**Overcoming the Barriers to Entry of Newcomer Sustainable Farmers: Insights from the Emergence of Organic Clusters in Japan**

Simona Zollet 1,* and Keshav Lall Maharjan 2

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**Abstract:** The growing concern for sustainability in agri-food systems and the parallel decrease in the number of people engaged in agriculture, especially in the Global North, is starting to draw attention to new entrant farmers from non-farming backgrounds (“newcomer” farmers). Newcomers, however, especially if interested in sustainable agriculture, face considerable barriers to entry, and their support needs are often not adequately met by conventional agricultural institutions and support structures. Several studies have highlighted the importance of formal and informal farmer-to-farmer networks and communities of practice for newcomers to receive support, but such networks are usually geographically dispersed. Dynamics of spatial clustering of sustainable farmers, on the other hand, have so far received less attention, particularly in relation to their role in supporting the establishment of newcomers. This study examines the barriers to entry faced by newcomer organic farmers in Japan and the relevance of geographically proximate “clusters” of organic farmers to address such barriers. The results highlight the environmental and social factors that can facilitate the formation of organic clusters in the first place, and how spatial proximity facilitates different forms of cooperation among newcomers. The paper concludes by discussing the potential role of clusters in scaling sustainable agri-food practices.

**Keywords:** new entrant farmers; newcomer farmers; first-generation farmers; organic farming; sustainability transitions; Japan; small-scale farming; organic farming clusters; farmers’ networks

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**1. Introduction**

The unsustainability of current agricultural practices and dominant agri-food system configurations is a central issue in relation to climate change, ecological degradation, and growing socio-economic inequalities at both global and local levels [1–4]. In this context, calls for a radical transformation of food production practices on the basis of ecological processes are becoming increasingly common [5–7]. A way to conceptualize this transformation, for example, is represented by Gliessman’s [8] levels of food system change. This and similar approaches discussed in the literature emphasize the continued importance of diversified and locally embedded farming systems for sustainability transitions [9–11], on the account that they are both more sustainable and more productive than large-scale, monocultural farming operations [12–16]. The drawback of this kind of farming systems is that they are more knowledge- and labour-intensive compared to conventional ones; as such, their expansion will likely require an increase in the number of farmers committed to this vision of sustainability [17]. This task is further complicated by decreasing rates of generational transmission, especially in small-scale farming, which is focusing attention on the need to nurture a next generation of farmers able to respond to the multiple challenges facing agri-food systems [17–22].
Even though family succession remains the most common way of entering the farming sector, there is evidence that people from non-farming backgrounds are also increasing [23–26]. Existing research suggests that this category faces considerable barriers to entry in agriculture [17,25], also due to the lack or unsuitability of conventional support systems [17,24,27,28]. Consequently, newcomers interested in sustainable farming often rely on networks and communities of practice [24,27,29–32]. Those described in the literature, however, are mainly spatially dispersed networks, while there is a scarcity of cases focusing on proximate ones, called here “clusters.” Considering the limited amount of research that currently exists on new entrants from non-farming backgrounds, deepening our knowledge on the strategies that can facilitate their establishment as farmers appears essential.

This study focuses on organic farming clusters in Japan and their role in addressing the challenges faced by newcomer sustainable farmers. Organic farming clusters are conceptualized as geographically proximate groups of organic farmers, while “newcomers” are defined as people who are not successors to an active farm, a category that includes both individuals from non-farming backgrounds and those with partial ties to agriculture [25].

The paper opens with a review of the international literature on newcomer farmers, focusing on their centrality to sustainability transitions and the relevance of networks and communities of practice to respond to the challenges they face upon entering farming (Section 2.1). The concept of clustering as a geographically bounded example of such networks is also introduced (Section 2.2). Sections 2.3 and 2.4 describe the characteristics of Japan’s farming sector and review previous works on Japanese newcomer farmers. The study area and the qualitative methodological approach employed in the study are outlined in Section 3. The Results and Discussion part (Section 4) is divided into three sub-sections: The first outlines the characteristics of the research participants; the second describes the barriers they faced when they started farming; the third discusses evidence of clustering processes among newcomer sustainable farmers, how such clusters emerge, and their relevance for the settlement of newcomers. The paper concludes by discussing how clusters may contribute to fostering a transition towards more sustainable farming systems at the territorial level.

2. Literature Review

2.1. Newcomer Sustainable Farmers and the Challenges They Face

In parallel to the constant decrease of farm successors, the number of people entering agriculture from non-farming backgrounds has been steadily increasing, as evidenced by examples from North America [19,30], Europe [23,25,26,33], and East Asian countries [24,34,35]. This tendency has been attributed to the increasingly uncertain trajectory of conventional agriculture, which discourages succession, and to a growing interest towards less intensive, biodiversity-based production models (such as organic and agroecological farming), and localized or alternative food networks [17,36,37].

An important characteristic of newcomers is their openness to different approaches to farming and farm management, since they are not confined by socialised farming norms [25,26]. Unlike successors, newcomers do not have the pressure to replicate family practices or to farm in ways that reflect the dominant practices in the area where they are located [19]. In addition, they have more freedom to experiment and innovate since they are not limited by pre-existing investments in farming assets [38]. An examination of the literature also suggests that newcomers may be pioneers in the introduction of sustainable farming practices [25,27,28,39–42] and innovative forms of producer-consumer reconnection, such as alternative food networks (AFNs) [19,26,30,33,38].

Newcomer farmers, however, face considerable barriers to entry in agriculture. The major barriers identified in the literature are (a) access to land, (b) access to capital and high start-up costs, (c) access to markets, and (d) access to knowledge and information [25]. Access to land is often identified as the primary barrier to entering the agricultural sector, especially in areas where land is scarce due to low availability or high prices [19,20].
Newcomers may also have difficulties in securing enough capital or credit to start farming, which is one of the reasons why they tend to be engaged in forms of farming requiring a low capital investment, such as small scale horticulture [25,27]. Accessing established marketing channels, such as wholesale markets and supermarket supply chains, is another challenge. Therefore, many newcomers tend to participate in AFNs, which are more flexible and require smaller volumes of production. These channels are also more receptive to specialty crops and heirloom varieties, which are often preferred by newcomer farmers [17,25]. A final barrier is access to knowledge and information. Many newcomers are adults starting a second career in agriculture, often from a completely different background, and they tend to have little or no experience in agricultural production and marketing [19,38,43].

While these barriers to entry are common to all newcomers, those interested in sustainable agriculture face even greater ones [17]. Actors and institutions belonging to the dominant agri-food regime—including formal organizations in the agricultural sector—influence how knowledge is produced and disseminated, as well as how resources such as subsidies are allocated [44,45]. Consequently, farmers who do not conform to the dominant farming mode face more hurdles in gaining the support they need to acquire the necessary knowledge and assets (land, capital, equipment), as well as access to suitable markets [44]. For example, policy support for farming still focuses mainly on productivity and tends to undervalue sustainable farming practices [17,20]. Similarly, financial support directed specifically at new entrants (or at young farmers) is often conditioned upon reaching financial viability as quickly as possible, which can be incompatible with sustainable practices [17,27].

