Food Safety in the Aftermath of Fukushima: Who can Consumers Trust?

Zina Teoh*

- I. Introduction
- II. Food Safety Governance Framework in Japan
 - 1. The food system and the role of law
 - 2. Food safety governance framework in Japan
- III. The Fukushima Nuclear Disaster and Distrust of Government Standards
 - 1. The disaster
 - 2. Regulatory failure
 - 3. The contamination problem
 - 4. The consumer reaction distrust of government standards
- IV. Problems in Food Safety Governance in the Wake of the Fukushima Disaster
 - 1. No provision for radiation contamination under the laws
 - 2. Problems of educating and communicating with the public on food safety
- V. Who Can Be Trusted to Guarantee the Safety of Fukushima Produce in the Future?
 - 1. New stakeholders seeking to define "safe food"
 - 2. Social trust
 - 3. How to improve the system change the way policies treat the consumer
- VI. Conclusion

I. INTRODUCTION

In October 2014 Japanese siblings United Brothers presented a live art piece titled "Does this Soup Taste Ambivalent?" at the Frieze London art fair. The piece involved serving soup to visitors, which was made by the brothers' mother using vegetables grown in their hometown, Fukushima. While they insisted that the vegetables were safe for consumption, there are many people who have concerns about anything grown in the Fukushima prefecture. The piece presented visitors with the chance to experience the dilemma felt by consumers in Japan every day when choosing whether to believe that food from Fukushima is actually safe to eat. Such concerns emanated after 11 March 2011, when the largest earthquake ever recorded in Japan caused a tsunami that killed

Bachelor of Arts (Hons), University of Melbourne and Master of Laws (Juris Doctor), Monash University.

M. Brown, Fukushima vegetable soup on menu at Frieze London art fair, in: The Guardian (online) 26 September 2014, http://www.theguardian.com/artanddesign/2014/sep/25/fukushi ma-vegetable-soup-frieze-london-art-fair.

up to 20,000 people in the north-east part of Japan called the Tōhoku region,² leading to the disaster at the Fukushima-Daiichi Nuclear Power Plant ("Fukushima-I NPP"). The meltdown of three reactors at Fukushima-I NPP, operated by Tokyo Electric Power Company ("TEPCO"), released radioactive materials into the environment³ causing contamination of some of the produce from Fukushima, a prefecture known for production of rice, fruit and vegetables.

As evidence of radioactive contamination of Fukushima produce emerged after the meltdown, food businesses associated with Fukushima suffered damage to their reputations even when their produce had passed through government safety standards. Lack of trust in the government's safety standards to ensure the safety of food sold is a problem, which sees consumers avoiding food from the stricken prefecture. The purpose of this article is to examine the role of law and regulations in guaranteeing the safety of the food system and promoting consumer trust in the food industry in light of the Fukushima disaster.

This article will begin by examining, in Part II, the food safety governance framework in Japan, which has evolved in response to various food safety incidents since World War II and is designed to promote trust in the Japanese food system. Although current food safety laws provide for scientific assessment of risks associated with food and focus on the rights of the consumer, we will see in Part III that Japanese consumers are still avoiding products that have been deemed safe by the Japanese food safety legal and regulatory framework. The problems with this framework that led to lack of trust in food associated with Fukushima will be examined in Part IV. This includes lack of provision for radiation contamination under the existing laws as well as problems with the ways that food safety laws and policies communicate to and engage with the consumer. While current food safety laws envision a role for an actively participating consumer, when dealing with the Fukushima disaster, the consumer was positioned as ignorant and only given a tokenistic role in the development of standards. As will be explored in Part IV, this left a gap between the law-makers and the experience of locals, resulting in a feeling of alienation by the consumer and a lack of trust in government food safety standards.

During food safety scares, like that caused by the Fukushima disaster, the ability of public and private actors to guarantee the integrity of the food system is often brought into question. We can see in Part V that the aftermath of Fukushima has left a regulatory gap, that has been filled by other stakeholders such as consumer cooperatives and community radioactivity measurement stations, which seek to assure consumers of food safety. While these actors may take up roles in the food safety arena, it is still vital that

² THE WORLD BANK, The Great East Japan Earthquake: Learning from Megadisasters (2012) 2 http://wbi.worldbank.org/wbi/Data/wbi/wbicms/files/drupal-acquia/wbi/drm_exsum_english.pdf.

M. BABA, Fukushima accident: What happened? in: Radiation Measurements 55 (2013) 17– 18.

the government works to strengthen its food safety governance system. The Fukushima disaster resulted in a loss of social trust in the government, particularly in its failure to provide reliable information on the effects of radiation to the public after the disaster.⁴ Strengthening the level of trust in the food safety governance system is one way the government can work to restore the public trust. Furthermore, lack of trust in a food system affects all stakeholders involved in the food supply chain, from farmers to restaurants, retailers and finally to consumers. This article is important in that it will add to the emerging body of legal literature on the Fukushima disaster. This will be done through an examination of how the Japanese regulatory framework can ensure food safety and communicate risks to the consumer, so that consumers can make choices they feel comfortable with and stakeholders in the food industry associated with Fukushima can survive financially.

II. FOOD SAFETY GOVERNANCE FRAMEWORK IN JAPAN

In order to analyse the adequacy of Japan's food safety governance framework in light of Fukushima, we must first understand how a food system is regulated. The food system describes the process that moves food from the stages of agriculture and production, to sale and eventual consumption. This section will first outline the role of law and regulations in assuring the safety of the food system. Then we will explore the various laws, regulations and institutions, which form the food safety governance framework in Japan that have developed since World War II.

1. The food system and the role of law

The safety of food produced within a food system relies on a complicated governance framework involving public and private actors. This governance framework uses a number of standards and regulations that cross a variety of areas of law including food law, consumer law, product liability and administrative law. Not only does this governance framework pay a role in ensuring the safety and quality of food, but it also regulates how risks associated with food are communicated to consumers through, for example, the labeling of processed foods. The complexity of regulating a food system is obvious in today's globalized world where most countries look internationally for supply of various foods. This issue is magnified in Japan, a country that only produces 40 per cent of its food locally.

⁴ M. REICH, A Public Health Perspective on Reconstruction Post-Disaster Japan, in: Butt/ Nasu/Nottage (eds.) Asia Pacific Disaster Management: Comparative and Socio-legal Perspectives (Springer Verlag 2014) 75.

⁵ S. ASSMANN, Reassessing Food Safety, Risk and Globalization in China and Japan, in: Food Culture & Society 16 (1) (2013) 11.

⁶ Ibid.

Regulation of this complex food system is necessary not only to ensure its safety, but also to enable consumers to trust the integrity of the system. This is important because a food system relies on consumer trust. Everyday consumption practices reflect consumer trust, or at minimum, that the level of risk inherent in consuming the food is acceptable to the consumer. There are many stakeholders in a food system, involved in industries such as agriculture, food processing, distribution and retail. It is important for the business of these stakeholders that consumers are able to trust in the food system. At the same time, all the stakeholders play key roles in ensuring that the food system produces food that is safe for consumption.

Given the importance of consumer trust, it is necessary for regulatory actors and stakeholders to consider how this trust is established. Tanaka, drawing on Bauman, states that consumers are presented with "anxiety-reducing devices" intended to encourage consumers to trust in the safety of food presented for sale. These devices include labels, brand names, certifications and supermarket newsletters. Behind these safety assurance devices is the food safety governance system involving a complex web of laws, regulations, industry standards, conventions and ethical codes of conducts influenced by public and private institutions. To

When threats to the food system like the Fukushima disaster occur, it is common for consumers to question the safety of food and the adequacy of food safety regulations. A key issue that arises is whether those responsible for the safety of the food system can be relied upon to ensure that food is safe for consumption. This is particularly obvious with public institutions, which, at least in Japan, have been traditionally responsible for regulating the food system. For example, the dissatisfaction in 1996 with how the public institutions in Europe handled the outbreak of Bovine Spongiform Encephalopathy ("BSE") or 'mad cow' disease led to distrust throughout Europe in the transparency and ability of public institutions responsible for food safety. Similarly, as will be demonstrated below, we can see that the Fukushima disaster has caused consumers to avoid some foods even when they pass the standards set by the government, because they doubt the adequacy of government regulation of the food industry.

