Marché as a Place for Interaction between Organic Producers and Local Consumers: A Study of Hiroshima Prefecture

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The organic movement and the chisan chishō (local production for local consumption) movement are two of the most visible forms of alternative food systems in Japan. Despite having some ideological similarities, however, they have remained largely disconnected. One of the most recent developments in chisan chishō is the increase in number and popularity of marché (farmers’ markets). To explore the overlap between the organic and local dimensions within marché, this study uses questionnaire survey data obtained at three locations in Hiroshima prefecture. First, it examines the reasons why visitors attend marché and whether the desire to buy organic products ranks highly among these reasons. Second, it assesses the presence of organic producers and their reasons for participating. The results suggest how marché could play a role in increasing the consumption of both local and organic products and in increasing the visibility of organic producers locally.

Key words: marché, organic farming, local food systems, chisan chishō, consumers, Hiroshima Prefecture

1. Introduction

The need to transition towards more sustainable agri-food systems is becoming increasingly evident in the context of newly arising social, environmental and economic issues at both global and local level. In this context, practices that are ‘alternative’ to the dominant model are attracting growing interest for their potential of steering both production and consumption towards more sustainable pathways. Worldwide, various types of alternative food networks (AFNs) have developed to encourage support for local producers and consumption of environmentally friendly (such as organic) products (Lamine, 2015). Japan has a long history in the development of such initiatives as well: prominent examples are the organic farming movement, which emerged in the 1970s, and the chisan chishō (local production for local consumption) movement in the 1990s. Although the organic farming movement was at the forefront of early efforts towards creating alternatives to the conventional food system, production and consumption of organic products have seen only a relatively modest increase (MAFF, 2017), and support from agricultural policies has been limited. On the contrary, the chisan chishō movement, which developed mainly with the aim of promoting food system localization (regardless of production methods), is now being endorsed by the Japanese government and JA (Iizaka and Suda, 2010; Kimura and Nishiyama, 2008). One notable manifestation of this support is the exponential growth of direct sale markets for farm products (chokubaijo) in rural and peri-urban areas (McGreevy and Akitsu, 2016). The institutionalization of chisan chishō has been explored by some scholars (e.g. Kimura and Nishiyama, 2008), which noted that the involvement of institutional actors is detrimental for the transformative potential of AFNs, because it discourages a more active food citizenship and does

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not make any commitment to environmentally friendly agriculture (Kimura and Nishiyama, 2008).

In 2009, the Japanese government launched the “Marché Japon” Project to promote the concept of marché (Marche Japon National Secretariat, n.d.). Marché is a temporary direct-sale system for the promotion of the consumption of local products in urban centres and is meant to resemble Western farmers’ markets. It is considered to be part of chisan chishō development efforts and it is complementary to the network of chokubaijo (Sato, 2017; Toyoshima et al., 2015).

As mentioned previously, organic products have never been a central focus of chisan chishō oriented initiatives (Kimura and Nishiyama, 2008). In most chokubaijo, for example, the focus is on selling conventional agricultural products, and it is difficult to promote sales of organic produce (Ojima et al., 2015). It has been noted, however, that many marché have themes such as ‘organic’ and ‘ecological’ (Sato, 2017).

A previous study by Ojima et al. (2015) discussed the topic of organic-focused farmers’ markets, although mainly in relation of management structure and challenges. However, there is still a scarcity of studies on the intersection between marché and the organic movement. It is therefore important to explore the role of marché in offering new opportunities and spaces for organic farmers, so far marginalized within chisan chishō. The two research questions addressed in this paper examine 1) the reasons why people visit marché, and whether purchasing organic products ranks highly among these reasons; and 2) whether marché provide a space – that until now has been missing – for organic producers to interact with customers.

2. Methodology

The paper is based on a questionnaire survey conducted at three marché in Hiroshima prefecture between September 2018 and January 2019. The survey was conducted over three times (one for each location) and consisted of one questionnaire for visitors (regarded as consumers here) and one for food producers and processors (henceforth: ‘producers’). The aim of the visitor survey was to understand the profile of marché visitors, particularly whether they were locals or not, their reasons for visiting, and their buying behaviour regarding organic products. In order to randomize the sample as much as possible, the data collectors positioned themselves in proximity of one of the marché exits and selected one every three visitors for the questionnaire.