In much the same way, there is a scarcity of resources allocated to extension and research on sustainable farming practices, inputs and equipment, and a consequent lack of extension and learning opportunities [13,17]. As a result, newcomers interested in sustainable farming tend to rely on a variety of learning sources outside of the formal system, especially farmer-to-farmer knowledge networks [25,30,42]. Nevertheless, newcomer farmers often experience isolation, especially when their farm is embedded in a productivist or commodity-oriented farming landscape [27,28,38]. In these cases, social interaction and knowledge sharing with neighbouring farmers can be hindered by different—and sometimes opposing—views of agriculture and of what “good farming” [46,47] entails. This is especially true when newcomers are also in-migrants to a certain rural community, which marks them as outsiders and makes it harder for them to access local knowledge, resources, and support networks [27,31,32].

2.2. Spatially Distanced and Spatially Proximate Newcomer Networks: From Communities of Practice to Clusters

The lack of formal support systems and the sense of distance from the local farming community are behind the tendency of newcomers to form geographically dispersed networks with peers and like-minded people through communities of practice [19,27,31,48,49], including virtual ones [28,50]. Such communities of practice are essential for strengthening newcomers’ connections and networks both among themselves and with established farmers practising sustainable agriculture, which in turn facilitates the creation of opportunities for mutual learning and social exchanges [27,51]. Spaces where like-minded individuals come together to exchange knowledge and experiences, solve problems and share resources, are essential for newcomer farmers in two major ways: First, they provide access to farming expertise and mentorship [19,31,32]; second, they offer moral support by making newcomers feel accepted and validated in their farming choices [19,31,52]. Although this process also occurs within producer-consumer networks and broader communities of interest [31,53–55], this paper focuses specifically on relationships among farmers.

The importance of networks to facilitate cooperation among farmers is not a new subject: Its importance has been widely emphasized, both as an informal practice based on trust, proximity, and personal relationships [27,56], and also in its formal incarnations, especially producer cooperatives [57–59]. Some of this literature relates to farmers engaged in sustainable agriculture [28,56], but research on cooperation specifically among newcomer
sustainable farmers is still scarce. In addition, two aspects which are rarely considered in the literature are the influence of the local context (in term of its bio-physical and socio-economic characteristics) and of spatial proximity in supporting cooperation among newcomer farmers. While the latter is discussed in some studies on the back-to-the-land movement [28,60] and on intentional communities [61,62], it is usually not a central element of analysis.

To shine a spotlight on the effects of spatial proximity on cooperation among newcomer sustainable farmers, this paper uses the concept of “cluster”. Research on clusters has focused mainly on industry clustering, where a cluster is defined as a “geographically proximate group of interconnected companies and institutions in a particular field, linked by commonalities and complementarities” [63] (p. 199). Clustering is different from a simple spatial co-location since it is an active process: A cluster is not defined only by spatial proximity but also by interaction, knowledge- or resource-sharing, collaboration, and connections not only within the cluster but also to other networks.

Clustering is a common strategy used to foster innovation and growth through three main dynamics of active clustering: Knowledge mobilization, collaboration, and competition [64]. Knowledge mobilization within clusters occurs as a result of the social infrastructure created through face-to-face exchanges and spatial proximity, which are essential to building trust. Knowledge mobilization and collective learning processes within clusters are also connected to the development of social innovations, thanks to the faster uptake of knowledge and best practices [65]. Collaboration and competition, although apparently in opposition to each other, are two other recognized features of clusters [64]. Collaboration is facilitated by the fact that participants in a cluster are characterized by similar needs, constraints, and opportunities. As a result, despite the degree of competition that inevitably exists among them, this is offset by the benefits arising from cooperation towards a common goal [63].

The concepts of clusters and clustering have been recently applied to local food initiatives [64,66,67]. Beckie et al. [64], for example, examined the characteristics of regional clustering of farmers’ markets in Canada and its significance for the scaling of alternative agri-food networks. These works, however, focus on the spatial agglomeration of marketing initiatives, rather than of farms and farmers.

2.3. Sustainable Farming and Newcomers in Japanese Agriculture

Unlike most global North countries, the Japanese agricultural sector is disproportionately composed of small-scale, part-time farmers. The average size of farm holdings in the country is 1.77 ha (farm holdings smaller than 2 hectares account for 79.8% of the total), and 67% of Japanese farmers engage in non-farm occupations [68,69]. These characteristics are due both to the prevalence of mountainous and upland areas, which hinder extensive farmland consolidation processes, and to the organization of farmers nationwide into the Japan Agricultural Cooperative (henceforth: JA) [70]. The latter contributed to keeping small-scale farmers in the mainstream market thanks to its collective purchasing and marketing practices [71] but has also made farmers dependent on its system for the procurement of inputs, information, and market access. Moreover, despite the success of this system in the post-war period, its lack of innovativeness—coupled with external factors such as market liberalization—eventually led to a contraction and decline of the agricultural sector [72]. This decline is evidenced by the ageing of farmers and lack of agricultural successors, which is driving large-scale processes of farmland abandonment, especially in upland and remote areas [73].

Reversing the decline of agriculture has been a priority of the Japanese government over the past two decades. This has resulted in policies focused on strengthening the global competitiveness of Japanese agriculture and on increasing productivity by encouraging farmland consolidation, the increase in the number of large farms, and by investing in technological innovation such as robot automation [71,74–76]. To counter agricultural abandonment in upland areas (chuusankan chiiki in Japanese), Japan has also introduced...
direct payments for ecosystem services [77] and made efforts to promote various forms of so-called “environmental conservation” farming practices (kankyō hozen-gata nōgō) that involve the partial decrease of the amount of synthetic pesticides and fertilizers used in agriculture, by a certain amount defined at the prefectural level [78,79]. In addition, separate laws on organic farming also exist, the most recent of which is the Act on the Promotion of Organic Agriculture enacted in 2006 [80]. In the rest of the paper, the term “organic” will be used to describe practices that correspond at least to level two of Gliessman’s [8] classification, to distinguish them from government-endorsed forms of farming that represent only an improvement of Level 1 practices.

Despite the apparent commitment to sustainable farming, government action continues to prioritize neoliberal and productivist-oriented interventions. Policies to encourage the adoption of organic farming, in particular, have mainly remained on paper only [71,81]. Organic farming in Japan has been growing at a much slower pace compared to other Global North countries, despite the long history of the country’s natural and organic farming movements [82]. Domestic certified organic products represent only 0.25% of the total agricultural production, and even combined, certified, and non-certified organic production areas are estimated to be around 0.5% of all farmland [80].

There is evidence, however, of an increase in the number of people engaged in small scale organic farming [24,32,83–86]. The area of uncertified organic farmland is estimated to have grown by 43% between 2009 and 2017, compared to a 19% growth of certified organic farmland [80]. Another aspect which is relevant to newcomer organic farmers is that a significant amount of farmland in Japan is located in mountainous, hard to access, and increasingly depopulated areas, and it is not likely to represent an attractive option for large-scale farmers or corporations [76,87]. On the other hand, an increasing number of people—especially from non-farming and urban backgrounds—are showing an interest in small scale agriculture and rural life, with a correspondent increasing trend in processes of urban-to-rural migration [24,88–90] and of newcomers entering into farming [24,32,84,91].

