Bringing Together Japanese Organic Food Consumers and Producers After Fukushima

Sumire Stanislawski, Tokyo International University, Japan

This paper qualitatively analyzed how an organic food delivery company acted to protect producer livelihoods while simultaneously ensuring feelings of safety for consumers after Fukushima. It was found that transparency and provision of choices were used to help create perceptions of safety that went beyond government claims of safety.

[to cite]:


[url]:

http://www.acrwebsite.org/volumes/1021450/volumes/v44/NA-44

[copyright notice]:

This work is copyrighted by The Association for Consumer Research. For permission to copy or use this work in whole or in part, please contact the Copyright Clearance Center at http://www.copyright.com/.
Bringing Together Japanese Organic Food Consumers and Producers After Fukushima
Sumire Stanislawski, Tokyo International University, Japan

ABSTRACT
This paper qualitatively analyzed how an organic food delivery company acted to protect producer livelihoods while simultaneously ensuring feelings of safety for consumers after Fukushima. It was found that transparency and provision of choices were used to help create perceptions of safety that went beyond government claims of safety.

FOOD SAFETY CONCERNS AFTER FUKUSHIMA

Fukushima and its surrounding regions are major contributors to Japan’s agriculture and fishing industries. Due to its geography, farmland is scarce in Japan, with only 12.1% of total land suitable for cultivation (Statistics of Agriculture, Forestry and Fisheries 2014). Japan has been struggling with a low food self-sufficiency ratio (39% as of 2013 on a calorie supply basis), the rising age of commercial farmers (61.6% aged 65 and over as of 2010), and a lack of young fishers (24.9% aged 44 and under as of 2014) (Statistics Bureau 2015). Despite the aftereffects of the Great East Japan Earthquake, tsunami, and nuclear accident disaster on March 11, 2011 (herein-after referred to as “3.11”), Japan cannot easily afford to abandon a significant portion of its fertile land or its diminishing number of farmers and fishers (see figure 1).

Figure 1: Prefectures Subject to Radiation Monitoring by Regulations (From Consumer Affairs Agency (2013), Food and Radiation Q&A in English, 8th Edition, p. 20)

Therefore, instead of banning food from all potentially contaminated areas, the government instead chose to limit consumers’ internal radiation exposure by implementing relatively strict provisional limits for radioactive materials in food. This was amended to an even stricter limit a year later (see table 1 for international comparisons of regulatory limits). This has been largely successful in keeping contaminated foods out of the marketplace (see Consumer Affairs Agency 2013 for regulation details and Merz et al. 2015 for food monitoring outcomes).

Consumer reactions to this new reality have been complex. On the one hand, there is an ethical consumption movement to help support reconstruction through actively buying products from affected areas called ouen (literally “aid”) consumption (Stanislawski et al. 2015). On the other hand, there is fear of potential adverse health risks, resulting in avoidance and so-called “harmful rumor damage.” Defined by Sekiya (2011) as “economic damage caused by media coverage of social issues that results in people perceiving ‘safe’ things as dangerous, and which leads to avoidance of consumption, tourism, and transactions” (p. 12), this term has been used to highlight damage to livelihoods caused by avoidance of products deemed “safe” by regulatory standards. Consumer unwillingness to purchase produce from Eastern Japan, regardless of scientific data backing claims of safety of all products in the marketplace, show that expert claims of safety do not always translate into feelings of safety for consumers.

Similar trends are seen in consumer discomfort with genetically modified (GM) foods, despite expert claims of safety and positive social impacts (Wansink and Kim 2001). Like radiation exposure, the long-term impact of genetic modification is a complex issue with differences of opinion even among experts, which makes it difficult for the average consumer to fully understand. The organic food movement has largely come out against GM foods and has often led campaigns against them. For example, Dreezens et al. (2005) found that consumer attitudes toward genetically modified foods and organically grown foods are negatively related. As such, it is logical to think that organic food consumers would be especially sensitive to radiation concerns and would strongly avoid products from potentially contaminated areas. Yet, research into Japanese ethical consumers, which included organic food consumers, has found that awareness of “harmful rumor damage,” trust in marketplace regulations, and feelings of obligation to help support reconstruction have acted to counter such concerns to some extent and have led to support of ouen consumption (Stanislawski, et al. 2015).

