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Social innovation in local food in Japan: Choku-bai-jo markets and Teikei cooperative practices.

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Abstract
The working paper depicts two innovative examples from Japan of the direct supply of food, which involves the development of closer producer-consumer relations, as well as closer producer-producer networks. Choku-bai-jo and Teikei networks are considered as examples of practices implicated in alternative food networks (AFNs). One example has become a quasi-public endeavour and is seen by the Japanese state as a legitimate part of rural development and is promoted in support of small producers. The other is borne from consumer concern over food quality and, despite its long-lived status, this arrangement remains marginal and with little institutional or governmental support. A model which blends the organization and aims of both examples holds potential for a more sustainable eco-economic future.
Introduction
This paper depicts two innovative examples from Japan of the direct supply of food which involves the development of closer producer-consumer relations, as well as closer producer-producer networks. These are considered as examples of practices implicated in alternative food networks (AFNs). One example has become a quasi-public endeavour and is seen by the Japanese state as a legitimate part of rural development and is promoted in support of small producers. The other is borne from consumer concern over food quality and, despite its long-lived status, this arrangement remains marginal and with little institutional or governmental support.

This contribution is focused in conceptual terms on how such food networks; driven by small producer interests and consumer efforts to co-control food chains, are shaped by innovative milieux. They are considered against both typical AFN features and innovation milieu factors. The chapter contrasts Teikei (a form of community-supported agriculture) and Choku-bai-jo (CBJ) a form of Farmers Market, which involves direct selling to consumers via multi-contributor outlets. Additionally the use of Michi-no-eki (roadside stations) as a tool for rural development are discussed; given that they often provide allocated space for local producers/CBJs to sell their goods (see also; Parker, 2010; JMAFF, 2009; Katsuki et al, 2009).

It is contended that Choku-bai-jo and Teikei exemplify forms of social innovation intended to support local food producers in different ways and to provide an alternative service to consumers. Despite enthusiasm on the part of observers or participants of AFNs it is recognized that such initiatives have been regarded by most commentators and policymakers in Japan as somewhat marginal but have still provoked much interest (Nakajima et al, 2011). These practical, if liminal, iterations of community supported agriculture (CSA) and Farmers Markets do chime with concerns over the localization of food networks in Europe and related issues of quality, scaleability and ecological considerations. This reflects a recognition that the benefits for the consumers and the producers which are potentially to be found in and across AFN practices need to be assessed more critically (Whatmore et al, 2003).

The examples are set amongst wider milieux or structuring factors and thus the development of associated infrastructures and social innovation for rural development existing in Japan are drawn into the narrative and their applicability elsewhere is critically assessed. In doing this the chapter brings together ideas drawn from the rural development and the regional development literatures in reflecting on the conditions, operation and potentials of the examples highlighted.

Alternative Food Networks (AFNs) and Alternative Retail Food Outlets (ARFOs)
There has been a significant growth in attention towards alternative retail forms, perhaps most notably in now well established considerations of farmers markets (FMs) and similar means of adding value, reducing costs, connecting producers and consumers, or shortening supply chains. Such consideration has included forms of community supported agriculture (CSA) activity internationally (see, for example; Connell et al, 2008; Carolan, 2011; Goodman et al, 2012), where closer relations and co-production is evident, or at least intimated between
producers, intermediaries and consumers. Such practices have generated significant policy attention and academic commentary, particularly in the global north, with speculation over their potentials to assist in developing a new food citizenship (see Hassanin, 2003; Parker, 2005; Seyfang, 2006; Ravenscroft et al, 2013), and how they may reflect evidence of social innovation and a challenge to dominant agro-industrial food systems, with their associated environmental, health and economic downsides (see, for example; Buttel, 2006; Blay-Palmer, 2008; Young Foundation, 2012). Thirdly and perhaps most significantly in policy terms, their potentials in assisting green or restructured rural ‘eco-economies’ (Horlings & Marsden, 2014) and aiding transition to low carbon living (North, 2010). Yet a ‘major theoretical and empirical task is to explore how these evolve and contribute, in different ways, to rural development’ (Renting et al, 2003: p394). In short to assess their credentials in economic, social and environmental terms and as here; in exploring the structuring factors that have shaped and sustained them as social innovation. Others have indicated that such reflections require much more work to understand how these activities equate with or draw on ecology, locality, region, quality convention, and consumer cultures (e.g. Goodman, 2004; Goodman et al, 2012).

AFNs (with ARFOs) reflect part of a shift towards a re-localized food and farming regime and have become recognised as potential tools for innovation in a mainstream restructuring of regional / rural economies. Wegener & Hanning (2010) identify a subgroup often associated with alternative food networks labelled as ARFOs - alternative retail food outlets (see also Pearson et al, 2011). These provide means to sell produce from linked producers or particular types of ‘new merit’ goods including organic, fair-trade or ‘locally sourced’ produce, with their key novel features centring on ‘quality’, ‘transparency’, and ‘locality’ (Sonnino and Marsden, 2006). The ARFO grouping typically includes Farmers Markets and many may maintain self-imposed procurement rules. Such outlets have been growing steadily in many countries with for example; the numbers of FMs doubling in the past decade in the US alone, to over 8,000 by 2013 (USDA, 2013).