⁷ K. TANAKA, Seven samurai to protect "our" food: the reform of the food safety regulatory system in Japan after the BSE crisis of 2001, in: Agriculture and Human Values 25 (2008) 567.

⁸ K. BURCH, Consumer perceptions and behaviors related to radionuclide contaminated food: an exploratory study from Kansai, Japan (Masters Thesis, Norwegian University of Life Sciences 2012) 5.

^{2.} BAUMAN, Postmodern Ethics (Blackwell 1993) cited to in TANAKA, *supra* note 7, 568.

¹⁰ TANAKA, supra note 7, 568.

¹¹ Ibid. 569.

¹² F. BERGEAUD-BLACKLER/M. FERRETTI, More politics, stronger consumers? A new division of responsibility for food in the European Union, in: Appetite 47 (2006) 137.

Nr. / No. 42 (2016) FOOD SAFETY 115

2. Food safety governance framework in Japan

To assess how the legal and regulatory framework deals with risks that the Fukushima meltdown poses to the food system, the next step is to outline how this framework has developed from food safety laws and polices since World War II. To do so we must also consider the attitudes of Japanese society towards food safety, which have also played a role in shaping how consumers feel about the regulation of the food system.

a) Japanese attitudes to risks associated with food

How Japanese society perceives risks and, in particular, risks associated with food safety, affects how Japanese consumers accept food safety policies and their trust in the food system. Japan has been characterized by some as a risk adverse society, with Hofstede noting a Japanese tendency to avoid uncertainty. In relation to food, Schroeder et al. noted in light of the BSE or mad cow disease outbreak in 2001 that Japanese consumers were far more risk adverse towards beef food safety when compared with the United States and Canada. Ferrari reached a similar conclusion, attributing the heightened sensitivity to this food safety risk in Japan to cultural and traditional perceptions of food and of beef. Both Ferrari and Rosenberger note that the traditions that are often associated with Japanese food sometimes mean that when presented with a food safety risk, a foreign/local dichotomy appears which frames local food as superior. In the food safety risk, a foreign/local dichotomy appears which frames local food as superior.

Also important when thinking about how Japanese consumers understand food safety is the concept of *anzen-anshin*.¹⁷ As explained by Yamaguchi, the term *anzen* refers to food that is scientifically proven to be safe.¹⁸ On the other hand, *anshin*, which is literally translated as "peace of mind", means "socially accepted safety".¹⁹ The challenge for regulators is that *anzen* is considered a minimum requirement when offering food for sale. In addition to this, Japanese consumers expect the government and industry to provide *anshin* or, as described by Yamaguchi, to be proactive and take additional measures to assure food safety and to protect the public.²⁰

¹³ G. HOFSTEDE, Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations Across Nations, (2nd ed.) (Sage Publications London 2001) in E. BERGIEL/B. BERGIEL/J. UPSON, Revisiting Hofstede's Dimensions: Examining the Cultural Convergence of the United States and Japan. in: American Journal of Management 12 (1) (2012) 73.

gence of the United States and Japan, in: American Journal of Management 12 (1) (2012) 73.

14 T. SCHROEDER/G. TONSOR/J. PENNINGS/J. MINTERT, The Role of Consumer Risk Perceptions and Attitudes in Cross Cultural Beef, Paper presented at the Western Agricultural Economics Association Annual Meeting (Portland 2007) 21.

¹⁵ M. FERRARI, Risk Perception, Culture, and Legal Change: A Comparative Study on Food Safety in the Wake of the Mad Cow Crisis (Ashgate Publishing Group 2009) 39.

¹⁶ *Ibid*; N. ROSENBERGER, Global Food Terror in Japan: Media Shaping Risk Perception, the Nation, and Women, in: Ecology of Food and Nutrition 48 (4) (2009) 245.

¹⁷ T. YAMAGUCHI, Social imaginary and dilemmas of policy practice: The food safety arena in Japan, in: Food Policy 45 (2014) 170.

¹⁸ *Ibid*.

¹⁹ *Ibid*.

It is necessary to consider the *anzen-anshin* construct and Japanese attitudes towards risks alongside Japan's current food safety regime, as this effects how Japanese consumers view government and industry efforts to provide safe food, and has played a role in the development of the food safety policies that will be discussed next.²¹

b) The growth of the food safety movement in Postwar Japan

Food has always been a key consideration of lawmakers in modern Japan. Food security was one focal point of Japanese government policy throughout Japan's transition from feudalism to a modern political-legal state during the Meiji Period (1868–1912) and through the hardship of World War II.²² Attention shifted to food safety in the 1960s and 1970s when Japan experienced rapid economic growth and food security was achieved for most of the population.²³ This change in focus of government policy coincided with an increase in prominence of product liability law that flowed from a number of high profile food safety scares and environmental pollution scandals during this time.²⁴

One of the prominent food safety scares occurred in 1955 when arsenic contamination of additives used in milk produced by the *Morinaga* Milk Company resulted in 12,000 people suffering food poisoning and 128 deaths.²⁵ This tragedy was also the subject of a product liability mass injury claim and was the first of Japan's "Big Four" product liability cases of the late 1960s and 1970s.²⁶ Nottage describes Japan during this period as more 'pro-consumer' than before.²⁷ Another of the product liability lawsuits involved *Kanemi* oil and resulted from an incident of mass food poisoning in 1968 caused by polychlorinated biphenal contaminating rice oil.²⁸ Consequently public perceptions of the food industry were negatively affected.²⁹ Furthermore, public awareness

²⁰ Ibid.

²¹ Ibid

²² R. JUSSAUME/S. HISANO/Y. TANIGUCHI, Food Safety in Modern Japan, in: Japanstudien 12 (2000) 215.

²³ *Ìbid.* 217.

²⁴ L. NOTTAGE, Product Liability and Safety Regulation, in: McAlinn (ed.), Japanese Business Law (Kluwer Law International BV 2007) 221, 224–225.

²⁵ JUSSAUME/HISANO/TANIGUCHI, supra note 22, 218.

²⁶ *Morinaga* Milk Company: *Japan v Ōka* [1963] 356 Hanrei Jihō 7; [1966] 447 Hanrei Jihō 31; [1969] 547 Hanrei Jihō 92; [1973] 302 Hanrei Taimuzu 123;

Kanemi oil: Kubota v Kanemi Sōko K.K. [1977] 866 Hanrei Jihō 21; Noguchi v Kanemi Sōko K.K. [1978] 881 Hanrei Jihō 17;

Thalidomide case: sixty-three plaintiff families sued the government and manufacturers of Isomin in at least eight separate suits for failing to warn about the drugs side-effects;

SMON case: *Yagi v State* [1978] 879 Hanrei Jihō 26; *Ōyama v State* [1978] 899 Hanrei Jihō 48; *Ochi v State* [1978] 910 Hanrei Jihō 33; *Aoyama v State* [1979] 910 Hanrei Jihō 19 cited in A. MARCUSE, Why Japan's New Products Liability Isn't, in: Pacific Rim Law & Policy Journal, 5(2) (1996) 374–376; NOTTAGE, *supra* note 24, 228.

²⁷ NOTTAGE, supra note 24, 226.