Since farmland in Japan was typically strictly passed down from one generation to another, it used to be rare for people from non-farming families to become farmers. Due to a lack of successors and the increase of abandoned farmland, however, restrictions preventing non-farmers from entering the agricultural sector have been eased, resulting in the increase of newcomers. Since 2007, the Japanese Ministry of Agriculture, Forestry and Fisheries (JMAFF) explicitly distinguishes between new entrants who return to their family farms after a period spent in non-farm employment and those who do not succeed land by kinship and create new farms (shinki nōgō san’nyū sha) [83]. In recent years, JMAFF has also allocated considerable funding to support new entrant farmers (independently from their type), both through direct payments and interest-free loans. Funding can be obtained both to support pre-farming training (up to 2 years) and to support establishment and management after starting to farm (up to 5 years). Subsidies are channelled through prefectural and municipal institutions and are available to people aged 49 years and under. One of the main requirements to receive financial support is the submission of a business plan showing the possibility to make a living from agriculture by the 5th year after starting to farm [92].

2.4. Challenges Faced by Japanese Newcomers in Organic Farming

Reflecting the international literature, comparisons between farm successors and newcomers in Japan show how farm successors are more likely to be oriented towards conventional agriculture for mainstream markets, while newcomers tend to gravitate towards smaller scale, highly diversified, and sustainable farming [24,83,87]. Japanese newcomers also face similar challenges as those highlighted by the international literature, such as access to land, credit, markets, and knowledge [83]. Japanese studies, however, put more emphasis on the role played by the local community in the successful establishment of newcomers [24,32,87,93,94]. Rural villages in Japan are traditionally built upon close-knit relationships arising from the cooperation in collective community and farming activities,
and their social fabric is relatively closed off to people from outside of the settlement [71]. Therefore, newcomers—who often have no pre-existing ties to the community—need to earn local acceptance and trust [32,79]. Even though this requires considerable commitment and can put a lot of social pressure on newcomers, earning the community’s trust is a necessary prerequisite to access resources, particularly farmland and housing [24,32]. The level of trust is also reflected on the quality of resources that can be obtained: Recent newcomers, for example, are often able to borrow only farmland of poor quality in terms of size, productivity, or location [24,76,87]. These issues are not exclusive to the Japanese context. Mailfert [27], for example, discussed the role that trust and social capital play in newcomer farmers’ access to knowledge and land in rural France. Unlike in Japan, however, these elements do not emerge as issues that can systematically preclude newcomers’ access to such resources, particularly land.

Access to suitable knowledge and training has also been indicated as a key challenge for Japanese newcomers interested in organic farming [32,81,83]. While prefectural agricultural extension offices offer technical assistance to farmers, usually in collaboration with local JA branches, research and extension focused on organic farming varies greatly among prefectures, but is overall very scarce. Farmers’ self-organized communities of practice, such as national and prefectural level organic farming associations (Yuki nogyokokai) offer some technical and learning support, but their reach is limited by financial and organizational constraints. Membership in these networks, however, also plays a key role in creating a sense of shared identity among newcomers engaged in organic practices [32]. This is relevant for two reasons: First, newcomers often face a local context which is usually unsupportive towards organic farming and other “alternative” practices [32,95,96], that further complicates social interaction and access to local knowledge and resources [32]. Second, while the overwhelming majority of conventional farmers relies on local JA branches for nearly everything from input provision to marketing of produce to extension services, organic farmers tend to remain outside of these dynamics and circuits and seek alternative markets [24,97].

In addition to geographically dispersed networks, the existence of organic farming clusters has also been observed. From a geographical perspective, these often occur at the town (machi) scale. Some of these clusters are well-established and represent organic farming hotspots, such as Ogawa Town near Tokyo [98], Ohara near Kyoto [24], and Aya Town in Miyazaki prefecture [99]. These areas tend to disproportionately attract newcomers, often as a result of the presence of established organic farmers willing to accept aspiring newcomers as trainees [24,71]. Even though it has been suggested that these clusters benefit newcomers by creating local support groups that allow them to socialize, share advice, obtain moral support, and collaborate in events and projects more easily [24], little is known about the factors leading to the formation of these clusters and the role they play in supporting newcomer organic farmers.

3. Methods

3.1. Case Study Area

The study was conducted in the Seto Inland Sea area, belonging to the Chugoku-Shikoku region of Western Japan (Figure 1). Although most of the interviewees were located in the Hiroshima prefecture, some of the interviews were also conducted with farmers in the border regions of neighbouring prefectures. The area is characterized by a variety of production regions and climates, ranging from the mountainous regions in the north, where rice and vegetable farming is prevalent, to the island and coastal regions in the south, dominated by citrus production. Despite this heterogeneity, most of the rural areas in the region are characterized by small scale farming, agricultural abandonment, and rural depopulation, which reflects the situation of most rural areas across Japan, and particularly of Western Japan [100].
The dots in Figure 1 show the location of the farmers interviewed. We can loosely classify the areas in which the farmers are located into three types, based on the official classification of mountainous and hilly areas (*chuusankan chiiki*, a broad definition that includes areas designated as remote islands, mountain areas, and depopulating areas [102]) shown in Figure 2. The first consists of the mountainous region in the north, which suffers the most from depopulation and land abandonment; the second is a “middle” region, which is partly affected by such issues but is also closer to larger urban centers such as Hiroshima city; and the third is the coastal and island region, which is heterogeneous in nature but is generally characterized by widespread agricultural abandonment due to the decline of citrus production [73]. Moreover, logistic difficulties in accessing the mainland have also driven depopulation processes in this area.

![Figure 1: Location of farmers interviewed within the Seto Inland Sea region.](image1)

![Figure 2: Areas classified as *chuusankan chiiki*, mountainous and hilly areas (in green).](image2)
3.2. Data Collection and Analysis

The data for the study was collected from in-depth interviews with 32 newcomer farmers. The sampling was purposive, to better identify information-rich cases [103]. The main criteria used to select respondents was the status of being a newcomer to farming (defined as an individual not succeeding an active family farm) and the uptake of organic practices, defined according to Gliessman’s [8] levels of food system change. Farmers adopting practices from Level 2 (input substitution) onwards were selected for this study. Moreover, priority was given to farmers having less than 10 years’ experience in operating their farm, to capture contemporary processes of new entry into farming in Japan. The president of the Hiroshima Prefecture Organic Farming association, himself a former newcomer, was also interviewed. A final requirement was that respondents had to engage in commercial farming, even if only on a part-time basis. This criterion was chosen to avoid a focus on farming for purely lifestyle reasons, which is often central in the literature on newcomers [104–106].

Interview questions (see Supplementary Materials) were designed to obtain a detailed account of participants’ socio-demographic and farming characteristics, the challenges they faced upon starting farming, as well as their relationships and networks with other farmers and local actors. All interviews were recorded after gaining permission from the participants. The interviews were conducted in Japanese and subsequently transcribed and translated into English, taking care to anonymize the transcript. Information was also collected through participant observation conducted while working as a volunteer in three of the farms, and by participating in on-farm events, farmers’ markets, and organic farmers’ meetings. Interview data and field notes were then analysed using thematic analysis [107]: The content was first coded, and then the codes were organized and grouped to identify patterns (themes) within the dataset. The Results and Discussion section examine two aspects: (1) Challenges faced by newcomer organic farmers’ (which were further analysed in relation to the barriers to entry discussed in Section 2.1, meaning access to land, credit, markets, and knowledge); and (2) dynamics of organic cluster formation. Clusters were conceptualized as having at least five or more organic farms located in the same town (machi) and connected by formal or informal networks. Sub-themes of the analysis include the relevance of the characteristics of the local farming system and community and the presence of pioneer organic farmers. Attention was paid to remarks made by interviewees about how geographic proximity with other sustainable farmers influenced their capacity to address the challenges of starting farming. The analysis of clusters is limited by the fact that exploring the clustering behaviour of Japanese newcomers was not the original goal of the research, but rather emerged from it. Clusters were mentioned during several interviews, hinting at their importance for newcomer farmers. Due to this, it was not possible, except in the case of three clusters, to interview more than one farmer involved in the cluster itself. The findings, however, provide a starting point from which to investigate this process and its implications for the establishment of newcomer organic farmers.