Community supported agriculture activity has grown too and overlaps with, or is connected to, some ARFOs, but there is difficulty in assessing the quantum of development given the range of activity found under the umbrella term of CSA. As an indicator, just in the US alone over the decade 1997-2007, the value of direct-to-consumer food sales trebled (USDA, 2009). Furthermore when examining ARFOs and Farmers Markets it is worth emphasizing that many apparently novel or alternative practices are reinterpretations or resuscitations of pre-existing means of trading (Kirwan, 2004; Brown and Millar, 2008). The traditional approach for centuries and for many farmers in very many countries was to sell directly at marketplaces. This model was highly developed for fresh and perishible goods prior to the modern era; whereupon the retail sector emerged and expanded through the development of food processing and more sophisticated supply chains, refrigeration, logistics and transport improvement. This modernization paradigm, as evolved through the modern era of urbanization and industrialization, is still predominant. The process has led to the well-documented development of the agro-industrial food complex in many countries and to the dominance of supermarkets as food retailers in a significant subset of those. For example; in the UK only around 5% of the grocery market is now taken by small retailers (IGD, 2014). In contrast the small scale and
owner operated retail network in Japan still maintains an important presence, despite the growth of supermarkets and convenience stores in the past two decades. Many traditional markets still operate and provide valued shopping spaces for consumers, often with a diverse range of produce with variable qualities – interestingly Japan maintains hybrid spaces with producers present as well as retail specialists; some with artisan and organic goods jostling with other graded produce and discount items.

Many farmers markets maintain operating parameters that are designed to retain key ‘alternative’ or ‘local’ features (such as requiring sellers to be based within a radius from the market location) (Kirwan, 2004), in addition to more less loosely applied new merit good criteria i.e. those goods and practices which may be judged to deserve institutional or consumer-citizen support (Parker, 1999). Proto-typical characteristics of AFNs include (eleven are listed here) elements of: social cooperation or partnership among producers, among consumers, and between those two groups. There is likely to be a degree of producers gaining economic independence from the agri-industrial system and providing a basis for production methods which may be more benign in social, economic and/or environmental terms. There may be a dimension of active citizenship which places food products and production as part of a political-ethical project. More widely that the public good (e.g. social justice or solidarity between producers-consumers is enhanced) and that environmental improvement via alternative production methods is implicated in the network operation. There may be some use of socio-territorial identity based on the aims of the AFN reflected in operating criteria, produce and marketing of the AFN/ARFO. The food relations and exchange may be embedded in trust, bound into community development and proximate relations. Lastly that regional development via local economic benefits, local heritage and place-based production is involved (see, for example; FAAN, 2010; Goodman et al, 2012). Through a combination of such extra-economic and other characteristics, alternative networks promote products and production processes, typically summarised as involving: ‘quality’, ‘source’ and ‘environmental’ credentials.

Notwithstanding the emerging critique of AFNs and ARFOs, associated commentaries have also identified a range of features and claims on their behalf including:

- **Innovation** – enabling new products, value-adding new markets, changed / more efficient practices (some CBJ/MNE);
- **Localisation** – reducing food miles, endogenous benefits, encouragement of improved self or co-regulation of food system (CBJ, Teikei);
- **Diversification** - enabling rural economic resilience for some producers (Teikei, CBJ);
- **Improving quality** - health and other ethical concerns may be met through such channels (Teikei);
- **Socially and culturally desirable** - food as social and relational good (intermediary and actant); community based, tool for social and cultural capital (Teikei);
- **Radical** and subversive – the alternative and breaking away from oppressive or unethical system of food production/consumption (Teikei);
- **Supplementary income** – secondary economic activity (CBJ);

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• Community of production – collective effort (CBJ, Teikei);
• Communities of consumption – involve the buying power for niche and alternative groups of consumers (Teikei);

Together this amounts to a diverse and rarely found singularity, overall the consideration of AFNs may be characterised as a complex issue that combines numerous cultural and social features and which in general may be viewed as being a feature of ‘post-productivist’ or post-consumerist innovation (Goodman, 2004; Cohen, 2013). There is a lack of attention paid to the conditions of success and failure of alternative food networks too, although it is perceived that they may be more or less susceptible to subordination by conventional food supply chains (Watts et al, 2005; Goodman et al, 2012). Their alterity, and any calculation of threat posed, can make them targets for cooption and of related strategies that act to undermine by means of marketing tools, absorption, mimickry or other undercutting practices. In this context the large supermarket chains, for example, act to absorb or copy elements of alternative practices, of ‘eco-marketing’ and via the procurement of organic, fairtrade and local produce in order to maintain market share, and diffuse criticism or otherwise persuade consumers regarding their environmental or ethical credibility.

While this chapter cannot hope to respond fully to the necessarily ambitious agenda as implied above, the intention is to position this otherwise neglected account of AFN activity in Japan in this context and in the light of continued growth of CSA and FMs in the UK, the US and Japan. While this chapter does examine innovation factors and conditions, clearly there are barriers to AFN and ARFO development as innovations, including a common lack of scale capacity, distribution channel access and other regulatory barriers (Martinez et al, 2010). The cases discussed here are examples where small producers attempt to reduce costs, join together for economies of scale and mutuality and to trade directly with consumers and feature at least some of the characteristics and drivers associated with AFNs as indicated above.