²⁸ Ibid 232

²⁹ JUSSAUME/HISANO/TANIGUCHI, supra note 22, 218.

of the impact of environmental degradation and pollution on the food system also grew during this time,³⁰ fueled in part by the cases of mercury poisoning in 1953 in Minamata, Kumamoto prefecture, and then in 1964 in Niigata prefecture.³¹

During these decades after World War II consumer co-operatives were key regulatory actors that played a role in the growth of food safety awareness.³² These co-operatives date back to 1879 when they were originally formed to provide cheaper goods to consumers.³³ However, their regulatory function changed as an interest in food safety often prompted Japanese consumers to join a co-operative, and membership created access to information about food safety issues.³⁴

c) Food scandals lead to restructure of the food safety regime in 2003

Japan's current food safety regulatory framework underwent major change in 2003 in response to a number of food safety scandals that had occurred since late in the previous decade, which had a great effect on Japanese consumers. In 1996, there was an outbreak of Escherichia coli from the consumption of sprouts in Sakai City that affected about 9,000 people and caused three deaths.³⁵ Then in 2000 a range of food scandals including mass food poisoning caused by Snow Brand Milk resulted in what Mainichi Daily News called the "summer of eating dangerously."³⁶ This was followed by an outbreak of BSE

Minamata disease describes mercury poisoning caused by eating fish and shellfish contaminated with mercury from factory wastewater pollution. The disease attacks the central nervous system and severe cases result in insanity, unconsciousness and death; MINIMATA DISEASE MUNICIPAL MUSEUM, Ten Things to know about Minamata disease, 4th ed (The Minamata Environmental Creation Development 2001);

The two Minamata disease trials found Chisso Co Ltd and Shōwa Denkō Co Ltd liable and both companies had to pay compensation to victims: Ōno v Shōwa Denkō K.K. [1971] 642 Hanrei Jihō 96 and Watanabe v Chisso K.K. [1973] 696 Hanrei Jihō 15 cited in A. MARCUSE, Why Japan's New Products Liability Isn't, in: Pacific Rim Law & Policy Journal, 5(2) (1996) 374. By March 2001 2,265 people in the Yatsushiro Sea coast area and 690 people in the Agano River basin had been certified as Minamata Disease patients and approximately 144.1 billion yen had been paid under the compensation schemes by the responsible companies; MINISTRY OF THE ENVIRONMENT, Minamata Disease The History and Measures http://www.env.go.jp/en/chemi/hs/minamata2002/ch4.html#sec2.

- 32 C. REIHER, Food pedagogies in Japan: From the implementation of the Basic Law on Food Education to Fukushima, in: Australian Journal of Adult Learning 52(3) (2012) 521.
- 33 JUSSAUME/HISANO/TANIGUCHI, supra note 22, 216.
- D. SMITH/P. RIETHMULLER, Consumer concerns about food safety in Australia and Japan, in: International Journal of Social Economics 26 (1999) 732.
- 35 MINISTRY OF AGRICULTURE, FORESTRY AND FISHERIES AND MINISTRY OF HEALTH AND WELFARE, Hygiene Practice Manual For Radish Sprouts Production in Japan, FAO/WHO Global Forum of Food Safety Regulators, Agenda Item 4.2.a (28–30 January 2002).
- 36 L. NOTTAGE, New concerns and challenges for product safety in Japan, in: Australian Product Liability reporter, 11(8) (2000) 101.

³⁰ Ibid.

or mad cow disease in 2001.³⁷ These incidents culminated in a government review and reform of the food safety regulatory regime in an attempt to better ensure the safety of food and restore consumers' trust that had been lost as a result of the food scandals.³⁸

An important part of the review of Japan's legal regulation of its food system is a 2002 report published by the Bovine Spongiform Encephalopathy Investigative Council, a committee created by the Ministry of Agriculture, Forestry and Fishery ("MAFF") and the Ministry of Health, Labor and Welfare ("MHLW"). This report highlighted significant flaws in the food safety governance system, including protection of the interests of food producers over that of consumers and the inadequacy of communication between government ministries.³⁹ Furthermore, lack of transparency of government processes and the exclusion of scientific experts from the making of food safety policies were also identified as weaknesses of the existing system.⁴⁰

d) The government turns to science to guarantee food safety

In late 2002 the government held public forums across Japan to establish how the system should be reformed. At the time of the BSE outbreak, virtually the only law that dealt with food safety was the Food Sanitation Act.⁴¹ One of the ways that the government responded to the food safety incidents was to amend the Food Sanitation Act to explicitly state that its purpose was to protect the health of consumers.⁴² Then in 2003 the Food Safety Basic Law⁴³ was introduced. This was a significant legislative reform because the law places emphasis on the rights of the consumer. Articles 3 and 5 stipulate the purpose of the law is to protect the health of the citizens.⁴⁴ Article 9 states that consumers are key participants in the policy making process.⁴⁵

The Food Safety Basic Law mandated the creation of the Food Safety Commission of Japan ("FSCJ"). ⁴⁶ This represented a substantial change to food safety governance in Japan because it established a system based on science. ⁴⁷ The FSCJ carries out scientific risk assessment and advises the MAFF and MHLW, which are in charge of managing the

³⁷ K. ISSHIKI/L. BARI/S. KAWAMOTO/T. SHIINA, Regulatory Issues in: Japan Regarding Produce Safety in SAPERS/SOLOMON/MATTHEWS (eds.), The Produce Contamination Problem (Elsevier 2009) 377.

³⁸ *Ibid*; M. BÄLZ/G. KOZIOL, Japan in KIRCHSTEIGER-MEIER/BAUMGARTNER (eds.), Global Food Legislation: An Overview (Wiley-VCH 2014) 143.

³⁹ TANAKA, supra note 7, 572.

⁴⁰ Ibid.

⁴¹ Shokuhin eisei-hō, Law No. 233/1947; YAMAGUCHI, supra note 17, 169.

⁴² Art. 1 Food Sanitation Act; YAMAGUCHI, *supra* note 17, 169.

⁴³ Shokuhin anzen kihon-hō, Law No. 48/2003.

⁴⁴ TANAKA, supra note 7, 576.

⁴⁵ Ibid.

⁴⁶ Artt. 22–38 of the Food Safety Basic Law; FOOD SAFETY COMMISSION OF JAPAN, Role of the Food Safety Commission, http://www.fsc.go.jp/english/.

⁴⁷ YAMAGUCHI, supra note 17, 169.

risks.⁴⁸ To fulfill obligations under Article 9, the FSCJ is required to make the scientific information about food safety risks available to the public.⁴⁹ This shift to a consumer focus in food safety regulation was praised by activists as being a 'monumental step forward in the Japanese food governance system.'⁵⁰ Hiwasa Nobuko, a member of the BSE Investigative Council, noted that the citizen and consumer had never been seen as viable legal concepts in previous food safety regulations.⁵¹ Prior to the reforms, the health of citizens and consumers was not a focus, just merely a consequence of regulating the food industry.⁵² The reforms enhanced transparency and gave the public increased opportunities to participate in the food safety regime, including attending meetings of the FSCJ.⁵³ Nevertheless, when the FSCJ faced its first test when BSE was discovered in America in 2003, some consumers remained unconvinced that the policies concerning imported beef were based only on science and not merely to placate the public to protect corporate interests.⁵⁴

e) Food education policies are implemented

Supporting the above food system law reform of the early 2000s is the Japanese government's policy of *shokuiku*, or "food education," a regulatory response to food scandals and a growing consumer consciousness of the emerging issues associated with the modern Japanese lifestyle, such as obesity. Kimura notes that "food education" has become a key concept in food policy in developed countries around the world and particularly in Japan. The idea behind the policy is that if consumers are properly educated the food economy will be able to function better because consumers will not avoid products due to "ignorance and a lack of knowledge." This was seen to be the problem during the BSE outbreak, which saw consumers avoiding beef. In light of the *shokuiku* policy, the government enacted the Basic Law on Food Education in 2005. The law provides the public with a set of principles on how to make healthy food choices and prepare food correctly. It calls for farmers, fishermen and food related businesses to

⁴⁸ *Ibid*.

⁴⁹ TANAKA, supra note 7, 576.

⁵⁰ Ibid.

⁵¹ Ibid.

⁵² Ibid.

⁵³ Ibid. 577.

⁵⁴ *Ibid*.

⁵⁵ ASSMANN, supra note 5, 149.

A. KIMURA, Food education as food literacy: privatized and gendered food knowledge in contemporary Japan, in: Agric Hum Values 28 (2011) 466.

⁵⁷ Ibid. 467.

⁵⁸ *Ibid*.

⁵⁹ Shokuiku kihon-hō, Law No. 63/; REIHER, supra note 32, 507.