4. Results and Discussion

4.1. Respondents’ Characteristics

Table 1 shows the basic socio-demographic characteristics of the 32 respondents. Even though the interviews are representative of a higher number of individuals (several farming couples were interviewed together), the results in the table are given by respondent unit (one farm and/or its principal manager).
Table 1. Socio-demographic characteristics of respondents. (Source: Authors’ field survey, 2018–2019).

| Characteristics                                      | n   | %  |
|------------------------------------------------------|-----|----|
| Age cohort of starting farming of principal manager  |     |    |
| 20–29                                                | 8   | 25 |
| 30–39                                                | 8   | 25 |
| 40–49                                                | 12  | 37.5 |
| 50+                                                  | 4   | 12.5 |
| Marital status                                       |     |    |
| Married/Partner                                      | 28  | 87.5 |
| Single                                               | 4   | 12.5 |
| Educational level                                    |     |    |
| High school                                          | 5   | 15.6 |
| University                                           | 27  | 84.4 |
| Type of respondents by principal manager’s gender and characteristics of farm management |     |    |
| Male sole manager                                    | 17  | 53.1 |
| Couple co-managing the farm                         | 13  | 40.6 |
| Co-managed with non-spouse family members            | 2   | 6.3 |
| Part/Full time (principal manager)                  |     |    |
| Full-time                                            | 23  | 71.9 |
| Part-time, agriculture main occupation               | 2   | 6.3 |
| Part-time, agriculture secondary occupation (including post-retirement farming) | 7   | 21.9 |
| Farming family background (access to family land)    |     |    |
| Access to family land                                | 8   | 25 |
| No access to family land                             | 24  | 75 |
| Relationship to place/Migration pathway (of principal manager) |     |    |
| I-turn (urban to rural migrant)                      | 25  | 78.1 |
| U-turn (return migrant)                              | 7   | 21.9 |

The average age of farmers at the time of the interview was 44.5 years old. Moreover, even though their age of entrance into farming ranged widely—from 25 to 60 years old—87.5% were under 49 years old when they started farming, the maximum age for accessing agricultural subsidies for new entrants. This seems to confirm the tendency of newcomers to be younger than the average Japanese farmer. Four people started farming when they were over 50 years old, but they did not necessarily follow the pattern of returning to the family farm to engage in post-retirement farming: Two of these respondents were newcomers who created new farms.

Most farmers were married or had a long-term partner (87.5%). In 13 cases, respondents were farming as a couple (with both partners sharing farm-related work), in a way that resembles the structure of traditional farm families. In most cases, however, the farmers interviewed were men, often married but whose spouse did not contribute a significant amount of farm work or had a different job (53.1%). There were no occurrences of women farming alone or identifying themselves as the main farm manager within a couple arrangement, even though this may not reflect the real dynamics related to decision-making roles. Newcomers’ relied mainly on their own and their family’s labour (Table 2), and sometimes on occasional volunteer help. Only six farmers had employees. They employed a mix of full-time, part-time, and temporary labour, and were mainly farmers who had diversified their business into processing, sales, and services (café, restaurant).
Table 2. Forms of agricultural knowledge acquisition and farm-related characteristics of respondents. (Source: Authors’ field survey, 2018–2019).

| Main Way of Acquiring Knowledge Related to Sustainable Agricultural Practices Upon Starting Farming | n  | %   |
|-------------------------------------------------------------------------------------------------|----|-----|
| Formal training (traineeships, employment at other farms)                                      | 14 | 43.8|
| Informal learning/training (short farm visits, volunteering)                                   | 10 | 31.3|
| Mainly self-study and direct experience                                                        | 7  | 21.9|
| Formal education (college, university)                                                          | 1  | 3.1 |

| Use of hired labour                                                                                   |    |     |
|-------------------------------------------------------------------------------------------------|----|-----|
| Yes                                                                                             | 6  | 18.8|
| No                                                                                              | 26 | 81.3|

| Use of volunteer labour                                                                             |    |     |
|-------------------------------------------------------------------------------------------------|----|-----|
| Yes                                                                                             | 17 | 53.1|
| No                                                                                              | 15 | 46.9|

| Use of new farmer subsidy                                                                             |    |     |
|-------------------------------------------------------------------------------------------------|----|-----|
| Yes                                                                                             | 7  | 21.9|
| No                                                                                              | 25 | 78.1|

| Type of farm in terms of production                                                              |    |     |
|-------------------------------------------------------------------------------------------------|----|-----|
| Diversified vegetables main                                                                    | 12 | 37.5|
| Diversified vegetables main + rice                                                             | 8  | 25  |
| Citrus main                                                                                     | 5  | 15.6|
| Other single crops (grapes; garlic; wheat)                                                      | 4  | 12.5|
| Rice main                                                                                        | 3  | 9.4 |

| Reuse of abandoned farmland                                                                      |    |     |
|-------------------------------------------------------------------------------------------------|----|-----|
| Yes                                                                                             | 29 | 90.6|
| No                                                                                              | 3  | 9.4 |

| Farmland size (average)                                                                            |    |     |
|-------------------------------------------------------------------------------------------------|----|-----|
| Total (owned + rented)                                                                            | 1.28|     |
| Rented                                                                                           | 0.96|     |
| Owned                                                                                           | 0.99|     |

Nearly all participants were either born in urban areas or had spent a significant time away from their rural place of origin for education and work. The first type corresponds to urban-to-rural in-migrants (called I-turn in Japanese), who were the majority (78.1%). The remaining respondents were return migrants (called U-turn in Japanese). Both types of respondents had quit their previous jobs before relocating or moving back to rural areas. Half (50%) of the respondents had white-collar jobs before they decided to engage in farming, mainly working for companies in urban areas. The others had working experience in the service sector (for example, in the restaurant and hotel industry), teaching or creative industries such as radio hosting and photography. Most of them (78.1%) had stable, usually full-time jobs before farming, so their decision to engage in agriculture was not motivated by the inability to find employment elsewhere.

Respondents also came from a mix of farming and non-farming family backgrounds (described here as having family ties to agriculture in terms of having access or owning family land), but the majority (75%) were newcomers in the strictest sense, meaning that they did not have any previous connection to farming and no access to farmland belonging to the family (the *shinki nogyo san'nyu sha* described in Section 2.3). People with access to land were not direct successors to an active farm, their connection to agriculture amounted to having farming grandparents. Generally, farming had not been continued by the parents’ generation, with the land being either abandoned or leased out to other farmers. Even though these respondents technically belong to the category of “new entrants returning to their family farms after a period spent in non-farm employment”, they did not succeed to an active and/or commercially oriented farm operation. Moreover, they had not been socialized into agriculture as a profession, and generally had little to no experience in
farming, often limited to short visits to their hometown. Therefore, their main connection to agriculture was land access, and relatively distanced family relationships tying them to the community.