Thus the examples of CBJ and Teikei are used below to discuss the role of the local and national state in supporting alternative practices as part of rural economic development and of consumer-citizenship strategies pursued by sections of the Japanese population. The two examples highlight quite different approaches that have developed in Japan and which illuminate contrasting governmental attitudes to challenges to dominant food systems, consumer feedback and to rural socio-economic challenges. It is claimed that this indicates how accounts of alternative food outlets and markets have neglected important contextual and other structuring factors beyond the common sociological perspectives. Those have centred on the intrinsic qualities of alternative products and the motivations or relations mediating between consumers and producers.

This work therefore also brings into view other elements of the operating milieux of producers in Japan and is set against (rural) policy exhortations found in the UK and the EU to diversify agricultural practices and to add value in the food chain, with a concomitant if somewhat dilute encouragement of a relocalisation agenda (e.g. Defra, 2002; Defra, 2011). This is a strand that has grown as each phase of CAP reform has emerged since at least the mid-1990s. As such
rural economic development discourse has seen much more attention on CSA, FMIs and other innovations, including on-farm sales and specialization in the light of an emergent new rural development paradigm which incorporates both innovation and the notion of the ‘eco-economic’ (Horlings & Marsden, 2014).

Innovation milieux and ARFOs
The concept of ‘innovative milieux’ has developed since the 1980s, primarily to reflect conditions that appear conducive to innovation-based regional development (Fromhold-Eisebith, 2004; Mackinnon et al, 2002). The idea of examining and understanding the milieux that produce innovation has received considerable attention and critique, with a number of key factors now recognized as common components in what is a complex system and a complex emergent rural regional development environment (Horlings & Marsden, 2014). Recognized components of the milieux taken together present a case that innovation is significantly shaped by values, standards, social / relational capital and the market environment (see Aydalot, 1986; Terluin, 2003), as well as more obvious factors such as government policy, funding, the physical development of infrastructure and so on. Thus at least some of the ideas or factors related to the innovation milieu concept are derived or linked with wider considerations of the knowledge economy and social innovation – again with an associated focus on human and social capital and may be identified in AFN/ARFO operation.

Many studies in regional development have emphasised the benefits of socially embedded interaction and localised institutions and have also identified social capital as important. The significance of such elements appears to lie in helping create and sustain favourable conditions for innovation (Lesser, 2000; Shucksmith, 2000). Less work has been done however on constraints and the way that innovations emerge ‘despite’ inertias and constraining factors (as well as identifiable ‘positive’ or enabling innovation milieu components) that provide macro-structuring effects, such as; social institutions, (re)actions of large food processors and retailers or other geo-political conditions.

It is has been contended that novel or innovative practices tend to emerge as a product of complex structuring factors (Pugliese, 2001). The cases discussed highlight some of the structuring and shaping elements of the milieux that has (co)produced Teikei and the Chokubai-jo / Michi-no-eki in Japan. More broadly, and in the face of a sustained critique of industrialised agriculture; resting on environmental as well as socio-economic grounds. UK and European policymakers have been concerned to develop a more (neo)endogenous growth strategy from an economic perspective. This also attempts to reflect eco-centric concerns derived from an erosion of consumer confidence and wider environmental concerns over food production and related resource use. A clear inference is that a (re)localization of food systems is desirable in policy terms. It is possible to argue that this policy environment in turn has helped encourage conducive conditions for AFN / ARFO operation and has turned institutional attention towards alternative models for rural development. Unlike the analysis provided by Hinrichs (2000) in examining the embeddedness and associated trust relations claimed by some researchers to characterize and explain the rise of AFNs, here the variety of factors of innovation milieu for the niche, or alternative, mechanisms for alternative food retailing
described below, are examined. This is counterpointed to the overarching Japanese concern with food production levels and other macro-economic and strategic political priorities.

Similarly the above literatures have rarely been combined and a specific focus on eco-economic development and AFN innovation has not been pursued. In general terms and as a means to deconstruct this idea three additional relevant dimensions have been identified to be added to the lists above. The first is the technological dimension which includes acknowledgement of local tacit knowledge and associated understandings that help foster innovation. The second type is the organizational context which focuses on the capability of local actors to organize themselves e.g. through reciprocal relations, trust and cooperation. Finally the spatial and cultural dimension otherwise labelled as the territorial component which marks a recognition of the differentiation in the ability to exploit and monetise resources based on locally specific features and conditions. When taken together with the three common clams of AFNs over quality / healthy, source / localness and environment / ecologic these provide a crosscutting list for assessment.