The questionnaire survey for producers aimed at understanding how many producers selling local or organic products (both fresh and processed) attended the marché, their reasons for participating, and their level of satisfaction. The questionnaire was distributed to all the following categories of producers: 1) farmers selling fresh produce; 2) food processors selling food products (made with at least 50% local ingredients); and 3) a combination of the above. As the emphasis in this study was on local food items, intended as those produced by producers located in Hiroshima prefecture or made from ingredients sourced from within the Prefecture, stalls selling food items with no linkage to the locality were excluded. This information was obtained from the producers prior to administering the questionnaire. Questionnaire responses, both for visitors and producers, were analysed through descriptive statistics and Pearson’s chi square test of independence \(^1\), with a significance threshold set at 0.05. Additional information about each marché was obtained through informal interviews with the organizers.

3. Results

The characteristics of the three marché examined in the study are shown in Table 1. Onomichi City’s Kazoku no daidokoro (Family kitchen) is the oldest among them; it was established in 2011 and is a successful example of a long-term cooperation among local producers and various private actors. Despite not having an explicit orientation towards offering organic products, the organizers actively encourage local
organic producers to participate. It is held all year long. Higashi-Hiroshima City’s Hitomusubi (Connecting people) was established in 2016 by a group of alumni of Hiroshima University. It does not have an explicit orientation towards organic products. Like the previous, it also runs year long. Mihara City’s Yuuki nouka no shuukakusai (Organic farmers’ harvest festival) differs from the other two cases in that it is organized once a year, but it is held at the same time as another regular marché (not shown in the table). It was established in 2017 by a group of local organic farmers and has an explicit organic orientation. All three markets include both food and non-food stalls (such as craft sellers), and in this aspect they differ from the traditional image of Western farmers’ markets. In the case of Mihara and Onomichi, however, food-related stalls made up more than half of the total, and included a mix of farmers, small scale food processors, and restaurant stalls.

**1) Visitor responses**

After eliminating nonresponses, the number of usable questionnaires was 366, of which 115 were from Onomichi, 150 from Mihara and 101 from Higashi Hiroshima. Respondents were predominantly female (66%), with no significant differences between the three locations. The two most significant visitor characteristics for the purpose of this paper are a) place of residence and b) frequency of buying organic products in daily life, according to each marché (Table 2). Most visitors lived in the same city were the marché was held (60.9%), despite significant differences between markets. As a tourist destination, Onomichi had a higher share of people from outside of the prefecture compared to the other two locations. Mihara’s marché, possibly by virtue of having a specific theme (‘organic’), also attracted visitors from outside the city. By contrast, Higashi Hiroshima’s marché attracted mainly city residents.

In relation to whether visitors bought organic products in their daily lives, overall 22.1% of visitors stated they bought organic products ‘often’ (at least once a week), 50.0% stated they bought them ‘sometimes’ (at least once a month) and 27.9% did not buy organic products at all. It can be observed how Mihara and Onomichi had a higher percentage of respondents stating that they buy organic products ‘often’ compared to Higashi Hiroshima. Mihara also had a lower percentage of visitors stating that they do not buy organic products in comparison to the other two sites. The differences, however, were not statistically significant.

Visitors were also asked to select up to three

| Location       | Name                                | Started | Frequency | Total stalls (food-related) | Orientation towards organic products |
|----------------|-------------------------------------|---------|-----------|-----------------------------|-------------------------------------|
| Onomichi       | Onomichi Kazoku no daidokoro        | 2011    | Monthly   | 37 (19)                     | Yes (implicit)                      |
| Mihara         | Yuuki nouka no shuukakusai          | 2017    | Yearly    | 31 (20)                     | Yes (explicit)                      |
| Higashi Hiroshima | Hitomusubi                        | 2016    | Monthly   | 25 (10)                     | No                                  |

Source: Field survey, 2018 and 2019. N=366.
1) M=Mihara; H=Higashi Hiroshima; O=Onomichi
2) Hiroshima Prefecture; all other cities

Table 1. Characteristics of the three marché in the study

| Place of residence | Total | M | H | O |
|--------------------|-------|---|---|---|
| Same city          | 60.9  | 58.0 | 85.1 | 43.5 |
| Inside HP          | 26.0  | 33.3 | 10.9 | 29.6 |
| Outside HP         | 13.1  | 8.7  | 4.0  | 27.0 |

Frequency of buying organic products

| Often  | 22.1 | 24.0 | 17.8 | 23.5 |
|--------|------|------|------|------|
| Sometimes | 50.0 | 52.0 | 54.5 | 43.5 |
| Not buying | 27.9 | 24.0 | 27.7 | 33.0 |

Source: Field survey, 2018 and 2019. N=366.
1) M=Mihara; H=Higashi Hiroshima; O=Onomichi
2) Hiroshima Prefecture; all other cities

