. (2021). COVID-19 Pandemic and Organic Agriculture: As an Opportunity to Change Food, Agriculture, Daily Life and Society [in Japanese]. *Japanese Journal of Organic Agriculture Science*, 13(1), 4–6. <https://www.>
- Terstriep, J., Kleverbeck, M., Deserti, A., & Rizzo, F. (2015). SIMPACT Project. Deliverable 3.2. Comparative Report on Social Innovation across Europe.
- The Japanese Society of Organic Agriculture Science. (2020). A proposal for realizing the numerical targets for the expansion of organic farming referred to in the Strategy for Sustainable Food Systems [MeaDRI `Midori no shokuryō shisutemu senryaku' ni genkyū sa rete iru yūki nōgyō kakudai no sūchi mokuhyō jitsugen ni taisuru teigen-sho]. [in Japanese] <https://www.yuki-gakkai.com/wp-content/uploads/2021/03/ad610735000bf2cdf94163e8e3d7c542.pdf>
- Van der Ploeg, J. D. (2020). From biomedical to politico-economic crisis: the food system in times of Covid-19. *The Journal of Peasant Studies*, 47(5), 944–972.
- Vercher, N. (2022). Territorial Social Innovation and Alternative Food Networks: The Case of a New Farmers' Cooperative on the Island of Ibiza (Spain). *Agriculture*, 12(6). <https://doi.org/10.3390/agriculture12060748>
- Westley, F., & Antadze, N. (2010). Making a difference: Strategies for scaling social innovation for greater impact. *Innovation Journal*, 15(2).
- Westley, F., Antadze, N., Riddell, D. J., Robinson, K., & Geobey, S. (2014). Five configurations for scaling up social innovation: Case examples of nonprofit organizations from Canada. *The Journal of Applied Behavioral Science*, 50(3), 234-260.
- Yasue, H., & Shimoguchi, N. (2018). Evaluation of Human Resources Development Functions of Networks for Organic Farmers' Organization: A Case Study of the Organic Production Association "K". *Japanese Journal of Farm Management*, 55(4), 33–38. [in Japanese] https://doi.org/https://doi.org/10.11300/fmsj.55.4_33
- Zollet, S., & Maharjan, K. L. (2021). Overcoming the barriers to entry of newcomer sustainable farmers: Insights from the emergence of organic clusters in Japan. *Sustainability*, 13(2), 1–24. <https://doi.org/10.3390/su13020866>