Thus the attitude and support of institutional actors or the institutional capacity dimension is recognized here. For example, the Japanese state has traditionally viewed agriculture as a key economic activity and plank of political policy given the power and number of the farmers. This still pertains but a softening of position in relation to the mainstream producer cooperatives (the JA) and their effective monopoly and control of production and quality has been seen in the past fifteen years or so. At local, regional and national levels new rural / regional policies and programmes have allowed for the growth of closer producer-consumer exchange, which is based on a desire to enable value-adding and support for producers and local rural economies. Yet such activity is in tension with traditional forms of agriculture and agricultural support in Japan and apparently clashes with still strong concerns over food security and low levels of domestic food production (Gasparatos, 2011). In the CBJ/MNE case below the state and local state effectively underwrite the ARFO and absorb at least some of the risk involved. In this reading CBJ represents an attempt to institutionalise and extend a cooperative supply of produce through public sector support i.e. to mainstream the activity of small producers in attempting to offer such produce direct to consumers but notably with less concern for quality or environmental dimensions. Conversely Teikei may be characterised as an attempt to privatise food supply; creating something of the equivalent of ‘gated food networks’ through the development of consumer-led but ultimately a hybrid consumer-producer cooperative. This example is demonstrative of consumer reactions towards food risk and the erosion of trust in food sources in Japan since the late 1960s. Conversely the priority in this type of network is on quality and ecology over localness, although the source (as a basis for trust) is also regarded as critical by those consumers. There is a clear correlation to Hinrich’s (2000, 2003) work here on the politics of food localization in the Teikei example. In this reading Teikei represents hybrid consumer-producer cooperative arrangements in a privatized form. This is characterised by the agency of educated, middle-class consumers who have been co-organising a new consumption and production network. In short this enables small groups of producers to realign their business decisions directly with groups of such consumers, rather than with larger cooperatives and effectively opt out of the mainstream agro-food system.
Japanese Agriculture in Overview

A brief overview of some of the general constraints and other milieu in Japan is necessary before discussing the producer-consumer innovation examples. The first general factor relevant here is the fragmented land ownership structure in Japan where small average farm sizes (80% of farms are less than 1.5Ha) have pushed farmers towards various forms of co-operation and has also led to widespread part-time farming. The co-operation between farmers has ensured economies of scale and bargaining power (Oyama, 2005) as well as providing the basis for mutual assistance over a variety of land management tasks. While many farmers are socialised towards co-operative styles of working and part-time or multiple income household status can make it less risky to embark upon alternative modes of operation. However almost all farmers in Japan join their regional (producer) co-ops known as Noh-kyo or the ‘JA’. The national representative body (JA Zenn-noh) boasted over 1,000 co-operatives by the mid-2000s and claim that most of the 3 million farm households in Japan belong to a JA (JA Zenn-noh, 2004).

The growth of the JAs were supported by central government post-1950, as they served the national objectives of food security and enhanced food chain efficiency. Some of the recognised downsides of JA operation have been to standardise practices and products and stifle innovation (Teruoka, 1989). This has led to frustration for farmers wishing to maintain high quality standards, diversify, for example; to convert to organic farming (Honjo, 2004; Kimura & Nishiyama, 2008).

Thus the apparent continuing strength of the producer co-ops in Japan masks tensions in Japanese agriculture which has been increasingly opened up to market forces and liberalised trade relations since the late 1990s. This has meant that prices are being driven downwards and economies of scale are being sought by central government. In contradistinction to such a policy orientation the Basic Law for Food, Agriculture and Rural Areas passed in 1999 emphasised the need for closer collaboration between farmers and consumers. It states that consumers have a role to understand rural issues and the impact of their consumption patterns on the nation's self-sufficiency, which fell from 79% in 1969 to 41% by 1998. This policy was shaped not only in recognition of the decline in the national food self-sufficiency rate but an overall economic decline of the remoter regions and associated socio-demographic challenges.

Despite domestic and agrarian politics which have tended to stifle innovation as described above, Japan has developed a relatively large market for organic produce since the 1970s, responding to consumer demands for quality food, but only very small areas of Japanese agricultural land have converted to organic production. According to the 2005 agricultural census in Japan around 10,000 producers (from 3.2 million farmers) in Japan were deemed to be farming organically and even fewer, around 3,000 of these, were officially recognised within the formal government accreditation scheme (‘JAS Organic’ / eco-farmers) which was only launched in late 1999 (Nagamatsu and Matsuki, 2003; JMAFF, 2005). By 2004 there were 4,539 such producers accredited and in 2006 the Promotion of Organic Agriculture Act was passed to boost organic conversion, although there has been little shift; by 2008 there were as few as 1,509 truly organic farmers in Japan (JFS, 2008) despite imports and rising demand.
**Choku-bai-jo – Japanese Farmers Markets**

The local production and consumption movement has developed an increased interest in ARFOs in Japan and many farmer’s markets (FMs) have been established. In similar fashion to the UK and under the rallying phrase in Japanese of Chisan-Chisyo (‘grow locally, eat locally’) farmers markets have been growing rapidly with the number of co-operative FMs in Japan estimated at 2,500 by 2004 (JCCU, 2004) and by 2010, there were estimated to be around 5,000 direct-sales farmer’s markets. Approximately 2,000 of these were run by cooperatives and 3,000 by third-sector companies and other farmer groups (JA, 2009). Definitional issues pertain here however and while the Choku-bai-jo (CBJ) – loosely translated as ‘place for direct selling’ are one form of farmer’s market and while the number of CBJ outlets has grown enormously since the 1980s and in the 1990s they are not the only FMs. The CBJs started to be organised and operated by the farming cooperatives (JA) and are now established widely across Japan, with the number of Choku-bai-jo being estimated at 16,916 by 2009 and thus given the statistical mismatch their status as ‘farmer’s markets’ is not recognized formally and appears to have been missed by non-Japanese researchers (see Hope and Henryks, 2013).