Table 2. Visitors’ characteristics (%)
Table 3. Visitors’ reasons for visiting the marché (multiple answers) (%)

| Reasons                  | Total | M1 | H | O |
|--------------------------|-------|----|---|---|
| Buy local products       | 37.4  | 40.0 | 35.6 | 35.7 |
| I enjoy eating here      | 33.3  | 33.3 | 40.6 | 27.0 |
| Buy fresh products       | 27.3  | 28.7 | 23.8 | 28.7 |
| Convenient place         | 25.1  | 24.7 | 31.7 | 20.0 |
| Support local producers  | 24.6  | 28.0 | 27.7 | 17.4 |
| Spend time with friends/family | 24.0 | 23.3 | 29.7 | 20.0 |
| Buy organic products     | 23.0  | 26.0 | 16.8 | 24.3 |
| Buy rare/special products| 21.0  | 20.0 | 11.9 | 30.4 |
| Just passing by*         | 15.3  | 11.3 | 12.9 | 22.6 |
| Fashionable atmosphere*  | 10.1  | 8.0  | 5.9  | 16.5 |
| Other                    | 16.4  | 19.3 | 20.8 | 8.7 |

Source: Field survey, 2018 and 2019. N=366.
1) M=Mihara; H=Higashi Hiroshima; O=Onomichi
* denotes statistical significance threshold at 0.05.

reasons why they visited the marché. Responses are shown (in descending order) in Table 3, both as aggregated percentages (based on the number of respondents) and according to each marché. As can be observed, buying local products (37.4%), eating at the market (33.3%) and buying fresh products (27.3%) were the three most selected responses overall. Being located in a convenient and easily accessible place was also one of the main reasons for visiting the marché (25.1%). The option ‘to buy organic products’, despite not being among the top priorities of marché visitors, was selected by 23.0% of respondents. ‘Supporting local producers’ on the other hand was slightly higher, at 24.6%.

To examine the correlation between marché location and each of the options, Pearson’s chi square test was used. However, only ‘fashionable atmosphere’ ($\chi^2$ (2, N=366)=7.87, p=0.020) and ‘just passing by’ ($\chi^2$ (2, N=366)=7.02, p=0.030) showed statistically significant differences. Both were significantly higher for Onomichi, which could be related to the higher share of tourists.

The chi square test was also used to seek out significant associations between the variable ‘frequency of buying organic products’ and each of the reasons for visiting shown in Table 3. All the significant associations are shown in Table 4. Given that dividing the dataset according to marché did not display significant correlations in the previous analysis, aggregated data were used in this step. It can be observed that buying organic products ‘often’ was strongly and positively associated with ‘support local producers’ ($\chi^2$ (2, N=366)=18, p<0.001), ‘buy fresh products’ ($\chi^2$ (2, N=366)=18.7, p<0.001), and ‘buy organic products’ ($\chi^2$ (2, N=366)=90.7, p<0.001). Frequent organic buyers were significantly less likely to choose the option ‘I enjoy eating here’ ($\chi^2$ (2, N=366)=8.63, p=0.013) and ‘just passing by’ ($\chi^2$ (2, N=366)=23.9, p<0.001).

The opposite behaviour was displayed by people who stated they ‘did not buy’ organic products in daily life: this group was significantly less likely to select ‘buy local products’ ($\chi^2$ (2, N=366)=9.27, p=0.010), ‘support local producers’, ‘buy fresh products’ and ‘buy organic products’. It was also significantly more likely to choose the options ‘fashionable atmosphere’ ($\chi^2$ (2, N=366)=6.01, p=0.050) and ‘just passing by’.

(2) Producer responses

A total of 36 producers returned usable questionnaires; 12 in Onomichi, 19 in Mihara and 5 in Higashi Hiroshima. This corresponded to 63.2%, 95.0% and 50.0% of the total number of food-related sellers (see Table 1) in each marché, respectively. Mihara and Onomichi had a higher number of producers that met the survey criteria (farmers and local processors) compared to Higashi Hiroshima, where more conventional food stalls (restaurants) with no emphasis on local products were present.

Some 55.6% of producers were from the same city where the marché was held, while the rest came from a different city within Hiroshima Prefecture. More than half of the producers were therefore ‘hyper’ local (from the same city) or from nearby areas (75.0% took less than one hour to reach the marché). Regarding their occupation, 26 out of 36 respondents (72.2%) indicated full time or part time farming as their main activity, while the remaining 27.8% were food processors.
producers (86.1% of the total) were selling at least some organic products (either fresh or processed). Only 5 producers were selling only conventional food items (Table 5). This pattern of high prevalence of organic products among surveyed producers was similar in all marché, regardless of the characteristics of the marché or of the organizers’ level of support for organic.