In terms of education, most respondents (84.4%) had university degrees. Most respondents had then proceeded to engage in non-farming jobs after education, rather than transitioning directly into farming. When asked about their main way of acquiring knowledge related to organic practices at the start of their farming career (Table 2), 43.8% of respondents stated they had engaged in formal training, either through one-year traineeships (often in relation to the granting of new farmer subsidies) or by working as employees at other organic farms before starting their own farm. Conversely, 31.3% had engaged in less formal training through farm visits or workshops (often organized by the Hiroshima Prefecture Organic Farming association) or by volunteering at other farms. About one fourth stated they had learned mainly on their own, by reading books and through direct experience. Only one had learned sustainable horticulture through a dedicated college course (outside of Japan).

At the time of the interview, most of the respondents (72%) were full-time farmers, a somewhat surprising result giving the prevalence of part-time farming in Japan [68]. Moreover, some of the part-time farmers were actively planning to transition to full-time farming using their side jobs to support their income, with the aim of gradually transitioning into full-time farming. This is a pathway into agriculture that was common to other—now full time—respondents. (Figure 3)

![Figure 3. A newcomer’s diversified vegetable plot. Authors’ photo.](image)

Another characteristic that set respondents apart from conventional farmers related to the production type: Newcomers in the sample gravitated towards small-scale diversified vegetable production (Table 2), with an average of 30–40 species/varieties (including many local and heirloom varieties) grown throughout one growing season. This contrasts with the monocultural approach of conventional commercial farmers in the area, who engaged mainly in rice farming and/or specialized vegetable production (northern and central parts of the study area) and citrus farming (coastal and island part). The high crop diversification was motivated both by the commitment to on-farm agroecological diversity and by market choices: All the respondents engaged with consumers primarily through short food supply chains, particularly vegetable box schemes and farmers’ markets. Some newcomers were also introducing practices uncommon among Japanese farmers, such as mixed crop and livestock systems, or innovative crops such as microgreens.
4.2. Challenges Faced by Newcomers

The main barriers identified in the international literature on newcomer sustainable farmers—access to land, capital, markets, and knowledge—were identified for the newcomers in this study as well, but with the differences identified in Section 2.4. Table 3 shows a summary of the themes that emerged from the thematic analysis of respondents’ interviews in relation to challenges and barriers to start farming. The table shows the themes that were mentioned by at least 20% of respondents. Each theme was counted only once per interview.

Table 3. Summary of barriers and challenges in starting farming according to respondents (Source: Authors’ field survey, 2018–2019) (total respondents: 32).

| Theme                                                                                                                                  | n  | %  |
|---------------------------------------------------------------------------------------------------------------------------------------|----|----|
| Being able to access only a farmland of poor quality or long abandoned, especially at the beginning                                  | 17 | 53.1 |
| Being unable to earn a living wage in the first years of farming                                                                      | 17 | 53.1 |
| Negative perception of Japanese government’s agricultural policies in relation to sustainable farming                                | 17 | 53.1 |
| Difficulty in accessing a farmland due to lack of connections to local farmers or community members                                 | 15 | 46.9 |
| Difficulty in accessing marketing channels and drawbacks of having to find customers independently                                  | 14 | 43.8 |
| Labour scarcity in comparison to the higher labour requirements of sustainable farming practices                                      | 12 | 37.5 |
| Facing opposition from local conventional farmers                                                                                    | 11 | 34.4 |
| Difficulty in finding suitable housing                                                                                               | 10 | 31.3 |
| Lack of concrete support for organic farming (financial, technical, etc.)                                                             | 10 | 31.3 |
| Choosing not to use subsidies for new entrant farmers on account of their conditions being considered unsuitable                  | 9  | 28.1 |
| Lack of information on sustainable farming techniques and of places where to learn them                                              | 8  | 25.0 |
| High upfront investment cost to buy the necessary farming equipment                                                                 | 7  | 21.9 |
| Facing opposition from family members concerning the decision of starting farming or to farming-related choices                   | 7  | 21.9 |

In relation to access to land, there were no instances of respondents being unable to find farmland due to the lack of availability or high prices. On the contrary, respondents frequently remarked on the increasing availability of farmland, due to the growing unwillingness of agricultural successors to engage in farming (including part-time) and to the decreasing profitability of farming. Despite the increasing availability of land and the eagerness of ageing locals, on principle, to lease out their farmland, actual access to a farmland of sufficient quality remains challenging for newcomers (53.1%). This was often due to the lack of connections with local farmers (46.9%). As mentioned by previous works [24,79], farmland lease deals in Japan are mostly conducted informally, and typically among members of the same local branch of JA, or friends, relatives, and neighbours, while people from outside of the community need someone to vouch for them, as illustrated by the following statement:

*The first land plot is difficult. It is difficult to move from having zero land to one. If you’ve just moved here, they [local farmers] don’t want to lend to someone they don’t know. If someone else living here tells them ‘please lend it to him’, maybe you’ll be able to rent. That depends on how much confidence that person has in you. You definitely need a ‘sponsor’ to look after you. After you rent a plot and start growing things, once the people in the surroundings know that you can do it, it becomes easier when you want to rent somewhere else.* (male, 46, island area)

Nearly all newcomers in the sample (90.6%) were farming on land that had been previously abandoned (Table 2). This is a given for I-turners, who do not own any family land, but even many respondents with land access were farming both on their family’s property and also renting additional land, due to their own land being too small. Many of the I-turn newcomers started with farmland of poor quality, located in areas hard to access with machinery or with no water for irrigation, and sometimes moved to better plots of land after acquiring a higher level of familiarity and trust with the local community.

Another important aspect regarding the settlement of newcomers in an area is housing. According to several respondents (31.3%), it was the availability of housing, rather than
of farmland itself, that represented a limiting factor for the establishment of newcomers. Newcomer farmers need houses with storage space for equipment, machinery, and produce, and also, ideally, located close to their farmland. Many respondents were unable to find houses with such characteristics, leading to logistic issues and less efficient organization of farming activities.

Concerning access to capital and high start-up costs, most newcomers had worked in non-farming jobs for several years before deciding to become farmers. This is significant since it allowed them to move to the countryside and start farming after having accumulated some savings from their previous employment. This was especially true of respondents in their late 30s and above. What most respondents did is called in Japanese _datsusara_, leaving (or “escaping”) one’s job as a white-collar worker and launching one’s own business. More than half (53.1%) of the respondents, however, found it challenging to earn enough to make a living in the first few years of farming, partly on account of the cost for purchasing equipment (21.9%) and of the high labour requirements of sustainable farming practices (37.5%). One aspect that emerged in relation to this transition was the centrality of family in determining the newcomers’ choices, both as an enabling and hindering factor. Family opposition was mentioned by one fifth of respondents (21.9%) as a key barrier:

_I would like to do [full-time farming]. When I worked at [workplace name], it was very hard work. I was always returning home with the last train. At that time, I really wanted to quit and talked with my family about quitting and wanting to do farming, but my family was absolutely against it. At that time I had two children, and I was told ‘you absolutely cannot do it’. […] in Japan, agriculture has the image of ‘not being profitable, not being able to make a living’, so if you say you will quit an office job and do farming, people will usually be opposed and surprised._ (male, 37, middle area)