A factor to consider is Japan’s organic food sector’s historic focus on building mutual support in a relational, rather than a transactional, approach (Parker 2005). The focus is “not only towards the organic standard of the food but to the quality of the relations between the consumer and producer” (ibid., 8). Within this context of long-term mutually supportive relationships, the thought of abandoning producers in their time of need would lead to hesitancy and guilt. And yet, many consumers who purchase organic food do so precisely because of their reluctance to eat “unsafe” food. Such conflicting feelings have created a conundrum for Japanese ethical consumers to navigate.

Various actors have stepped forward to help resolve this situation by acting as intermediaries between consumers and producers to increase feelings of safety in the marketplace beyond mere adherence to government regulations. A notable example of this is Daichi wo Mamoru Kai Co., Ltd., literally “Association to Preserve the Earth,” (hereinafter, Daichi). Founded in 1975, Daichi’s organic food delivery business is one of the pioneers of the organic food movement in Japan. Daichi’s mission is to: 1. Protect and grow Japan’s primary sector, 2. Protect people’s lives and health, and 3. Create a sustainable society. However, the aftermath of Fukushima has made it difficult to simultaneously achieve missions 1 and 2. Some may even consider it a paradox for Daichi to sell food that feels “unsafe” to consumers, even if it is to protect organic farming in Japan. This
paper explores how Daichi has navigated the dilemma of its conflicting desires to protect producer livelihoods and to provide feelings of safety for consumers.

By studying this unique case, this paper helps to broaden the understanding of how marketplace actors can help shape perceptions of safety and guide consumer purchase decisions under situations of complex uncertainties and trade-offs where there are no easy answers. This has implications not only for GM foods, but also for food safety and consumption in general.

METHOD

As there is not much research into how ethical consumers are navigating the post-3.11 realities in Japan, a qualitative study was chosen for its ability to help understand complex social phenomena at the exploratory phases. This paper analyzes Daichi’s communications on the impact of 3.11 to its consumer members and the general public by examining information made available through their corporate website including notifications, press releases, and blogs. Over 400 pages of data were analyzed, covering a period from March 2011 to December 2015. Supplemental information was also collected from books published by Daichi’s founder (Fujita and Komatsu 1992; Fujita 1995, 2005). Such naturally occurring data, which exists independent of researcher intervention, is useful when recounting the research phenomenon is not likely to be sufficiently detailed, accurate, or complete (Lewis 2003, 57). Inductive thematic analysis was used to identify patterns across the dataset (Braun and Clarke 2006).

FINDINGS

Framing support as larger issue of sustainability. Along with many other groups, Daichi has been working to help revitalize Japanese agriculture, with a particular emphasis on organic methods of cultivation. They have consistently communicated that producers are equal to consumers and are not merely there to serve consumeristic needs. Consumer members are asked to accept misshapen or imperfect produce (that is rejected by supermarkets), dirt and occasional bugs, and substitute products (when weather conditions prevent expected harvests). When there are natural disasters, both producer and consumer members are solicited to help those impacted (through financial donations and purchase of blemished products). Daichi also hosts seminars, farm visits, and other events to bring producer and consumer members together to build face-to-face relationships. They teach consumers that access to safe organic food requires commitment from all parties, and that there needs to be a mutually beneficial relationship for organic farming to be sustainable in the long-term. This is placed in the context of food self-sufficiency as an issue of national security—an understandable concern for a nation that suffered from food shortages during and after WWII. Thus, it is no surprise that Daichi refused to abandon affected producers in the immediate aftermath of 3.11 and spoke out against harmful rumor damage.

[Daichi will work to] protect food safety by providing appropriate information to consumers and distributing safe food. At the same time, ... prevent additional hardships for producers in disaster-hit areas from harmful rumor damage. (March 23, 2011)

Daichi emphasized that producers in disaster-hit areas were the biggest victims and that they should not be punished for something that was beyond their control—especially when scientific evidence indicated that their food was within safe limits for consumption. In addition, consumers’ responsibility to support these farmers was framed as a larger sustainability issue by expressing that abandoning these farmers would endanger food security for future generations.