⁶⁰ MINISTRY OF AGRICULTURE, FORESTRY AND FISHERIES, What is *shokuiku*? (2006), *http://www.maff.go.jp/e/pdf/shokuiku.pdf*; ASSMANN, *supra* note 5, 150.

collaborate and promote *shokuiku* through activities like tours and cooking classes, and for the government to run education initiatives for the public and schools.⁶¹ Furthermore, it aims to address the low rates of Japanese food self-sufficiency by emphasizing domestically produced Japanese foods.⁶²

f) Growth of Consumer rights and the creation of Consumer Affairs Agency

The reforms to Japan's food safety governance framework sit within a broader context of transition that Japan has experienced since the early 1990s when the "bubble economy" burst. While many view this period of time as Japan's "lost decades" due to the stagnation of the economy, 63 others recognise the importance of these decades in terms of law reform and societal change. 64 Law reform in this period covered many fields and includes changes to corporate governance, 65 introduction of a quasi-jury system to criminal trials (*saiban-in seido*) and increased lay participation in civil trials. 66 These decades have also been significant in terms of consumer law. 67 The developments in food safety law that we have noted form part of an effort on behalf of policy makers to fill regulatory gaps in the consumer rights framework. 68 The increased focus by the government on consumer rights is exemplified in the first major policy speech of former Prime Minister Yukio Hatoyama, after he led the Democratic Party of Japan to victory over the long dominant Liberal Democratic Party:

"[W]e must switch to an economy and society which give greater emphasis to the quality of people's lives by preparing adequate safety nets with regard to employment and human resources development, by ensuring food safety and public safety, and by adopting the consumer's perspective." ⁶⁹

This increased focus on consumer rights in government policy lead to further reform of the food safety governance system in 2009 with the creation of the Consumer Affairs Agency ("CAA"). The previous years had exposed regulatory gaps in not just the food

⁶¹ ASSMANN, supra note 5, 151.

⁶² *Ibid*; REIHER, *supra* note 32, 511.

^{63 &}quot;An end to the Japanese lesson; Japan's two lost decades", The Economist, 2 January 2010, 10.

⁶⁴ L. NOTTAGE/L. WOLFF/K. ANDERSON, Introduction: Japan's gradual transformation in corporate governance, in: NOTTAGE/WOLFF/ANDERSON (eds)., Corporate Governance in the 21st Century (Edward Elgar Publishing Ltd. 2008).

M. NICHOL, Japanese corporate governance and the market for corporate information disclosure: What is the role of private rights enforcement? in: Australian Journal of Corporate Law 27 (2013) 262.

⁶⁶ NOTTAGE/WOLFF/ANDERSON, *supra* note 64, 1.

⁶⁷ L. NOTTAGE, Consumer Rights in Japan (draft of 29 February 2010) in: Parissa Haghirian (ed.), Japanese Consumers (Palgrave MacMillan 2010) 7.

⁶⁸ Ibid.

⁶⁹ Y. HATOYAMA, Policy Speech (Speech delivered at the 173rd session of the Diet, Tōkyō, 26 October 2009) http://japan.kantei.go.jp/hatoyama/statement/200910/26syosin e.html.

safety governance framework, but the whole consumer law framework, which meant that appropriate action was not always taken when dealing with consumer safety risks. Matsuo notes examples of this including the food products being mislabeled, $gy\bar{o}za$ dumblings containing poison imported from China, incidents of choking deaths from konjac jellies and carbon monoxide poisoning caused by water heaters. The problem was "bureaucratic sectionalism" which saw these incidents slipping between the gaps in jurisdiction of various government departments with no one to take the lead in ensuring swift and appropriate action was taken.

The CAA was established to address these regulatory gaps and was designed to be a "control tower" ensuring that an integrated approach between government departments is taken to consumer safety issues.⁷¹ Food labeling was taken from the jurisdiction of MHLW and MAFF and brought under the CAA. Furthermore, the FSC responsibilities of emergency response, risk communication and development of policy was transferred to the CAA. Finally, the CAA, alongside the Ministry of Economy, Trade and Industry ('METI'), administers the Consumer Product Safety Act,⁷² which is designed to protect consumers by regulating the sale and manufacture of certain products.

g) Keeping up with global standards

In conjunction with the reform of domestic food safety laws, Japan has made an effort over the recent years to participate in the international food safety governance framework. This includes initiatives to liaise and share data with other food safety regulatory bodies including the European Food Safety Authority and Food Standards Australia New Zealand. Furthermore, Japan cooperates with the Codex Alimentarius Commission ("Codex"), an organisation set up by the World Health Organisation and the Food and Agriculture Organization of the United Nations, which issues international guidelines and standards on food safety. Japan regularly sends government employees on secondments to Codex and plays host to a number of the Codex committees. As noted above, the 2003 restructure of the governance frame saw the risk assessment and risk management functions in relation to food safety split between the FSCJ and the MHLW and MAFF. This separation is in line with guidelines from Codex, which state separation is necessary to ensure scientific integrity.

M. MATSUO, Restructuring Japanese Food Safety Governance: Institutional Changes and Future Challenges, in: European Food and Feed Law Review 4 (2013) 252.

⁷¹ *Ibid*. 253.

⁷² Shōhi-sha seikatsu-yō seihin anzen-hō, Law No. 31/1973.

⁷³ MATSUO, *supra* note 70, 254.

⁷⁴ Ihid

⁷⁵ *Ibid.* 255; BÄLZ/KOZIOL, *supra* note 38, 143.

h) Private sector issues in food safety

While the focus to this point has been on public institutions, there are indeed many responsibilities and ramifications for the private sector in relation to food safety. When the safety of a food system is in question, consumers respond by avoiding products, and that in turn cause losses to the food industry. Furthermore, when food scandals occur, consumers claim redress through the courts or the various forms of alternative dispute resolution that are often preferred over litigation in Japan. He Product Liability Law⁷⁷ the manufacturer is responsible, with the retailer only responsible if the retailer causes a problem. Manufacturer liability is usually easy to establish so manufacturers will suffer tremendous loss if their products cause food poisoning. The range of food scandals, which occurred in 2000 during the "summer of eating dangerously" generated some lawsuits under the Product Liability Law. 80

Apart from liability under the Product Liability Law, food companies suffer economic loss due to damage to their reputation when a food safety incident occurs. Food scandals have made companies particularly concerned with how to promote consumer trust in their products. Although the government provides regulations and standards that companies must abide by, some create even stricter standards to protect themselves from possible food scandals and even use these as a marketing strategy. Furthermore, a recent trend that has occurred in response to the food scandals is companies implementing traceability systems that make information about the origin of products available to the consumer. The government has encouraged these traceability systems, providing an example of what Hall calls "public promotion of private governance." These policies show that the private sector contributes to the food safety governance framework in Japan.

III. THE FUKUSHIMA NUCLEAR DISASTER AND DISTRUST OF GOVERNMENT STANDARDS

We have now established that the Japanese food system is regulated by a number of laws and policies, involving the public and private sectors, which seek to provide a safe

⁷⁶ NOTTAGE, *supra* note 36, 103.

⁷⁷ Seizō-butsu sekin-hō, Law No. 85/1994.

⁷⁸ Artt. 3 and 4 Product Liability Law; ISSHIKI/BARI/KAWAMOTO/SHIINA, *supra* note 37, 381.

⁷⁹ NOTTAGE, , *supra* note 36, 103.

⁸⁰ NOTTAGE, supra note 24, 246.

⁸¹ ISSHIKI/BARI/KAWAMOTO/SHIINA, supra note 37, 384.

⁸² *Ibid*.

⁸³ *Ibid*.

⁸⁴ Ibid. 385.

D. HALL, Food with a visible face: Traceability and the public promotion of private governance in the Japanese food system, in: Geoforum 41 (2010) 827.

food system and to communicate this to the consumer. The next step is to examine how the food system was impacted upon by the Fukushima disaster.

1. The disaster

The cooling systems at the three reactors in operation at the Fukushima-I NPP were disabled when the tsunami destroyed their power supply, resulting in a meltdown of nuclear fuels in reactor cores releasing radioactive materials into the environment. ⁸⁶ Behind Chernobyl, the incident is considered the second worst nuclear disaster in history. ⁸⁷ Many people had to be evacuate from the area surrounding the Fukushima-I NPP and by the end of 2011, 150,000 people had been evacuated from the Fukushima prefecture. ⁸⁸ Death caused from radiation exposure, even amongst the workers who worked on containing the disaster at Fukushima-I NPP, has not yet been reported. ⁸⁹

2. Regulatory failure

The National Diet of Japan produced the Fukushima Nuclear Accident Independent Investigation Commission Report, which describes the Fukushima-I NPP meltdown as a "Made in Japan" disaster. According to the Report, the disaster, although it occurred when the tsunami hit, was "the result of collusion between the government, regulators and TEPCO, and lack of governance by said parties." Japan's Nuclear and Industrial Safety Agency (NISA) is responsible for safety of the industry and is a division of the Ministry of Economy, Trade and Industry (METI). As METI is responsible for promoting the nuclear energy industry, NISA was not an independent safety watchdog. Furthermore, nuclear energy government bureaucrats were able to retire to jobs in the nuclear energy companies, a revolving door practice known as *amakudari*. The result is a lack of separation between the regulators and the regulated. Systemic problems such as these meant that the dangers of Japan's nuclear power plants were not addressed. This is exemplified by the fact that the Fukushima-I NPP was ranked one of the worst five

⁸⁶ BABA, *supra* note 3, 17–18.