CBJ have been supported in a number of ways by local state funding for the promotion of local agricultural production activity, following successive iterations of national policy and producers can use consequential funds to construct CBJ facilities as needed. These outlets involve small producers contributing their own produce, often in small amounts, to sell collectively at one shared location. The most commonly sold products at Japanese CBJs are fruit, vegetables and rice. Often the identity and details of the individual growers is displayed clearly next to their products to provide direct association and connection between the consumer and the producer (see Fig. 1).

Some speciality products that are typical of the area are often sold and add value to the producer (examples include processed items that are based on a locally distinctive product, such as a particular fruit or other crop). Figure 2 shows a display from a Michi-no-eki hosting a CBJ and displaying a wide range of products using the Biwa fruit (the Loquat aka ‘Japanese Medlar’) in Tomiura, Chiba Prefecture. These CBJ outlets are mainly established by rural producer organizations via the JA cooperatives (see Kimura & Nishiyama, 2008), in partnership with local authorities and through the establishment of a joint company. The joint venture companies founded by local government and partners will make the Choku-bai-jo facilities available to the farmer/producers for a set fee. The CBJ host a shared selling space for a considerable number of farmers, with the average number of producers per CBJ being 86.5 in 2009 (Nakajima et al, 2011). The value estimates for Choku-bai-jo operations are that the average annual sale of CBJ goods per outlet was ¥34m with income levels for participating farmers rising due to their CBJ activity, according to the Japanese government (JMAFF, 2007).

The percentage of agricultural produce which is sold in CBJ is estimated for each item based on production value. This is claimed to be in the range of 5-8% for Vegetables; Fruit 3-5%; and Flowers 5-9%. The food produce on sale at the Choku-bai-jo tends to be mainly irregular goods (i.e. deemed to be below supermarket standard and not suitable for wholesale market trading). There is no national statistical data about organic produce on sale at CBJs but best estimates
from the limited Japanese research available indicates that at most 10% of CBJ sales appears to be organic. In terms of economies Choku-bai-jo usually sells produce at a lower price than other outlets such as the supermarkets. The commission fee is generally lower because there are no intermediary agents operating between the CBJ and consumers.

**Figure 1: photos of individual growers above their food products at the CBJ / Michi-no-eki at Shirataka, Yamagata prefecture, Japan.**

![Figure 1](Source: Gavin Parker)

The leader of the producer group is often a former staff member of the local JA or a retail outlet and while there are few formal rules that limit the sales of products through Choku-bai-jo some of the networks have established self-imposed and regulated rules about the quality of produce.

**Figure 2: Display of Loquat products, Tomiura, Chiba Prefecture, Japan**

![Figure 2](Source: Gavin Parker)
There are several recognisable threats to CBJ operation. These include the aging profile of the producers and too many Choku-bai-jo outlets entering the market. Some studies of the CBJ markets have been conducted that indicate competition among Choku-bai-jo and some areas have established rules that producers who live outside a given municipality cannot supply to the CBJ to avoid conflicts. While this self-regulation is developing in most CBJ groups it is left to the individual companies to decide their policies.

Members of Choku-bai-jo consist of various types of farmers but most of the producers are small part-time farmers and some find it difficult to provide produce to the CBJ outlet every day. The Choku-bai-jo established by the JA or the municipality and the Choku-bai-jo which is established by an independent rural producer organization exhibits some institutional capital; there is support locally and nationally for such enterprises. The CBJ system involves trust relations between producers and the CBJ company as retailer. It is reported that the system has some other weaknesses that may weaken the integrity of the CBJs however. In some areas there is a free rider issue and some producers may supply low quality produce to the Choku-bai-jo and such produce may become mixed with higher quality goods, which either reduces overall selling prices or impacts on consumer attitudes and willingness to pay. As a consequence quality and quantity management is needed. There are examples where CBJ groups have adopted mechanisms to avoid this - including separate labelling/coding and payment methods based on individual producer sales.

Some CBJ examples observed have created a portfolio of activity that is built around the MNE / CBJ (explained below). This acts to create efficiencies and interdependencies, as well as cross-subsidy in some cases. A CBJ / MNE example at Yuza Town, Yamagata operates with several linked activities including a hotel that appears to cross-subsidise other activity and overall is now a significant local employer.

In overview the CBJ system appears reliant on a number of factors. Primarily the structure of farming and land; many farmers are part-time and see the CBJ as a supplementary source of income. The willingness of the local authority and national government to support such outlets and the overall tendency to collaborate is also pertinent. Coordination among CBJ would enhance value because so many have now been established. The example of CBJ is encouraged by a pre-existing culture of cooperation and is a spin-off from long lasting agricultural cooperatives. The way in which CBJ develop and regulate themselves provide further fruitful avenues for further study to include exploring in more detail the milieux - what factors prompt and sustain it? e.g. institutional support, information and consumer attitudes. Furthermore the details of Governance - how is the ability to develop self-governing systems understood in these milieux? Thirdly in terms of Business Management and how processes of negotiation and creation of pricing strategy, profit allocation, rent for example, are organized is in need of detailed study.

Choku-bai-jo are likely in the future to see regional or community contributions growing. A further rationale is being explored by government and local government, around the potential of such outlets to provide a support system for the elderly; to ensure that they eat well and
healthily in those rural areas lacking facilities. The innovative credentials of the CBJ are to provide new income for producers and local produce for consumers as well as supporting local employment and related social infrastructures, as well as hitting a number of typical AFN and Innovation characteristics as shown in Figure 3 below.