If [harmful rumor damage] persists, producers may quit farming ... [with] disappearing farmers and fields. This means a loss of food for future children. (April 4, 2011)

Daichi will fulfill our two missions of providing safe food to members and protecting Japan’s primary sector (protecting the production base of food so that our children and grandchildren will never go hungry in the future). (April 6, 2011)

This places a portion of responsibility for the future of food security on consumers’ willingness to support affected producers. This is likely a solid argument to use on organic food consumers, who tend to be aware of such sustainability issues. However, there was a backlash from consumers to the use of the term “harmful rumor damage,” as there are indeed real concerns about food safety in the post-3.11 world. This is especially true for those with children, since they are considerably more sensitive to radiation than adults.

We fully understand not wanting to let children eat [potentially contaminated food]... [Our intended meaning was] “damage occurring to producers when denied distribution and sales due to unsupported rumors,” and was not targeted at consumer behavior of “wanting to refrain [from buying] things that have any measure of contamination”... we regret that our expression may have caused distress. (April 27, 2011)

---

**TABLE 1: Limits on Radioactive Cesium in Food (Unit: Becquerel/kg)**

<table>
<thead>
<tr>
<th>Product</th>
<th>Daichi (limits as of Apr 2012)</th>
<th>Japan (limits as of Apr 2012)</th>
<th>Japan (provisional limits)</th>
<th>Republic of Korea</th>
<th>US</th>
<th>EU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drinking Water</td>
<td>6</td>
<td>10</td>
<td>200</td>
<td>370</td>
<td>1200</td>
<td>1000</td>
</tr>
<tr>
<td>Milk</td>
<td>10</td>
<td>50</td>
<td>200 (including dairy products)</td>
<td>370</td>
<td>1200</td>
<td>1000</td>
</tr>
<tr>
<td>General Foodstuffs</td>
<td>6–50 (depending on item)</td>
<td>100 (including dairy products)</td>
<td>500</td>
<td>370</td>
<td>1200</td>
<td>1250</td>
</tr>
<tr>
<td>Food Items for Babies</td>
<td>6</td>
<td>50</td>
<td>200 (baby formula)</td>
<td>370</td>
<td>1200</td>
<td>400</td>
</tr>
</tbody>
</table>

Adapted from Prime Minister of Japan and His Cabinet (2012), Post 3/11: Food Safety in Japan, p. 2, with EU and Daichi values added by the author. Daichi’s lowest limit of 6 bq/kg is based on the detection limit of their equipment (Daichi 2012). See Kimura (2013) for a comparison of the limits set by the Japanese government versus alternative food outlets including Daichi.
Although Daichi continued to advocate support for producers from affected areas, they became more sensitive to consumer perceptions of safety. After this, the term “harmful rumor damage” was largely replaced with “reluctance to buy” to indicate consumer avoidance of products from affected areas. This is a more neutral term that does not tie avoidance directly to farmers’ suffering; nor does it judge consumers for acting based on their own feelings of safety.

Enabling informed choices through transparency
Daichi worked to reassure consumers that continuing support for producers would not mean extra health risks for them by stating that foods from evacuated areas and those above government limits were not being distributed, even while openly admitting that this may not seem like enough for some consumers.

It’s an agonizing choice, but we are forced to start by taking responsibility to at least not distribute food above the government’s provisional limits. Currently, we cannot develop our own distribution standards, but it does not mean that we think this is acceptable in the long-term … we must establish an independent measuring system … in order to provide food you feel safe eating. (April 27, 2011)

While acknowledging consumers’ lack of trust toward government limits, Daichi stated that they did not want to prematurely launch their own limits without confirming it was reliable (accurate measurement system), double (achievable for producers), and usable (timely disclosure). To this end, Daichi became one of the first private companies to purchase a germanium semiconductor detector in September 2011, then trained their employees in its correct use, and have continued to publish results online.