Issues related to the difficulty in earning a living wage in the first years of farming, together with the upfront investment needed to start an agricultural activity from scratch, are meant to be addressed by subsidies for new entrant farmers. Among the respondents, however, only 7 (21.9%) had applied for the subsidies for new entrant farmers provided by the Japanese government, even though subsidies offer considerable financial support. A reason that was mentioned several times (28.1%) to motivate this choice was that subsidies were perceived as a double-edged sword. Respondents believed that over-reliance on subsidies could negatively affect newcomers’ ability to create an economically viable farming operation, if “economically viable” is meant on the farmers’ own terms. Subsidies are seen as coming with considerable strings attached, since they limit freedom in terms of the farm models farmers can create, and pushes them towards a productivist pathway they may not wish to follow. According to the respondents, the emphasis given by the subsidy system to reaching economic viability within five years led almost inevitably to intensification and sometimes conventionalization of organic practices, forcing farmers to sacrifice environmental or social aspects in favour of economic ones:

_I went to the city hall to apply for the subsidy. The first thing the staff asked me was ‘how much do you want to earn in a year?’_. Not about what kind of vegetables I wanted to grow or something like that. I guess it wasn’t wrong. It was not wrong but I thought, ‘wow’ [negatively surprised]. […] Money comes first in the support system. What about basic things like ‘let’s grow and eat healthy food?’ […] I think the order is all wrong. _ (female, 43, mountain area)

Therefore, the way the subsidy system is structured is pushing newcomers to choose between following a productivist pathway or not using the subsidies at all and rely on their own resources. More than half of the respondents (53.1%) saw this as a direct consequence of the national government policy, perceived as being directed exclusively towards support for large-scale, single-commodity agriculture. Among the respondents there was a widespread perception that this lack of policy support, and the consequent
lack of adequate subsidies, was a major reason preventing aspiring farmers from actually engaging in organic practices:

Among people who want to start farming, those who want to do organic farming are a lot. But the way of thinking of the government regarding new farmers is that large-scale, single-crop farmers are better than organic farmers. The first kind of people can get support, but if a young person who wants to do organic farming comes, there is no specific support system for them. This is a problem. (female, 44, middle area)

The same applies to technical support and extension, which closely relates to newcomers’ access to knowledge. One of the farmers interviewed worked at a prefectural facility that provides agricultural extension and technical support. However, he found the attitude of institutional actors unsupportive towards the needs of organic farmers, especially small-scale ones:

There is a strong nuance of ‘getting farmers to do what the prefecture wants’. The most important thing for the government is how to create a strong farm business. My job is all about giving that kind of support. [...] The prefecture doesn’t really ‘touch’ organic farming. In organic farming there are large-scale farms too, but among the people who want to do organic farming, most want to do small scale farming [...]. Therefore, they are not the target of the prefecture’s work. (male, 37, middle area)

Newcomer organic farmers also tend to remain outside of the JA system, which is the other main provider of extension, inputs, and marketing outlets for farmers in Japan. JA was seen by many respondents not only as the institution perpetuating a conventional and pesticide-intensive model of farming, but also as an overly controlling entity that severely undercut farmers’ agency both in terms of production and marketing choices. Being part of the JA system, however, does have benefits, especially since farmers are ensured a market for their produce. If newcomers do not want to be part of this system, access to markets becomes another major bottleneck (43.8%). As a result, most of the farmers interviewed were engaged in independent AFNs and direct-to-consumer market channels. Even though autonomy and direct relationships with consumers are generally seen as one of the elements of attraction of small-scale organic farming, many respondents also described the hardships of “having to do everything by oneself”:

[It’s hard to] make time for everything. The time required to manage the farm, and then the time to go to events, go to market, or to go on business trips to sell. [...] if you don’t have a place to sell, once you produce things you don’t know what to do with them; but if you go out to find a place where to sell, then nobody is working in the field. So the [conventional] farmers around me were saying that I didn’t go out in the fields [...], that I wasn’t a farmer but a trader, and so on. It was really harsh. (male, 45, island area)

These issues were especially true in the case of newcomers located in areas dominated by strongly vertically integrated monocultures, particularly citrus farming in the coastal and island areas of the region. Respondents who wanted to do organic citrus production (such as the one in the previous quote) found it particularly hard to find a market for their produce. One respondent, a newly settled organic citrus farmer, eventually decided to switch to conventional farming on part of his orchards to be able to sell his crop to JA, as he had not yet succeeded in establishing his own independent marketing channels.

4.3. Organic Farmer Clusters

Even though in some areas of Japan relatively large organic clusters have existed for decades [98,99], this is not the case for the study area, where, according to the respondents, organic farming has not spread significantly even compared with other regions of Japan. The respondents’ answers, however, revealed a tendency towards the formation or growth of clusters, mostly driven by recent newcomers. Six of these cluster areas were identified through the interviews conducted for this study (Figure 1), by asking respondents whether there were other organic farmers in the same town with whom they engaged in cooperation in some form (knowledge and resource sharing, marketing, etc.). The largest cluster was
located in Shiwa town, part of Higashi Hiroshima city. This cluster is composed of ten organic farming households, all I-turn newcomers who moved into the town after the first organic farmer settled in the area. Four of them were interviewed for this research. From the interviews, two elements emerged as key factors for the formation of clusters: (a) The characteristics of the local farming system and community; and (b) the presence of charismatic pioneer farmers acting as “attractors”.

4.3.1. Characteristics of the Local Context and Community

The local farming system structure, as well as socio-cultural and logistic aspects, represent a first essential set of factors that facilitates or hinders the formation of organic clusters. The characteristics of the local farming system and the attitude of conventional farmers, in particular, emerged as fundamental for the establishment of newcomers wishing to do organic farming. These newcomers face a double hurdle: Not only do they have to gain the trust and acceptance of local community members, they also have to cope with the fact that organic farming practices are still seen by the majority of conventional farmers as a naïve “utopia” at best, and as a threat to conventional farmers at worst (this issue was mentioned by 34.4% of farmers, see Table 3). In this study, areas where newcomers could settle down more easily, and therefore, where organic clusters seem more likely to emerge, were generally characterized by one or both of the following characteristics: (a) A prevalence of small-scale, part-time, and self-sufficiency-oriented farming; and (b) advanced processes of agricultural abandonment. When asked about why so many organic farmers had gathered in Shiwa, for example, one farmer stated:

I guess it’s because the local people support and accept people who want to do this type of agriculture. They are not full-time farmers, many people do part-time farming, so maybe their way of thinking is more flexible, ‘softer’. There are many people with an open-minded way of thinking, who are more accepting. (male, 38, middle area)

The fact that local farmers did not have a strong conventional commercial orientation made them less antagonistic towards organic farming, which in turn facilitated the settlement of newcomers. Conversely, newcomers who settled down close to areas characterized by more intensive farming systems faced considerably more opposition. One respondent compared his town to another in relation to rice farming:

In other areas, you face a lot of opposition if you grow without pesticides. In another city in the Prefecture, called [city name], it is not possible to do it. I have friends there, but they have been told that they’re not allowed to grow rice if they don’t use pesticides. They can’t do it. I heard this kind of story. Here, I have never been told this kind of thing. So, it was easy for me to do organic farming. (male, 46, island area)

Moreover, in places where agricultural abandonment and the ageing of farmers is widespread, which often correspond to areas dominated by small scale non-commercial farming [73,108], newcomers are starting to be seen as important for the survival of the community and its farmland and landscape. Another respondent who settled down in a small island community, for example, was eventually gifted a piece of farmland by the owners since maintenance had become too burdensome for them:

[The owners] haven’t used this land for about 20 years, and their children don’t live here either. Whenever the land becomes overgrown with weeds, the neighbours would give them a phone call. But since they don’t come to the island, it’s bothersome to come just for cutting the grass. (male, 49, island area)

This was typical especially for areas in the study site which were relatively remote, particularly the island and mountain areas. There were also several instances in which newcomers emphasized the connection between this relative remoteness and the related prevalence of non-commercial farming with the quality of the natural environment, and therefore, higher suitability for organic farming. Moreover, these kinds of rural areas were also described as enjoyable and safe places to live, and therefore attractive locations for people moving to the countryside from urban areas. The desire to live surrounded by
nature ranked high among the reasons why respondents wished to start farming in the first place, a desire shared by many urban to rural migrants in Japan [89].