Michi-no-eki and ARFO friendly retail
Linked here to the CBJ approach is the rise of the Michi-no-eki (MNE), literally ‘roadside stations’. These are one tangible and notable product of the new rural economic development policy in Japan over the past 20 years. Such road stations are typically partnerships between the national government, the prefectures, local municipalities and local producers. Facilities such as the CBJ, shops and restaurants are not included in the national government funding for MNEs; these are led by the prefectures and local municipalities working with producer groups.

The MNE are purpose-built facilities for travellers with a threefold aim; to act as rest stops for drivers, to provide a point of local information for travellers and locals and to provide an opportunity to generate revenue for local enterprises. The Michi-no-eki idea was taken up by the Japanese Ministry of Infrastructure, Land and Transport (MILT), and was initially centred on the idea of establishing links between road users, as consumers, and local rural communities (as suppliers or producers). The first of the Michi-no-eki opened in 1991 on a trial basis in Yamaguchi, Gifu and Tochigi Prefectures and subsequently the formal adoption of the approach came in 1993 when enabling legislation was passed and national guidance produced. This established a policy which authorised and subsidised the construction of Michi-no-eki nationwide. Since the first pilots 936 road stations were registered in Japan by 2010.

When the Michi-no-eki idea was first launched, the opportunity was taken by local municipalities to tie together functional services with other value-added products and services. Other facilities in the main service areas typically include a large market-style shop area with numerous small vendors running stalls, as well as restaurant space. Thus many of the MNE are host environments for CBJ cooperatives and have proven highly successful examples of multi-service outlets that address more than one policy objective i.e. rural development, highways safety and public amenity (Fig. 1). Thus the MNE provide the infrastructure and ‘host’ environment for a multi-service outlet (cf. Moseley et al, 2004).

Teikei networks: direct producer-consumer CSA in Japan
The Teikei networks are producer-consumer collectives organised as a form of CSA developed in the early 1970s in Japan. Most are based on accessing organic produce. Many of the Teikei groups in Japan are purported to have survived for decades (Masugata & Kubota, 1992; Ahmed, 1994; Honjo, 2004; Parker, 2005) and Teikei as an idea and practice is credited with inspiring numerous novel or alternative food networks across the globe, including the development of CSA projects in the US, mainland Europe and the UK (Honjo, 2004; Lapping, 2004). Their very presence, if prompting only a minimal transformative role domestically, has been significant as a promoter or inspiration for social innovation elsewhere.
One of the key features of *Teikei* relations is that they almost always comprise of *groups of farmers* and *groups of consumers*. Early proponents were women living in the big conurbations such as Tokyo, Osaka and Kyoto looking for direct sourcing of food under conditions negotiated by themselves with producers. The approach is centred on an alternative distribution system based around organic agriculture and the early *Teikei* groups were responses to consumer concerns over food risk. *Teikei* was initially a protest against mainstream food production practices using consumer power – the power to essentially privatise food production. It also relies on consumer co-operation, with lower delivery costs enabling lower prices (Suhara, 2005).

The *Teikei* idea developed at a time when consumer anxiety over food additives and the use of industrial pesticides in Japan was growing. From the producer side some farmers were receptive to organic conversion, particularly those who suspected that pesticides and other chemicals were responsible for ill health within the farming community (see Honjo, 2004; Masugata & Kubota, 1992). During the 1970s and 1980s the *Teikei* movement expanded and the number of *Teikei* groups was thought to be 832 by 1990 (JOAA, 1993; Masugata and Kubota, 1992), but little empirical evidence has been collected, although some grand claims about its coverage have been made by some promoters given that one network is said to boast over a quarter of million consumer members (the *Seikatsu* club). Others claim that the availability of organic produce through other outlets and the influence of changing work practices, particularly of women in Japanese society is said to be constraining *Teikei* growth (Parker, 2005). Other challenges include the aging profile of *Teikei* leaders and, on the producer side, some of the leading organic growers complain of succession problems. Such issues reflect broader issues in Japan as mentioned above.

Different *Teikei* groups have evolved in numerous ways in terms of numbers of consumers and numbers of producers and the way that they have negotiated working and production practices. The typical range of size of the consumers involved varies from less than 10 families to more than 5,000 consumers per group. *Teikei* networks also vary in terms of distances between the producer group and the consumer group and there is variance in terms of the products exchanged and the delivery arrangements for those products (for example fruit and vegetables are regularly delivered while organic rice may be delivered only once per year). Most of the organisation and management of the *Teikei* networks tends to be undertaken by a core group of consumer volunteers who liaise and negotiate with the farmers (Oyama, 2005).

There are numerous established *Teikei* networks, the *Takahata Shiki-dayori no Kai* (TSK) group set-up in 1973 was one of the first (Parker, 2005). The first farmer was persuaded to convert to organic production and convinced a group of other local farmers to follow suit as the consumers promised to ‘guarantee the crop’ by buying all of the produce. TSK appears to be stable, maintaining its membership and economic viability. By 2005 the TSK network consisted of nine farmers/farm households, cultivating approximately 25 hectares of land and serving around 130 consumer households. The consumers meet once per year with the farmers and in addition to the annual meeting a core group liaises intermittently with the farmers on behalf of the group over; which crops to grow, the amounts of produce, techniques to be used.
or avoided and other administrative matters. A feature of the TSK arrangements is that the farmers are based in the Tohoku prefecture at a distance of approximately 500km from the majority of the participating consumers, who live in Tokyo.