⁸⁷ Ibid. 17.

⁸⁸ THE WORLD BANK, supra note 2, 16.

⁸⁹ BABA, *supra* note 3, 20.

⁹⁰ NATIONAL DIET OF JAPAN FUKUSHIMA NUCLEAR ACCIDENT INDEPENDENT INVESTIGATION COMMISSION, The Official Report of The Fukushima Nuclear Accident Independent Investigation Commission, Executive summary (2012), https://www.nirs.org/fukushima/naiic_report.pdf, 9.

⁹¹ NATIONAL DIET OF JAPAN FUKUSHIMA NUCLEAR ACCIDENT INDEPENDENT INVESTIGATION COMMISSION, *supra* note 90, 16.

⁹² Q. WANG/X. CHEN, Regulatory transparency – How China can learn from Japan's nuclear regulatory failures? in: Renewable and Sustainable Energy Reviews, 16 (2012) 3575.

⁹³ *Ibid*.

⁹⁴ REICH, supra note 4, 65.

nuclear power plants in the world, yet even in February 2011 it was granted permission to extend its reactor for a further 10 years.⁹⁵

3. The contamination problem

The release of radioactive materials into the environment from the Fukushima-I NPP caused major concern about the contamination of Japanese food. Fukushima prefecture is the fourth largest source of rice in the country, with 440,000 tonnes produced in the Fukushima prefecture in the year before the disaster. ⁹⁶ In the period following the melt-down, from 19 March 2011 to 2 February 2012, 102,271 tests on food were conducted and excessive levels of radiation were found in 1,106 samples of foods. ⁹⁷ In the end, a total of 85 different kinds of food were found to be contaminated, including rice, fruit and vegetables, seafood, milk, meat and tea. ⁹⁸

Contaminated food began to be reported within a week of the disaster, which resulted in panic from the general public. ⁹⁹ One week after the disaster, spinach and milk up to 90 miles from the plant were found with higher than normal levels of radiation, and shipments of these products from Fukushima prefecture were suspended. ¹⁰⁰ In April 2011 contaminated fish were found off the coast of Fukushima. ¹⁰¹ By May 2011 concerns that radiation contamination had also occurred outside the Fukushima prefecture began when tea leaves in Kanagawa prefecture, southwest of Tōkyō, revealed higher levels of radiation. ¹⁰² On July 19 2011 cattle shipments from Fukushima were banned because the cattle had eaten hay contaminated with radioactive cesium. ¹⁰³ Unfortunately this ban came after beef had already been sold to consumers in supermarkets around the country. ¹⁰⁴ In November things worsened for the Fukushima prefecture's food industry with the government banning rice from Ōnami district after levels of radioactive cesium were found to exceed the government's accepted levels. Adding to the panic was the fact

⁹⁵ WANG/CHENG, supra note 92, 3575.

⁹⁶ J. MCCURRY, Fukushima rice banned by Japan, in: The Guardian, online 18 November 2011, http://www.theguardian.com/world/2011/nov/18/fukushima-rice-banned-by-japan.

⁹⁷ G. BERENDS/M. KOBAYASHI, Food after Fukushima – Japan's Regulatory Response to the Radioactive Contamination of its Food Chain, in: Food and Drug Law Journal 67 (2012) 51.

⁹⁹ A. KIMURA, Standards as Hybrid Forum: Comparison of the Post-Fukushima Radiation Standards by a Consumer Cooperative, the Private Sector, and the Japanese Government, in: International Journal of Sociology of Agriculture and Food 20 (1) (2012) 12.

¹⁰⁰ K. BELSON/H. TABUCHI, Japan Finds Tainted Food Up to 90 Miles From Nuclear Sites, in: New York Times, 20 March 2011, A10.

¹⁰¹ BERENDS/KOBAYASHI, supra note 97, 52.

¹⁰² Ibid.

¹⁰³ A. TAKADA, Japan's Food-Chain Threat Multiplies as Fukushima Radiation Spreads, in: Bloomberg (online) 25 July 2011, http://www.bloomberg.com/news/2011-07-24/threat-to-japanese-food-chain-multiplies-as-cesium-contamination-spreads.html.

¹⁰⁴ *Ibid*.

that only one month before, the governor of the prefecture, Yūhei Satō, had given assurances that rice from the Fukushima prefecture was all safe. 105

4. The consumer reaction – distrust of government standards

The possibility of radiation contamination of food naturally has generated substantial fear in the population and is demonstrated in a number of ways.

As there were no existing standards as to the acceptable levels of radiation found in foods, the government came up with "provisionary" standards. 106 These standards were not trusted by the population who believed that they were not strict enough, resulting in consumers avoiding Fukushima produce. 107 Consumer groups also began speaking out against the government regulations. 108 In response to the concerns voiced by the consumers, the government began a campaign to end *fuhyō higai* ("financial damage due to harmful rumors or misinformation"). 109 This campaign was designed to educate citizens on the effects of radiation so that incorrect information about the effects of radiation did not crush Fukushima's agriculture and food industries. 110

The problems with radiation contamination are not isolated to those products that have been contaminated with radiation but extend to reputational damage caused by association with Fukushima, rather than by direct contamination. Studies suggest that the Fukushima disaster has impacted on the food industry such that people are less willing to buy food or produce which comes from the Fukushima prefecture even though it has passed the government standards. Lack of public trust in government safety standards was seen in a study by Burch, who examined the perception of radiation in food by consumers in Kansai, far from Fukushima.¹¹¹ The study revealed that even one and a half years after the Fukushima disaster, every group surveyed expressed distrust of government radiation standards.¹¹² A similar study by Hosono indicated that 20 per cent of consumers surveyed would not eat Fukushima products even if they tested below government standards and were free.¹¹³

¹⁰⁵ MCCURRY, supra note 96.

¹⁰⁶ E. OSAKA, Corporate Liability, Government Liability, and the Fukushima Nuclear Disaster, in: Pacific Rim Law & Policy Journal, 21(3) (2012) 443.

¹⁰⁷ KIMURA, *supra* note 99, 12.

¹⁰⁸ BURCH, supra note 8, 6.

¹⁰⁹ *Ibid*.

¹¹⁰ Ibid.

¹¹¹ Ibid. 27.

¹¹² Ibid.

¹¹³ H. HOSONO, *Shōhi-sha chōsa no jōhō* [Report on consumer research] (Speech delivered at the *Hōsha seibutsu-shitsu osen to shoku no anzen* [Radioactive Pollution and Safety forum], Tokyo University, 16 March 2013); cited in N. CISTERNA, Safe and Trustworthy? Food Safety after Fukushima, An STS Forum on the East Japan Disaster *http://fukushimaforum.wordpress.com/workshops/sts-forum-on-the-2011-fukushima-east-japan-disaster/manuscript s/session-4a-when-disasters-end-part-i/safe-and-trustworthy-food-safety-after-fukushima/.*

Lack of consumer confidence in safety laws to regulate food from Fukushima was seen at Vegetable Café Harmonize, a store in Fukushima, which only sells produce from West Japan, far away from the Fukushima-I NPP. The store was established by an organisation known as *Mamoru Kai* or "Network of Parents to Protect Children from Radiation". Sachiki Sato, a network founder, states that *Mamoru Kai* was created due to dissatisfaction with the government, arguing that Japan needs a new food monitoring system that can really be trusted by the public. 115

IV. PROBLEMS IN FOOD SAFETY GOVERNANCE IN THE WAKE OF THE FUKUSHIMA DISASTER

Given the consumer distrust of the safety of foods that have passed through government standards, which has been outlined above, the next step is to determine the weaknesses in the food safety governance framework that became apparent in the aftermath of Fukushima. It must be noted that strong regulations and standards do not necessarily lead to consumer trust in food products. Furthermore, nuclear radiation is a threat that naturally evokes a considerable amount of fear in any context, so some lack of trust in the safety of food is expected. However, given the amount of attention in the media showing Japanese people stating how unhappy they are with government standards in particular, this article will focus on the perceived and actual weaknesses in the food safety governance framework.