Producers were also asked about their purpose of attending the marché, as well as the criteria they used to evaluate successful attendance (Table 6). As it can be observed, 88.9% of respondents indicated “talk directly to consumers” as the main purpose of attending the marché, showing how they considered the marché to be an important venue for direct communication with consumers. Moreover, as highlighted by the second and third most popular choices, (‘secure diverse sales channels’, 66.7%, and...
advertise my farm/shop', 55.6%), it was also an important way to publicize one's farm or shop to a wider public. Producers were also asked to state their satisfaction level in participating in the marché: on a 4-point Likert scale, 50.0% of respondents chose 'satisfied', 41.7% chose 'somewhat satisfied', while only 2.8% and 5.6% chose 'somewhat' dissatisfied' and 'dissatisfied', respectively. Satisfaction was therefore high.

When asked about their criteria to evaluate success, 44.4% of producers highlighted the importance of being able to attract regular customers, which outranked all other considerations, which were mainly of an economic nature. In this regard, it is noteworthy to examine the content of the open answers given for the ‘Other’ option; in all 8 cases (22.2%), the respondents referenced interaction and communication with visitors in some fashion. The original question did not contain any reference to communication with visitors as a measure of success, but respondents spontaneously emphasized this aspect.

4. Discussion and conclusions

In relation to the question of why people visit marché, the aggregated results showed that buying 'local' products ranked highest among stated reasons (37.4%). This was followed by reasons connected to the use of marché as a space for entertainment and socialization, which also ranked high (e.g. ‘I enjoy eating here, 33.3%). In light of these findings, the purchase of organic products (chosen by 23.0% of visitors) cannot be said to be a major reason why people visit marché. It can still be argued, however, that almost one fourth of respondents listed buying organic products as one of their top three reasons to visit; moreover, 22.1% of visitors defined themselves as frequent organic buyers. The statistical relation between visitors’ frequency of buying organic products and their reasons for visiting (Table 3) reveals a clear difference among visitors, who can be qualitatively clustered in two types. The first type is composed of people who are frequent organic buyers and who use the marché mainly as a space to buy food products (with locality, freshness and organic attributes being all emphasized). Even though it cannot be said that frequent organic buyers visit marché primarily to buy organic products, for this cluster of visitors both the organic and local dimensions of food consumption appear to be important, and marché is a space where both can be found. This is especially significant in light of the considerations made in the introduction about the disconnection between other forms of chisan-chishō and the organic movement, and the scarcity of outlets for organic produce within the chisan-chishō system.

The second type is composed of visitors who do not normally buy organic products and who are interested in marché as a space for entertainment and socialization. They are less likely to be interested in buying organic (or even local) food items. They view the marché as an event rather than a venue where to buy food for daily consumption. This type is exemplified by answers such as ‘I enjoy eating here’ or ‘Spending time with family and friends’, which were significantly more common among non-organic buyers. This cluster also includes casual visitors (‘Just passing by’), while frequent organic buyers attended the

| Purpose of attending marché | Total (%) |
|----------------------------|-----------|
| Talk directly to consumers  | 32 (88.9) |
| Secure diverse sales channels | 24 (66.7)  |
| Advertise my farm/shop      | 21 (55.6)  |
| Raise awareness about organic products | 12 (33.3) |
| Sell small amounts or non-standard produce | 5 (13.9) |
| Other                      | 8 (22.2)   |
| Criteria to evaluate success |           |
| Getting regular customers   | 16 (44.4)  |
| Selling out                 | 13 (36.1)  |
| Sales amount                | 12 (33.3)  |
| Cover the expenses          | 12 (33.3)  |
| Other                      | 8 (22.2)   |

Source: Field survey, 2018 and 2019. N=36.

marché purposefully. It should be noted that the behavior of visitors who buy organic products only occasionally was not clear from this study.

Regarding the second research question, the analysis shows that that marché is offering a new space for organic farmers to interact with consumers. This is evidenced by the fact that, independently from the organic orientation of each marché, nearly all farmers were selling organic produce. Similarly, most locally-focused processors sold mainly organic products. The same cannot be said for other sites that promote chisan-chishō such as chokubaijo, where, even though the products offered are local, there is usually little commitment to organic (Ojima et al., 2015). Therefore, the study shows that marché are emerging as more ‘organic friendly’ sites of local consumption, and that are more attractive for organic producers.