The TSK operation does not rely on spatial proximity between producer and consumer but does require ties and contact between the consumers involved and between the group of spatially proximate farmers. The role of mediating institutions and actors is not therefore removed but instead the ‘chain links’ are replaced in this arrangement. In the TSK example, a school provides a milieu for interaction and engagement for consumers and seems to have played an important role in helping to cohere and stabilise the network. This new intermediation aspect may be a key element when attempting to encourage AFN development elsewhere.

**Assessment and Conclusion**

The main aim of this chapter has been not only to outline under-researched examples of AFN/ARFO operation in Japan but equally to consider how operations of the types discussed are being used, reflect, or may be used, as part of a new eco-economics of rural development and in support of this to examine associated innovation and constraining milieux. The other associated purposes implicated are the extent of a development of new food citizenship as a challenge and alternative to dominant agro-food systems.

There are some other key historic, cultural and institutional differences that provide for points of departure and reflection too as outlined. Clearly the structure of farming and land ownership in Japan has promoted forms of cooperation and socialised the farming community towards joint action. While post-WWII institutional arrangements, notably the producer co-ops have acted to somewhat stifle innovation; locking-in Japanese farmers to the JA networks. Yet the Japanese context generally and the situation pertaining to rural economies and consumer attitudes otherwise are not so different to those found, say in the UK. In the sense that efforts to diversify, add value and tentatively to encourage re-localisation are present. This has meant that while AFNs have been tentatively encouraged they are in tension somewhat with remaining strategic concerns over impacts on food production levels. Additionally Japan is faced with an aging population profile with overall population shrinkage. Continued rural depopulation presents somewhat of a crisis which can be seen as a driver of social innovation.

Despite concerns about overstating the significance of ARFOs / AFNs, some argue that such novel and innovative phenomena are products of, as well as being implicated in, the production of a rise of a new and more territorial-based rural development paradigm in Western Europe (van der Ploeg et al., 2000; Renting et al, 2003). Others are more sceptical and see such AFN practices as largely the product and the preserve of affluent groups behaving rationally to manage their own risk, or as well-intentioned but ill-fated and limited attempts to challenge industrialised and unsustainable food chains (Whatmore et al, 2003; Goodman et al, 2012). Questions remain over how and if such practices may scale-up (but possibly still remain the preserve of affluent consumer-citizens?), remain as niche features, or in any case act to influence the trajectory and practices of the mainstream food industry, or most pessimistically,
to decline and wither. In short there is as yet, little consideration of their resilience or wider impact.

**Assessing Teikei and CBJ as social innovations**

The factors both present and absent can be considered together in the light of the examples above. Firstly if we reflect on the variables identified as below and more broadly consider the institutional frame, such as the Japanese government attitude to innovation, and the impact of forms of innovation on productivity these colour the institutional spaces and resources deployed in aid of AFN/ARFO innovation. When assessing these in overview it is useful to reflect on the list of acknowledged factors recognized in relation to AFN/ARFOs i.e.

- Social cooperation or partnership (**Teikei**, CBJ);
- Producers’ economic independence from the agri-industrial system (**Teikei**);
- Food and production as an ethical commitment (**Teikei**);
- Public good and social justice (CBJ possible);
- Solidarity between producers-consumers (**Teikei**, possible for CBJ);
- Environmental improvement via alternative production methods;
- Regional development (MNE/CBJ);
- Socio-territorial identities (CBJ/MNE);
- Food embedded in trust (**Teikei**);
- Proximate relations (CBJ);
- Place-based production (**Teikei**).

Given that the priorities and aims of the examples are varied and multiple, as expressed above, we can reflect on how the three innovation dimensions of: technological elements, organizational conditions (including the capacity of local actors), and the spatio-cultural dimension or territorial conditions feature. Along with the basic AFN trio of quality, source and environment to help deconstruct and assess **Teikei**, CBJ/MNE and their future. Other observable milieu that cross cut and are usefully identified here are also set out in Figure 3 below as a condensed set of nine assessment criteria.

When mapped against the range of considerations and characteristics the examples highlight the different conditions and priorities of the two examples. CBJ are less environment oriented but there is potential in developing this aspect of CBJ operation given market demand. The **Teikei** model creates further consumer / producer co-control but a localized version of this would produce a hybrid that performed better in terms of food miles. The CBJ approach if modified to incorporate aspects of the **Teikei** modality has a stronger chance of maximizing across the AFN/ARFO criteria as well as representing positive social innovation that performs well against the standard sustainable development trio of social, environmental and economic.