1. No provision for radiation contamination under the laws

While the CAA was designed to take the lead in food safety crises, when faced the problem of assessing radiation contamination due to the Fukushima disaster it was the MHLW and MAFF that took control. The first major problem the government faced with the food safety governance framework is that radiation contamination was an unprecedented threat. The Food Sanitation Act regulates food safety and had no provision for radiation contamination. Instead, 'Provisional Regulatory Values' ("PRVs") created by the Nuclear Safety Commission in 2002 as non-legally binding guidelines were adopted under an information notice in line with the Act.

The PRVs were subject to criticism regarding their ability to ensure the safety of food consumed after the disaster. This includes the concern noted by Kimura that the PRVs set the ingestion limits of Becquerel per kilogram ("Bq/kg") too high.¹¹⁷ Although the PRVs standards were in line with that of United States and the European Union, the

¹¹⁴ M. FACKLER, Japanese Struggle to Protect Their Food Supply, in: The New York Times, 22 January 2012, A6.

¹¹⁵ Ibid.

¹¹⁶ MATSUO, supra note 70, 255.

¹¹⁷ KIMURA, *supra* note 99, 15.

World Health Organization set much lower standards for tap water (10 Bq/kg by WHO compared to 200 Bq/kg by Japan). Furthermore, some experts called for lower levels and an NGO called Foodwatch reported that Ukraine had set much lower levels (2 Bq/kg) when it faced the threat of Chernobyl. 119

Furthermore, while the central government issued instructions and guidelines, it was the prefecture governments that carried out testing. This meant that there was a lack of consistency in the tests carried out across Japan, exemplified by the fact that 14 prefectures did not conduct any inspections of radioactive materials in foods between March and July 2011, although many contaminated foods were found during this period. 121

Eventually, the MHLW, in consultation with the FSCJ and the Radiation Council, set new standards that came into force in April 2012. These standards were stricter than those set by the International Atomic Energy Agency, the European Union and the United States Food and Drug Administration and were designed to achieve more confidence in food safety. The following discussion will show that even though Japan now has strict standards in relation to radiation, there are problems with the way that radiation risks are communicated to consumers, which contribute to a lack of consumer trust in the standards even as they stand today.

2. Problems of educating and communicating with the public on food safety

The lack of provision for radiation contamination in the food safety governance framework described above provided a major reason for Japanese consumers to doubt the adequacy of government assurances of food safety. Another problem that contributed to the lack of trust that Japanese consumers have in government safety standards is the way that consumer concerns are addressed in food safety policy. We have noted that the laws relating to food safety now call for consumer participation and education. Despite these provisions that stipulate a role for the consumer, the following discussion will show that the current science-based food safety governance system did not adequately engage with or address the concerns of the consumer. Therefore the problems of the food safety laws in communicating with and educating consumers about radiation risks also led to a lack of trust in the government's food safety governance framework.

¹¹⁸ *Ibid*.

¹¹⁹ Ibid.

¹²⁰ BERENDS/KOBAYASHI, supra note 97, 58.

¹²¹ KIMURA, *supra* note 99, 16.

¹²² Ibid. 17.

¹²³ M. YOSHIDA, Global harmonization of food safety regulation: perspectives from Japan after the Fukushima nuclear accident, in: Journal of the Science of Food and Agriculture 94 (2013) 1939.

a) Lack of trust in science

As we described earlier in this article, the Japanese food safety governance system under the Food Safety Basic Law now relies on science for analysis of food safety risks. 124 However, the accounts of Japanese consumers demonstrate a lack of trust in these government standards and scientific expert advice. 125 A problem that Yamaguchi offers for the lack of trust of this science-based safety governance system is due to the gap between acceptable levels of risk in government policy and in Japanese society.

Yamaguchi explains that the expectation of *anzen-anshin* positions Japanese society to only accept a zero-risk goal of food safety laws and standards. ¹²⁶ However, when the government moved to laws and standards based on scientific risk assessment it moved to a model designed to achieve food safety that is not zero-risk, but at a level of risk that is scientifically acceptable. As *anshin* (socially accepted safety) requires a level of assurance of food safety that goes beyond scientific analysis, the public is not necessarily receptive to science-based risk management. ¹²⁷ The pursuit of *anshin* was seen to override scientific assessment immediately after the outbreak of BSE in the United States when the government implemented a policy to screen all cattle imported into Japan. ¹²⁸ This measure went beyond EU standards and even beyond the recommendations made by the Food Safety Basic Law. Comments from the Japanese government ministers indicated that the strict levels were to "provide *anshin* to the public." ¹²⁹ Therefore we can see that the creation of science-based food safety policy under the Food Safety Basic Law has not, by itself, been completely trusted by Japanese consumers and may account for some of the attitudes towards the government standards dealing with radiation.

b) Uncertainty

The *anzen-anshin* framework has resulted in an argument by Yamaguchi, which sees Japanese people unreceptive to a framework based on science ensuring low risk, but not zero-risk. Morris-Suzuki provides a similar analysis which states that the way that policy has dealt with "uncertainty" may explain the lack of trust of government policies. ¹³⁰ Designing laws that can deal with scientific uncertainty is a complicated task for policymakers. ¹³¹ This task is even more difficult and significant in industrialised democracies in our globalized world, where information is so readily available that we are increasingly aware

¹²⁴ YAMAGUCHI, supra note 17, 167.

¹²⁵ Ibid. 169.

¹²⁶ Ibid. 171.

¹²⁷ *Ibid*.

¹²⁸ Ibid.

¹²⁹ Ibid.

¹³⁰ T. MORRIS-SUZUKI, Touching the Grass: Science, Uncertainty and Everyday Life from Chernobyl to Fukushima, Science, Technology & Society 19(3) (2014) 333.

¹³¹ L. NOTTAGE, Mad cows and Japanese consumers, Australian Product Liability reporter, 14 (9) (2003) 127.

of risks that occur in everyday life.¹³² In the context of Fukushima, Morris-Suzuki argues "the uncertainties and complexities of science of radiation meet the very different uncertainties and complexities of everyday life, scientific rationality and mundane logic diverge, creating profound problems of communication and understanding."¹³³

In contrast to Chernobyl, when dealing with the Fukushima disaster Japanese people have access to a wealth of information on the internet about the effects of radiation.¹³⁴ The various scientific debates, data collected by concerned citizen groups, media and forums mean that Japanese people are unlikely to simply accept government statements like "there will be no (or no immediate) health effects".¹³⁵ Instead, what we have seen are concerned citizens feeling alienated from science-based policies and government information, and the feeling that there is a gap between the information of experts and lived local experiences.¹³⁶ Again this is a problem for the way that risk is communicated in the science-based food safety governance system. The challenge for Japanese policy makers is how to build trust in the science-based governance system even though the number of Japanese people who said they "trusted" or "somewhat trusted" scientists fell 20 per cent six months after the disaster.¹³⁷

c) Standards showed a lack of public input

Perhaps further participation by citizens in the food safety framework would ensure that these standards are better accepted by Japanese people, and in doing so, bridge the gap between scientific experts and consumers. Earlier we noted that the Food Safety Basic Law framed Japanese citizens as key participants in the food safety governance process. However, an examination of how the standards were set for Fukushima allows an assessment of the impact of the lack of real participation by the public in this process. Kimura states that an examination of the degree of democratic debate in the setting of food radiation standards is very relevant given the lack of consensus even within the scientific community as to what is a safe level of radiation contamination. 139

We can see that there was little public involvement in the setting of the PRVs, as these initial government standards were based on the guidelines published by the Nuclear Safety Commission ("NSC") in 1980 and last updated in 2010.¹⁴⁰ The NSC members were mostly nuclear experts and their independence has been criticized given that they

¹³² Ibid.

¹³³ MORRIS-SUZUKI, supra note 130, 333.

¹³⁴ Ibid. 352.

¹³⁵ Ibid.

¹³⁶ Ibid.

¹³⁰ *Ibia*. 137 *Ibid*.