The role of marché to facilitate interaction between organic producers and consumers is particularly evident from the producer questionnaire. Most producers attended the marché for the main purpose of talking directly to visitors and to advertise themselves; this is especially important for organic farmers, who in Japan usually sell to individual customers mainly through box schemes and household delivery, and therefore have low visibility among consumers who do not actively seek out organic produce (Ojima et al., 2013; Sato, 2017). The ‘criteria to evaluate success’ answers further emphasizes this aspect, showing that for producers communicating with visitors and being able to create a long-lasting customer base was more important than merely selling products.

On the visitors’ side, this research question cannot be easily answered, as there was no dedicated question addressing the importance given to interacting with producers. Further research is therefore required to assess this aspect, and also whether organic producers are able to reach out to visitors who are not strongly interested in organic products. Nevertheless, the existing evidence shows the relevance of marché as interaction spaces to increase the visibility of organic producers and to provide more chances to engage directly with visitors. This is an aspect that is not as strong in other types of chisan-chishō oriented spaces, where ‘interaction’ occurs mainly by proxy (for example by displaying producers’ photos or information) (McGreevy and Akitsu, 2016; Ojima et al., 2013).

Finally, buying local products was, overall, the most common reason for visitors’ attendance. This shows how marché represents, first and foremost, a new locus for encouraging the localization of food consumption, in line with chisan-chishō objectives. This is further emphasized by the fact that the majority of visitors and producers were local.

This study suggest how marché could play a significant role in expanding both local and organic product consumption and in strengthening the relationships between consumers and producers, particularly organic ones. The study has also shown how marché is significantly different from other forms of chisan-chishō. Further research is needed to solidify these claims and to examine whether increased interaction and a stronger presence of organic producers can also contribute to deeper changes in food consumption patterns and increased attention for sustainability issues.

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Notes
1 This test was selected because the variables are categorical (nominal), and because at this stage of the analysis the interest lay in understanding the existing associations between variables, and the chi-square test allows for a clearer interpretation of results.
2 The chi square test between marché and frequency of buying organic products was χ²(4, N=366)=4.59, p=0.332
3 A sample of representative answers: “If I can raise awareness about organic among people”; “If I can communicate with customers in an unhurried way”. 
References

Iizaka, T. and F. Suda (2010) Making device for sustainable agricultural systems: A case study of Japanese farmers’ markets, in A. Bonanno, H. Bakker, R. Jussaume, Y. Kawamura, and M. Shucksmith, eds., From Community to Consumption: New and Classical Themes in Rural Sociological Research: Emerald Group Publishing Limited, 171–184. https://doi.org/10.1108/S1057-1922(2010)0000016015.

Kimura, A. H. and M. Nishiyama (2008) The chisan-chisho movement: Japanese local food movement and its challenges, Agriculture and Human Values 25(1): 49–64. https://doi.org/10.1007/s10460-007-9077-x.

Marche Japon National Secretariat. (n.d.) Marche Japon Project, https://www.marche-japon.org/ (Accessed January 30, 2019).

McGreevy, S. R. and M. Akitsu (2016) Steering sustainable food consumption in Japan: Trust, relationships, and the ties that bind, in A. Genus, ed., Sustainable Consumption: Design, Innovation and Practice: Springer, 101–117. https://doi.org/10.1007/978-3-319-29665-4_5.

Ministry of Agriculture, Forestry and Fishery (MAFF) (2017) Promotion of Organic Agriculture. Tokyo: MAFF.

Lamine, C. (2015) Sustainability and resilience in agrifood systems: Reconnecting agriculture, food and the environment, Sociologia Ruralis 55(1): 41–61. https://doi.org/10.1111/soru.12061.

Ojima, K., T. Sato, and H. Datai (2013) Sales of organic farm products using various distribution channels: Circumstances and problems, Journal of Rural Problems 49(2): 403–408. https://doi.org/10.7310/arfe.49.403 (In Japanese).

Ojima, K., T. Sato, and H. Datai (2015) Main management points for organic farmers’ market development, Journal of Rural Problems 51(3): 179–184. https://doi.org/10.7310/arfe.51.179 (In Japanese).

Sato, R. (2017) Raison d’etre of farmer’s market in Japan: A consideration of co-existence with local food marketplaces, Doshisha Policy and Management Review 19(1): 323–340. https://doi.org/10.14988/pa.2017.000016790 (In Japanese).

Towoshima, N., S. Takeda, H. Kaga, and N. Masuda (2015) The study of the social significance and roles of each actor about “Marche” which are held regularly and continuously, Journal of the Japanese Institute of Landscape Architecture 78(5): 727–730. https://doi.org/10.5632/jila.78.727 (In Japanese).