**Figure 3: the examples assessed against innovation milieu and AFN criteria**

<table>
<thead>
<tr>
<th>Criteria / Milieu element</th>
<th>Choku-bai-jo</th>
<th>Teikei</th>
</tr>
</thead>
<tbody>
<tr>
<td>Values</td>
<td>Traditional, opportunistic, socio-centric</td>
<td>Alternative (CSA), Eco-centric</td>
</tr>
<tr>
<td>Technological (Innovation)</td>
<td>Some investment enabled to develop value-added goods via Local and</td>
<td>Some <strong>Teikei</strong> are actively opposed to technological innovation - eco-economic</td>
</tr>
<tr>
<td><strong>Organizational (Innovation)</strong></td>
<td>the CBJ are producer-led coops with local governmental support</td>
<td>Cooperative based Teikei consumer led and independent</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------------------------------------------------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td><strong>Territorial credentials (Innovation)</strong></td>
<td>Neither are strong on this as the CBJ market is local / passing trade</td>
<td>Less important to Teikei as other priorities dictate.</td>
</tr>
<tr>
<td><strong>Source, transparency and quality (AFN)</strong></td>
<td>Variable quality but locally produced, marketed to buyers as local. Clear indication of producer identity</td>
<td>High quality not usually local to consumers. Teikei produce tends to be based on eco / organic or at least GMO-free credentials. Obvious who has produced and under what stipulations.</td>
</tr>
<tr>
<td><strong>Environment (AFN)</strong></td>
<td>Lower priority but proximity between producers and consumers reduces food miles</td>
<td>Higher priority along with risk minimisation. Greater distances between consumers and producers.</td>
</tr>
<tr>
<td><strong>Social / Relational capital</strong></td>
<td>Strong ties in farming community, relations between governmental institutions and farmers strong</td>
<td>Weak but significant ties between consumers and between consumers and producers. Producer group tends to be associated</td>
</tr>
<tr>
<td><strong>Funding</strong></td>
<td>CBJ have benefitted from support in aid from local and prefectural government</td>
<td>No external funding.</td>
</tr>
<tr>
<td><strong>Other institutional support / infrastructures</strong></td>
<td>Building of MNE facilities has aided CBJ, initiation and support for CBJ organizing companies.</td>
<td>Very limited. Self-operated network.</td>
</tr>
</tbody>
</table>

The innovation milieux set up conditions whereby different forms of collaborative innovation are rendered more likely than previously. This has lead to a critical exchange between social groups and institutions which are typical drivers of innovation (for example, see; Loveridge & Cox, 2013). One reading of this situation is that a tipping point has been reached and is being cautiously negotiated over the best way to progress the eco-economic agenda in Japan, while attempting to maintain concern with food security and efficiency policies. However the environmental / ecological motives are viewed as of secondary importance by the Japanese State who have being moderating and balancing change and other considerations. It is a concern for the future of the local rural economy and society that is helping tip the balance towards diversification and alternative sustainable and resilient food and farming practices. Where these can combine there is a positive mix of need, resource, social capital and market conditions to grow an ecoculture that serves the rural economy and society in Japan. However Teikei is rather different in emphasis and its strength lies more in maintaining political pressure and presenting the Japanese State with a model that highlights the problems that the dominant system has sustained until now.

This situation may be considered from the perspective of three key actor groups; firstly the Japanese state has adopted a policy towards rural economic and social development that is quite to similar to the UK / EU and this is reflected in the growing encouragement and support found in legislative, policy and financial terms. In support of such policies are pressing needs to maintain a well managed green infrastructure given the need to ensure resilience, for example, regarding; flooding, landslips and to maintain valued landscapes. This type of concern, along with other worrying socio-economic indicators mentioned above, has promoted
social-economic innovation that develops local embeddedness which can add value and enhance resilience.

From the producers perspective up to half of all Japanese farmers are claimed to be interested in shifting to organic production but very few have done so (JFS, 2008; Jussaume, 2003). Part-time farmers have more flexibility and an ability to take calculated risks in their business decisions. There is latent demand to reorient the JAs or break away from the constraints that they have imposed. A culture that appears to be capable of producing new forms of smaller scale cooperative that can devise innovative networks and value-added economic activity - as demonstrated through the rise of the CBJs. In terms of the consumers, a diversity of issues present themselves with environmental / ecologic concerns remaining prominent and an already significant level of consumer cooperative forms which are extant and a growing need for basic services to be maintained in rural areas. The concern to bolster and create conditions for populations to stay in rural areas is growing and supports enhanced diversification and localisation policies that are, at face value, congruent with an eco-economic agenda.

Taken together the CBJ and Teikei are indicative of how the state, producers and consumers are experimenting with cooperative models with different underpinning motives and characteristics and they exhibit an interesting mix of typically identified factors that prompt innovation and are found to be associated to AFNs. The examples indicate the significance of social capital, expressed here as cohering the network and the relations between the producers. In the case of the Teikei group this relation between the consumers is also key. The role of the state and local state and the role of other intermediaries such as the School in the TSK case indicate that such elements are important in cohering and encouraging the assemblage of milieu required to maintain them. Yet the mix may be different across cases and state support and a shift of institutional conditions (e.g. legislation, policy and funding) is encouraging the CBJ/MNE approach which is largely in support of producers. The Teikei initiatives are more consumer oriented but also provide support for (some) farmers. The likely trajectory for such AFNs is unclear, but the shifting attitude of the Japanese state is an encouraging sign, given that many producers and consumers have been pushing for new forms of innovation for at least the past two decades. Overall the milieu are maintaining a innovation trajectory that could usefully develop a (hybridized) model for ARFOs in Japan that can help deliver a wide range of social, environmental and economic benefits, towards, one is tempted to say, a greener Japan.

References


Parker, G. (2005) *Teikei, cooperatives and food citizenship in Japan.* Working papers in Real Estate and Planning #11/05, University of Reading, UK.