At the same time, however, respondents also often emphasized the importance of settling down in areas not overly remote and disconnected from larger urban areas, to be able to access markets and services. Shiwa town, for example, is located approximately 50 min away by car from Hiroshima city. A respondent living in another cluster area summarized the characteristics that made his town suitable for newcomer organic farmers as follows:

[The town name] is about 1 hour away by car from Hiroshima city. And there is a lot of farmland too. However, there are no large farmland areas, many are scattered here and there in the mountains, so it is not suitable for large scale farming. However, because it is close enough to the consumption area of Hiroshima city, it is easy to go and sell vegetables. In this case, I think that a model of farming focused on growing many diversified vegetables that can fetch high unit prices, such as rare and organic vegetables, is suitable for this area. If you go to [...] places with large farmland areas, [farmers] go in the direction of doing conventional farming, such as growing nothing but cheap cabbage. But here, if you want to grow cabbage in that way there isn’t too much space, mechanization is also difficult, so rather than doing this, it is better to make diversified vegetables. (male, 42, mountain area)

4.3.2. Presence of Charismatic Pioneer Farmers Acting as “Attractors”

The second element that plays an important role in the formation of clusters is the presence of other organic farmers, and particularly of charismatic pioneer farmers that act as attractors and that pave the way for other newcomers. These pioneers tend to be skilled communicators, open to visitors and aspiring organic farmers, and willing to take on leadership or mentorship roles. In Shiwa, most of the farmers that eventually settled down in the town had originally come to visit the farm of the first pioneer or had completed a traineeship period at his farm. This farmer has so far hosted 11 trainees, and five of them subsequently settled down in Shiwa and began farming there. In the literature, such pioneers are often older farmers belonging to the first generation of organic farmers that started in the 1970s and 1980s [24,98,99], but this was not the case for most clusters in this study, most of which had formed only recently: In Shiwa, for example, the first organic newcomer had settled down in 2009.

Frequent visits of the author to the farms of some of these first settlers also showed how these farms often functioned as informal hubs for the local organic farming community, as also described by this respondent:

Every month, the people who are doing organic farming in this area meet at [pioneer farmers’ name]’s place. We have about 8 members now, it’s a group we created by ourselves to exchange information. [...]. (male, 42, mountain area)

Farmers belonging to clusters tend to be similar in terms of cropping patterns as well, which facilitates information exchanges: In all cases, the prevailing production model was that of diversified vegetable production. Finally, the spontaneous aggregation process through which clusters form tends to attract in one place farmers that resemble each other in terms of lifestyle aspirations, values, and even age, which facilitates cohesion among the farmers themselves:

Since everyone is doing a similar style of farming, ‘companions’ (nakama) with similar characteristics keep gathering here. I was the first, then [...] various other people came here, and little by little, a good cycle has been created. [...] here there are more younger people because we are relatively closer to the city, so maybe it’s easier to do organic farming. (male, 38, middle area)
4.3.3. Advantages of Organic Clusters

Being part of organic clusters had several advantages for the newcomers interviewed in the study. First, as mentioned previously, it is common for aspiring organic farmers in Japan (including many of the interviewees) to go through a traineeship period at another organic farm. This traineeship period gives the aspiring farmer a chance to form relationships with local people and to scope out the farmland available for rent. Two of the respondents, for example, were former trainees of the first pioneer in Shiwa town, and both were able to find farmland in the town thanks to the help of their host farmer. Without any kind of connection to the local community, it would have been harder for them to find land and housing, and the entire process would have taken considerably more time. Established organic farmers, therefore, represent a “bridge” between newcomers and the local farming community.

Both traineeships and other kinds of farmer to farmer learning, such as farm visits, are also fundamental sources of information and knowledge. Settling down relatively close to more experienced organic farmers, however, further facilitates knowledge acquisition, as newcomers have more chances to seek specific advice about the local microclimate and agroecosystem, as well as suitable cultivation methods and crop choices. Since it can be difficult for Japanese newcomers (especially I-turn migrants) to tap into the knowledge of local conventional farmers [32,96], having someone willing to provide information can greatly facilitate access to production knowledge. In addition, even when local people are willing to share information, specific organic farming practices or management approaches—such as those related to building soil fertility or managing pest issues—are not something that can be learned from locals:

> Most of the people around me […] are people growing food for themselves. […] Very rarely do they come to my farm to talk about sales or farming techniques […]. They are very encouraging, but at the same time you wish you had more mentors, more people helping you, or giving you new ideas… but I don’t really have that. (male, 31, island area)

Formal organic farming groups and organisations do exist. The most important locally is the Hiroshima Prefecture Organic Farming Association, which holds events and study groups. New farmers are particularly encouraged to participate. Established organic farmers are aware that the number of new farmers quitting within the first few years is high, and thus emphasize the need of acquiring the necessary skills as quickly as possible. The Hiroshima Prefecture Organic Farming Association covers the whole prefecture, and its meetings are attended by farmers from the neighbouring areas as well, thus representing a broader and spatially diffused community of practice. Among the respondents, however, more than half were not part of any formal organic farming association. Smaller and more localized groups were considered equally if not more important for farmers in terms of knowledge dissemination and for obtaining advice and support in a more accessible way. Moreover, smaller informal groups can be more easily created by newcomers themselves and facilitate the development of social ties with other organic farmers in the area:

> There are other organic farming groups, but we wanted to make one for this area, so we did it by ourselves, with people from the same generation. […] and we wanted to create it within the community so we could talk. If we go far, the weather will be different, and the crops you produce will be different, so in order to learn about cultivation methods that would be directly useful to us, we limited the group to people in our vicinity. Other than that, there are a lot of merits in the fact that when you’re busy you can help each other, and that’s why it’s good to have people nearby. (male, 42, mountain area)

In addition, given the limitations of official extension services described in Section 4.2, newcomers often need to produce their own knowledge. The terrain for knowledge creation might be especially fertile within clusters, thanks to the existence of a supportive environment that can encourage experimentation. The geographic closeness of farmers allows for frequent exchanges and for closer monitoring of what works and what does
not. These conditions can sometimes lead to faster development and dissemination of innovative farming practices, first within the cluster, and then to the wider network of connected communities of practice. In Shiwa, for example, in previous years farmers in the cluster have suffered from crop failures as a result of high summer temperatures and lack of rainfall. Recognizing that drought-prone summers have been occurring more frequently in the area, likely due to climate change, the farmers are now attempting to pool their experience with successful crop varieties and cultivation methods to adapt to the changing environmental conditions. Seed saving and informal seed exchanges among farmers in clusters were also common practices. This collaboration is facilitated by the fact that most of the farmers in the cluster have similar production types (diversified vegetables): This similarity is conducive to finding common solutions that work for everyone, and this case is at once an example of the processes of knowledge sharing and of the cooperation that characterizes active clustering.