¹³⁸ Supra II. 2 c), d).

¹³⁹ KIMURA, supra note 99, 20.

¹⁴⁰ Ibid. 21.

had been receiving financial assistance from the nuclear industry.¹⁴¹ Furthermore, while there was a public comment period held for the 2010 update, this occurred only when the report had been almost finished and only one person actually commented.¹⁴²

Furthermore, the new standards introduced in 2012 involved the FSCJ, the MHLW's Radioactive Material Response Working Group and the Ministry of Education's Radiation Council. The FSCJ does not contain democratically elected members or members from consumer groups. This is different to the European Food Safety Authority, which contains a management board that allows for the involvement of consumer groups. The Japanese position is such because it is based on the belief that consumer groups should not participate in the FSCJ as risk assessment should be impartial and based solely on scientific objectivity. Nevertheless, this system brings up the question of how to represent or accommodate the consumer and stakeholder perspective in the operational management of the FSCJ. Furthermore, this structure shows, once again, a gap between the lived experience of consumers and the scientific experts in charge of setting the standards.

Nevertheless the public did participate in the setting of the new standards through the public consultation, period which saw 3,000 public comments emailed and faxed to the FSCJ. However, Kimura argues that the level of meaningful public participation was actually very limited because the FSCJ only asked for comments after agreement within the FSCJ had already been substantially reached so the comments had minimal impact on the final standards.¹⁴⁷ The way that the government dealt with public comments in relation to the setting of these standards is reflective of the manner that the public is engaged with generally in food safety governance. On top of considering public comments too late to have any practical affect, Matsuo notes that government bureaucracy often sees officials engaging in "nemawashi". This is where officials and experts engage in informal discussions prior to the formal consultation period.¹⁴⁸ It seems, therefore, that although the public was involved in the process as envisioned under the Food Safety Basic Law, the public was not involved in any debate as to the setting of the standards through democratic dialogue with the FSCJ.¹⁴⁹

d) Reputational damage - citizens considered ignorant

We can also see the gap between scientific experts and the public in the way that the government treated the consumer under policies designed to deal with *fuhyō higai* or

¹⁴¹ Ibid.

¹⁴² *Ibid*.

¹⁴³ Ibid.

¹⁴⁴ MATSUO, *supra* note 70, 252.

¹⁴⁵ Ibid. 255.

¹⁴⁶ KIMURA, *supra* note 99, 21.

¹⁴⁷ Ibid.

¹⁴⁸ MATSUO, supra note 70, 257.

¹⁴⁹ KIMURA, *supra* note 99, 21.

Nr. / No. 42 (2016) FOOD SAFETY 131

"harmful rumours." ¹⁵⁰ The Japanese government attempted to deal with consumer concerns about radiation contamination by educating the public on the health effects of radiation, with the idea that Fukushima's agricultural economy was being harmed by rumours based on misinformation. ¹⁵¹ This policy seems to be in line with the Basic Law on Food Education, which aims to provide education so that the public can make informed choices about what food to eat. ¹⁵² However, given the amount of consumer concern with the information that is being provided to them by the government, this education policy warrants further investigation.

Burch argues that the way that the government has gone about educating the public on the effects of radiation framed consumer concerns as "excessive, or unwarranted or irrational". The government appeals to guilt and consumer desires for "societal wellbeing" by implying that concerns about radiation are hurting their fellow citizens in Fukushima. Burch demonstrates that many consumers have taken care to be well informed on the topic of radiation and actually believe it is the government that is misinformed. Is some consumers have taken care to be well informed on the topic of radiation and actually believe it is the government that is misinformed.

Similarly, Koyama and Ishii argue that the policy inaccurately portrays food safety concerns associated with Fukushima as a rift between producers and consumers, with consumers harming the producers by making decisions based on misinformation. ¹⁵⁶ They argue that reputational damage is actually caused when consumers' insecurities are heightened when they believe that they are not being given correct information. ¹⁵⁷ Reiher goes as far as to say that the government does not even have the means to provide adequate information to consumers. ¹⁵⁸ She argues that the Basic Law on Food Education contains an assumption that domestic food is safer than imported food, and this is a mentality that people in charge of food education still adopt. ¹⁵⁹ Given the bias towards domestic food, when the Fukushima disaster created a situation where domestic food became unsafe, the government was ill-equipped to provide education to citizens to enable them to make appropriate food choices. ¹⁶⁰

¹⁵⁰ Ibid. 12.

¹⁵¹ BURCH, supra note 8, 6.

¹⁵² MINISTRY OF AGRICULTURE, FORESTRY AND FISHERIES, What is *shokuiku*? (2006) 3 http://www.maff.go.jp/e/pdf/shokuiku.pdf.

¹⁵³ J. HANSEN/L. HOLM/L. FREWER/P. ROBINSON/P. SANOE, Beyond the knowledge deficit: recent research into law and expert attitudes to food risks, in: *Appetite* 41 (2003) 111; BURCH, *supra* note 8, 6.

¹⁵⁴ BURCH, supra note 8, 30.

¹⁵⁵ *Ibid*

¹⁵⁶ R. KOYAMA/H. ISHII, The Systemization of Radioactivity Inspection for Food Products and Steps to Counteract Reputational Damage in Fukushima, Japan, in: *Shōgaku Ronshū* [*Journal of Commerce, Economics and Economic* History] 82 (4) (2014) 16.

¹⁵⁷ *Ibid*

¹⁵⁸ REIHER, *supra* note 32, 522.

¹⁵⁹ Ibid. 526.

¹⁶⁰ Ibid.

V. WHO CAN BE TRUSTED TO GUARANTEE THE SAFETY OF FUKUSHIMA PRODUCE IN THE FUTURE?

This article so far has been concerned with Japanese consumers' lack of trust in the government's ability to regulate the food system. This section will examine the other regulatory actors that have emerged to assure consumers of food safety. While these other actors now play an important role, it is still imperative that the government rebuilds consumer trust in its role as a regulator. To do so the government must address the way laws and policies involve, communicate to and educate the consumer.

1. New stakeholders seeking to define "safe food"

A number of other regulatory actors in the food safety arena have emerged in response to radiation concerns. Kimura analyses the Seikatsu Club Consumer Cooperative ("SCCC") and the way that it has dealt with radiation contamination. The SCCC is made up from 350,000 members and is considered to be progressive with a focus on environmental issues. 161 After the meltdown occurred, the SCCC built an in-house testing facility using the government's PRVs and made the test results public. 162 After a year of testing, the SCCC set its own standards, which ended up being stricter than government standards. 163 Although not perfect, Kimura argued that the SCCC standards were more democratic and involved more public participation than that of the government. 164 While the standards are based on science (like that of the government), lay people were involved who were representatives of consumers and producers. Furthermore, the members that made the final decision on the standards were democratically elected and not scientific experts as in the government standards. 165 This is just one example of a consumer cooperative providing another standard to use to determine what is safe food. However it is useful because it demonstrates processes that could be better at engaging the public.

A number of grassroots efforts have arisen to assure consumers of the safety of Fukushima produce and to help revive industry in the stricken prefecture. Radiation contamination concerns, combined with a lack of trust in government standards, have resulted in consumers and farmers taking their own measures to test radiation levels. ¹⁶⁶ This has included the operation of over a dozen independent radiation testing stations from Fukushima to Tōkyō, which aim to provide consumers with testing that can be trusted better than the government. ¹⁶⁷ An example of this is 59 year old farmer Ichi Muto who started

¹⁶¹ KIMURA, *supra* note 99, 18.

¹⁶² Ibid.

¹⁶³ *Ibid*. 19.

¹⁶⁴ *Ibid*. 24.

¹⁶⁵ Ibid.

¹⁶⁶ FACKLER, supra note 114.