Daichi also tried to shape larger public discourse by establishing the “Roundtable for Discussion on Food and Radiation” with other major players in the natural food delivery industry (see Kimura 2013 for details). In February 2012, this roundtable jointly issued a public comment strongly criticizing the government’s lack of transparency, its delay in releasing updated limits, and its methodology for setting these limits. Also, each group set forth their own testing procedures and limits in response to consumer distrust of government practices and its assurances of safety.

Notwithstanding their commitment to producers, Daichi’s limits were set much lower than the government’s when announced in February 2012 (see table 1). Daichi also actively cooperated with their producer members to monitor and decontaminate fields in affected regions ahead of government initiatives. Daichi lent radiation-measuring instruments to enable local producers to monitor levels of contamination, test the effectiveness of various decontamination efforts, and release gathered data.

Daichi is pursuing decontamination initiatives in cooperation with producing regions … to restore consumers’ feelings of safety … there is no time to wait for government action … Daichi has the unique ability to do this because of our strong network with producers that emphasizes “face-to-face relationships” and our traceability system that accurately tracks the cultivation history of each field. […] If Japanese consumers do not feel safe choosing domestic food, Japan’s primary sector will decline. (August 26, 2011)

Daichi also helped to publicize the results of such initiatives. For example, they reported on a Fukushima rice farmer group’s decontamination efforts, including the use of radiation-absorbing organic materials and potassium silicate in their fields. In 2011, this group tested 341 unpollished rice specimens with only four specimens above the 10 bq/kg detection limit. These were all under 12.1 bq/kg (see table 1), and no contamination was detected after polishing. By reporting on such producer efforts, Daichi showed that these were the same trustworthy farmers who had always worked to provide safe food. By transparently reporting cultivation methods and results obtained, consumers were given the ability to make informed decisions. It also enabled producers across Japan to learn what practices were effective against radiation contamination.

Daichi will share [this] empirical data and widely disseminate information to other producers in order to pursue ways of production that protect consumers from radioactive contamination. (August 26, 2011)

Providing ways to support and avoid. Due to the immediate need to prevent the collapse of producer member’s livelihoods, Daichi first put priority on their needs. Within a month of the disaster, Daichi had put together multiple ways for consumers and producers from other regions to support them: sending messages of support; giving cash donations; buying surplus products (with shorter expiry dates due to disrupted distribution) and other products with a portion of sales going toward donations; and buying the “Let’s Do It Fukushima and North Kanto Producers Set” (weekly delivered vegetables set). Daichi spoke about the suffering of farmers in affected regions and asked consumers to support reconstruction in whatever ways they could.

Those who can do so, please support by eating produce from Fukushima and [nearby regions]. If this is difficult, please cooperate with the [donations collected by Daichi] or buy … products from other affected areas to support producing regions. There isn’t only one way … let’s all work together… to support Japan’s primary sector.” (April 4, 2011)

Yet, Daichi also recognized that scientific appeals of safety cannot fully reassure consumers, and that many wished to protect their loved ones by entirely avoiding anything that felt unsafe. Since May 2011, Daichi has featured items with no radioactive material detected (focusing on foods frequently consumed by children) and other products with a portion of sales going toward donations; and buying the “Let’s Do It Fukushima and North Kanto Producers Set” (weekly delivered vegetables set). Daichi spoke about the suffering of farmers in affected regions and asked consumers to support reconstruction in whatever ways they could.

[Daichi] will launch the “Safe Vegetable Set for Children,” a set of vegetables from Western Japan and Hokkaido … in order to meet the demands of families with small children worried about effects of radiation.” (July 8, 2011)

Though priority was given to producers, Daichi did respond to consumer desires in a relatively timely manner. Yet, Daichi has struggled to maintain a balance between supporting producers and responding to consumer demands to avoid produce from affected regions. Daichi has been open about the difficulty of simultaneously fulfilling these needs.