In a similar vein, some farmers have also been attempting to carry out the production of some crops jointly. The crops in question are heirloom varieties that the farmers are trying to re-introduce to the area and to start growing at a relatively larger scale by pooling parts of their farmland together and by jointly contributing labour for planting, harvesting, and selling the produce. Another example of cooperation resulting from clustering is the possibility of helping each other with marketing and sales of farm products. It was not uncommon among respondents belonging to a cluster to buy or exchange produce among each other to have a sufficient variety or quantity of produce to put in the vegetable boxes destined to their customers. In some cases, the established farmers helped more recent newcomers to sell their produce as well, for example, by selling produce at the farmers’ market on behalf of other farmers. This form of cooperation would not be possible with conventional farmers living in the same area, since they usually sell directly to JA and are not involved in alternative marketing channels entailing direct to consumer sales.

In addition to these informal forms of cooperation, some farmers that are part of clusters have established more formal marketing groups. One of the farmers interviewed, for example, belongs to a local organic group that includes five other newcomers and that delivers part of the farmers’ produce and rice to nearby restaurants and natural food shops. By selling as a group, farmers were able to ensure a more continuous supply, and therefore, to sell to venues that would have been harder for them to access individually. Another group of newcomers, whose members are part of two different organic clusters located not far from each other (within the administrative boundaries of the same city), have joined forces to create an “organic corner” at the local roadside station (michi-no-eki—a multipurpose facility that functions as rest stop for drivers but also as a venue for local farmers and other local enterprises to sell their products to passers-by and tourists [109]). Moreover, several respondents indicated the geographic proximity of organic farmers within clusters as a potential opportunity to develop their town’s “organic image” through local brands. In this respect, farmers within some of the clusters were also sharing the acquisition of the organic certification. This helped them not only to obtain support (e.g., for filling out paperwork) but also to share the cost and decrease the expenses that certification entails.

Finally, clusters also play an important role in giving moral support to newcomers. As discussed before, organic farming still represents a deviation from the norm of agricultural practices in Japan and is far from being widely accepted by conventional farmers. There is still a strong “cultural resistance” towards organic farming, as also documented in the literature [32,86,96,110]. Moreover, newcomers sometimes face pressures from their own families as well, since agriculture as a whole is not seen as a viable occupation. Through clusters, aspiring farmers and newly settled newcomers can obtain not only farming, but also lifestyle-related advice from people with similar aspirations and backgrounds who succeeded in becoming organic farmers. According to the respondents, the lack of opportunities to learn about forms of farming and lifestyles that deviate from the
“norm”, and especially the lack of successful examples, was the main challenge faced by newcomers:

If people like [pioneer newcomer organic farmer name] had more visibility, those who want to start farming without using chemical fertilizers or pesticides would feel more encouraged. The people who have the intention of doing organic farming are many, so if […] the impression that this kind of farming is actually possible became stronger, newcomers would increase, and it would create a good cycle. (male, 46, island area)

In general, the characteristics of the organic clusters discussed in this paper conform to those found in the wider literature on clusters, particularly concerning knowledge mobilization, collective learning processes, and the development of social innovations through cooperation. Competition, on the other hand, was not found to be a significant feature, possibly due to the small size of the clusters examined in this study, but it was mentioned in other works describing similar organic clusters in Japan in relation to marketing [24].

Finally, it is important to note that these clusters are not intentional communities such as those described, for example, in the literature on ecovillages [61,62]. The formation of clusters is not guided by the intention of creating organic enclaves separated from the local community as the ones described for Japan by Knight [95]. By forming loose clusters, newcomer sustainable farmers can create supportive “communities (of practice) within the community”, without at the same time distancing themselves from the local society. This strategy allows them to fight the pressure of conforming to the conventional and locally “acceptable” model of agriculture without outright opposing it, which may also help in slowly increasing acceptance towards organic farming among local farmers.

5. Conclusions

This study has examined the characteristics of newcomer organic farmers in Japan and the barriers they face upon entering farming, contributing to the international literature on processes of non-succession entry into farming. The paper offers a more nuanced understanding of aspects which are crucial to the establishment of newcomers, such as access to land and knowledge acquisition. The results also highlight the role played by dominant farming modes and their institutions in hindering the settlement of people interested in “alternative” farming practices. This was especially evident in the constraints that aspiring organic farmers face in accessing government subsidies, and confirms a trend identified in the international literature, as well [17,20,25,27]. This suggests that a priority area of intervention is the creation of more flexible and diversified support schemes, distinguishing between newcomers and farm successors and targeting newcomers’ specific needs.

The paper has also demonstrated the importance of geographic proximity in influencing the successful establishment of newcomer organic farmers, illustrating this concept through an examination of organic clusters. The clusters described here, despite being modest in size, can represent the seeds around which larger organic communities may develop in the future, as already observed in other parts of Japan where this process is more advanced [71]. This could be facilitated by national-level policy support directed at encouraging the development or growth of organic clusters, which is already occurring in isolated cases through the initiative of municipal governments [99].

This has broader implications for the expansion of sustainable farming in other countries, as well. Common features of newcomer sustainable farmers everywhere are the relatively small scale of their farms and geographic dispersion [17,26,49], which make them unable to compete with larger conventional farms in terms of production and market power. This implies that supporting the settlement of newcomers in spatially proximate places could contribute to creating stronger networks and partnerships and helping to balance out the isolation they face within the dominant agri-food landscape. Clustering can also help advance sustainable farming by (1) facilitating access to and diffusion of appropriate knowledge, tools, and inputs (such as seeds of heirloom/local cultivars); (2) enhancing the possibility of farmers to sell their products together or to create their own
marketing groups or structures, and (3) increasing opportunities for farmers to create group certifications or quality labels. In addition, the clustering of organic farmers contributes to enhancing their visibility and to attracting aspiring newcomers interested in sustainable farming and rural lifestyles, while promoting and potentially normalizing “alternative” farming models among conventional farmers. While encouraging the spatial clustering of newcomers is obviously not feasible in all cases (particularly in areas where available land is scarce and/or costly), this could be an option in areas characterized by widespread farmland abandonment or for publicly owned land, such as land trusts. This might also facilitate experimentation with alternative property forms such as community-based or cooperative ownership of land [111].

Given the limitations of this study’s research design and its exploratory nature, further research will be needed to better characterize organic clusters (e.g., in terms of production types and degree of cooperation among farmers) and to deepen our understanding of how clustering processes unfold: For example, are “pioneer” farmers necessary to cluster formation, and if yes, what are their characteristics? Which factors facilitate or hinder cooperation among farmers within a cluster? Why are some clusters or areas more successful than others in attracting newcomers? All these aspects warrant more in-depth examination, especially in connection with wider strategies aimed at supporting sustainable agriculture and at linking newcomer farmers with local communities and consumers.

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