¹⁶⁷ Ibid.

a radiation testing center at a local truck stop where he and 250 other farmers from Nihonmatsu test their crops. ¹⁶⁸ Once, when his tests revealed high radiation levels, Muto had to destroy his entire crop of 110,000 mushrooms. ¹⁶⁹

The Fukushima Organic Agriculture Network, in an effort to promote Fukushima produce, set up a café in Tōkyō in 2013, which uses vegetables and rice from the Fukushima prefecture that have been tested independently by the Network.¹⁷⁰ The café displays pictures of Fukushima farmers on the walls and customers are able to learn more about Fukushima and the produce.¹⁷¹ Fairs showcasing Fukushima produce have also sprung up around the country. Fukushima University students set up Recovery Markets to demonstrate, through discussions and presentations, the scientifically tested and confirmed safety of produce sold from Fukushima.¹⁷²

From the efforts of the consumer cooperative and various grassroots activities we can see that a number of non-government stakeholders play a role in the food safety arena. Reiher describes the food safety arena as a contested space between the power relations of the state, consumer-cooperatives, producers and retailers.¹⁷³ That the government is afraid to lose power to define safe food is demonstrated by statements by the MAFF, which seek to discourage producers and retailers from setting their own standards.¹⁷⁴ However it seems it is grass roots efforts like community radioactivity measurement stations that seek to genuinely achieve the aim of providing consumers with knowledge about food so they can make appropriate choices as envisioned under the Basic Law on Food Education.¹⁷⁵

2. Social trust

Although other actors have emerged to respond to the concerns of consumers caused by Fukushima, it is still important that the government work at providing standards that can be trusted by the public. Reich notes that from a public health perspective, in the aftermath of the disasters it is important to create a government that the people can trust.¹⁷⁶ Radiation evokes such fear that it is important the people are able to rely on information given to them by the government.¹⁷⁷ The government undermined public trust when it

¹⁶⁸ Ibid.

¹⁶⁹ Ibid.

¹⁷⁰ Tokyo café offers taste, atmosphere of Fukushima, in: The Straits Times: SoShiok (online) 8 March 2014, http://www.soshiok.com/content/tokyo-cafe-offers-taste-atmosphere-fukushima. 171 Ibid.

¹⁷² K. RYOTA, Towards Effective Countermeasures Against "Reputation Damage", in: Institute for International Studies and Training (IIST) e-Magazine (online) 19 November 2013, http://www.iist.or.jp/en-m/2013/0225-0910/.

¹⁷³ REIHER, *supra* note 32, 523.

¹⁷⁴ *Ibid*.

¹⁷⁵ REIHER, *supra* note 32, 526.

¹⁷⁶ REICH, *supra* note 4, 66.

¹⁷⁷ Ibid.

failed to regulate the nuclear industry and in the way that it communicated with the public after the disaster. 178

Restoration of public trust is the key to helping the country resolve problems of care, compensation and cleanup for the victims of the disaster.¹⁷⁹ Therefore, even in a food safety arena now comprised of a variety of regulatory actors, it is still important for the Japanese government to review its polices and provide a system that can be trusted by the people. Making an effort to restore trust in food safety standards could play a part in the Japanese government working to restore social trust overall. Even before the disasters Japanese people were shown to be less trusting of government standards than in other countries.¹⁸⁰ Given this history and the current consumer reactions to Fukushima, it must be concluded that there are some flaws in the government's food safety governance framework.

3. How to improve the system – change the way policies treat the consumer

Other than the lack of provision for radiation contamination, the weaknesses in the system that have been identified earlier in this paper are all concerned with the way that policies have involved the public in the food safety governance framework. This includes the lack of real public participation, and the disconnection between scientific experts and public opinion on how the public is positioned in food education policies. Therefore, government policy makers would do better to rethink the way that the public is involved in the food safety regulatory process.

Over the years food safety laws have developed in response to scandals with a number of changes, including, giving more attention to the role of the consumer. For example, the Food Safety Basic Law, implemented in 2003 after a series of scandals and the BSE outbreak, specifically states that there is a role for consumers in expressing their opinions on food safety policies. Furthermore, the Basic Law on Food Education was designed in response to safety concerns by necessitating that consumers be given information. What we can see in the laws is an intention for consumers to be active and well-informed participants in the food safety governance framework.

However, from our study of how the food safety governance framework held up after Fukushima, it appears that there is a disconnection between the science-based decisions made by the government and the anxiety faced by the consumer. The poor public participation in the regulatory framework and the government's inherent views on the consumer have been the main problems in the ability of the government to build trust in their safety standards. The various laws that make up the government's food safety governance framework already emphasize the role of the consumer. It is up to policy makers to either amend the laws to form clearer roles for consumer participation and education or to fol-

¹⁷⁸ Ibid. 65.

¹⁷⁹ Ibid. 75.

¹⁸⁰ SMITH/RIETHMULLER, supra note 34, 739.

Nr. / No. 42 (2016) FOOD SAFETY 135

low these in a more meaningful, less tokenistic way. To start with, the government could look to the way that other stakeholders have involved and educated the public.

VI. CONCLUSION

The current food safety regulatory framework developed in the context of the broader law and societal reforms that have occurred in the last two decades in Japan. These reforms coincided with a growing focus on consumer rights, and the food safety laws that emerged envision a role for an active and educated consumer. This framework was tested by the threat of radiation contamination arising out of the Fukushima-I NPP meltdown. The consumer response has indicated that the government's food safety governance framework is not well trusted to assure the integrity of the food system. We have identified weaknesses in the framework in not only the initial lack of provision for radiation contamination, but also in the way it communicates with and educates the public on food safety risks. In light of the lack of trust in government standards, other regulatory actors have taken up roles in the food safety arena to assure consumers of the safety of Fukushima produce. However, for the government to build up the public trust lost with the Fukushima disaster, it is essential that it work to build a trusted food safety governance framework for the benefit of consumers and the food industry.

SUMMARY

In March 2011, Japan's largest recorded earthquake and tsunami caused the meltdown at the Fukushima-Daiichi Nuclear Power Plant resulting in not only the evacuation of residents within the area and in towns nearby but also contamination of produce grown in Fukushima. The disaster threw the unprecedented threat of radioactive contamination of the food system into the limelight with Japanese consumers refusing to trust the safety of food even when it had passed the government safety standards. This paper examines the role of law in guaranteeing the safety of the food system and promoting consumer trust in the wake of the Fukushima disaster. This involves an analysis of the flaws in Japan's food safety governance framework that contributed to the loss of consumer trust in the food system since the disaster. In addition, this paper will identify the efforts made by different stakeholders to restore consumer trust in food products associated with Fukushima. Despite considerable efforts by different grassroots organizations, it is still essential that the Japanese government takes the lead by reassessing the way it manages food safety risks and communicates this to the consumer. After the disaster there was a loss of faith in the government as a regulator and as a provider of reliable information. Creating a food safety governance framework that can be trusted by the consumer is one step the government can take to start to rebuild public trust.

ZUSAMMENFASSUNG

Im März 2011 lösten das größte Erdbeben und die größte Tsunami in Japan seit Beginn der Aufzeichnungen eine Kernschmelze im Kernreaktor Fukushima-Daiichi aus. Nicht nur mussten Bewohner der Gegend und der umliegenden Städte evakuiert werden, sondern auch die in Fukushima angebauten Erzeugnisse wurden kontaminiert. Die Katastrophe rückte für Verbraucher die beispielslose Gefahr einer radioaktiven Verseuchung des Ernährungssystems ins Rampenlicht, wobei japanische Verbraucher der Lebensmittelsicherheit selbst dort misstrauten, wo die Sicherheitsstandards der Regierung eingehalten wurden. Der Beitrag untersucht, inwiefern das Recht angesichts der Katastrophe von Fukushima dazu beiträgt, die Lebensmittelsicherheit sicherzustellen und das Vertrauen der Verbraucher zu fördern. Ferner analyisert der Beitrag, was verschiedene Akteure unternehmen, damit die Verbraucher Lebensmitteln aus der Gegend von Fukushima wieder vertrauen. Trotz vielfältiger Anstrengungen von Bürgergruppen bleibt es essentiell, dass die japanische Regierung vorangeht und eine Neubewertung der Art und Weise vornimmt, wie sie Lebensmittelrisiken kontrolliert und dies den Verbrauchern kommuniziert. Die Katastrophe hat zu einem erheblichen Verlust an Vertrauen in die Regierung als Kontrollinstanz und als Quelle verlässlicher Informationen geführt. Einen Rahmen für die Sicherstellung der Lebensmittelsicherheit zu schaffen, auf welchen sich die Verbraucher verlassenkönnen, ware ein möglicher Schritt, um verlorenes öffentliches Vertrauen wiederzugewinnen.

(Die Redaktion)