Since immediately after the nuclear accident, Daichi has worked to support producers … However, in real terms of vegetable shipments, we were unable to obtain sufficient results. We struggled with the frustration of wanting to support, but being unable to do so. On the other hand, we are painfully aware
of consumers’ desperate need to “protect my child from radiation,” especially for mothers with small children. This has been a year in which Daichi has struggled with these [conflicting] issues. (February 29, 2012)

Despite Daichi’s struggles to meet their somewhat paradoxical goals, many consumers have embraced Daichi’s strict limits, transparency, and provision of choices that go beyond what is provided in the general marketplace. The number of Daichi’s consumer members increased from 115,994 in 2010 to 241,000 in 2015, reflecting consumer desire for feelings of safety that go beyond governmental regulations based on expert claims.

**DISCUSSION**

This paper analyzed how an organic food delivery company grappled with its conflicting desires to protect producer livelihoods and to provide feelings of safety for consumers after 3.11. At first, Daichi seemed to be operating on an understanding that they could help reinforce the ideals of mutual support embedded in the Japanese organic farming sector by emphasizing consumer’s ethical obligations to help support producers to protect the future of organic farming in Japan. In their communication to consumers, Daichi emphasized that most food from affected areas was “safe” based on government limits, and focused on farmers’ suffering and the potential long-term damage to Japanese agriculture. However, this overlooked the emotional aspect of risk perception, wherein scientific information or expert claims do not necessarily lead to trust (Engdahl and Lidskog 2014). Since consumers did not feel that food from affected regions was safe, they pushed back against the use of the term “harmful rumor damage” and its implication that consumers were obliged to support producers or be perpetrators of damage. Similar to GM foods, it was found that consumers who have reservations regarding safety are unlikely to be swayed by expert (especially government) claims of safety or an appeal to larger social benefits (Costa-Font et al. 2008).

Daichi responded by switching the focus of their communications to how they were working to be a trustworthy partner for consumers to navigate the complex realities of the post-3.11 world. To this end, they joined forces with other major industry players and established a roundtable to publicly critique the government and announce their voluntary adherence to more stringent testing procedures and stricter limits. As Kimura (2013) states, “this kind of networking with other similar-minded organizations, as well as engagement with media and the government, is necessary for standard-setting groups to function meaningfully…” (p. 25).

Also, Daichi acted to build trust in their handling of radiation contamination by backing these limits up with accurate measurement systems, timely disclosure, and openly discussing their difficulties and struggles. Such transparency in the food supply chain is an effective means of building trust toward food safety (Beulens et al. 2005). Furthermore, Daichi reported on producer-led decontamination initiatives in order to rebuild trust for producers. This acted to renew the traditional ideals of the Japanese organic food movement that “include the social dimension alongside environmental and health objectives and promoted enhanced relations between consumers and producers as a way of building necessary trust and accountability” (Parker 2005, 16) where “to trust the producer was to trust the food” (ibid., 8).

Daichi’s strong desire to help affected producers led them to create multiple ways for consumers to support producers. Yet, they also provided ways for consumers to entirely avoid food from affected areas. Though seemingly in conflict, this allowed Daichi to pursue their goals of protecting Japan’s primary sector and protecting people’s lives and health, which had become somewhat paradoxical in the aftermath of Fukushima. Through these various means, Daichi has worked to restore the severely damaged trust in food safety in order to rebuild a foundation for mutually supportive relationships between organic food consumers and producers. Daichi’s work to restore consumer feelings of safety in choosing domestic produce shows a way forward for Japan’s agricultural industry to overcome the lasting damage of 3.11.

Due to its exploratory nature, this study is limited. It only considered how one organic food delivery company responded to producer and consumer needs after 3.11. Future studies can analyze other actors in the organic food marketplace, including other intermediaries, producers, and consumers. For example, interviews can be conducted with Japanese organic food consumers and producers to see how 3.11 impacted their understanding of risk, trust, and mutual support. Such studies can also test whether the findings of this paper can be generalized.

**REFERENCES**


Prime Minister of Japan and His Cabinet (2012), Post 3/11: Food Safety in Japan, Tokyo, Japan: Government of Japan.


Statistics Bureau (2015), Statistical Handbook of Japan 2015, Tokyo, Japan: Ministry of Internal Affairs and Communications, Japan.

Statistics of Agriculture, Forestry and Fisheries (2014), 2014 Arable Land (as of July 15), Tokyo, Japan: Ministry of Agriculture, Forestry and Fisheries. (in Japanese)