Alternative Marketing Systems for Organic Agricultural Products in Japan: Accumulating Social Capital to Protect the Ecology

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ABSTRACT

This study was undertaken to observe the marketing of organic agricultural products in Japan using collectively based systems such as the *teikei* system and *sanchoku* schemes, and to determine whether such methods differ from the mainstream marketing of normal agricultural products.

Data was collected through a review of secondary sources and in-depth interviews with representatives of successful consumers' and farmers' groups involved in the Japanese organic agriculture movement undertaken.

The results of the study show that the difference between the alternative marketing systems of the organic agricultural sector in Japan and other traditional marketing schemes is that social capital plays a much more defined role in the alternative system. The marketing systems in use in organic agriculture bypass the middlemen who are common in normal marketing chains. In addition, alternative marketing systems are focused not only on exchanging products but also, perhaps more importantly, on creating an alternative community by establishing a relationship between farmers and consumers who have the same goals of conserving the environment and maintaining their community.

Key words: organic agricultural products, alternative marketing, social capital, Japan

INTRODUCTION

Organic agriculture in Japan

Japan is currently one of the most important economies in the world. Although economic success has created an imbalance between the industrial and agricultural sectors, agriculture remains important in Japan. The agricultural sector has enhanced productivity by adopting modern industrial agricultural techniques such as mechanisation, the use of chemical inputs, and the adoption of high yield seed varieties, even though the average farm size remains small.

Although Japan has experienced considerable economic success in agricultural development, the industrialisation of agriculture has resulted in inevitable negative impacts on environment. Rising demand for safe food and a growing interest in sustainable agriculture are encouraging an increasing number of players in the Japanese agricultural sector to look at other options to produce as safe agricultural products.

Demand for food safety is not a new phenomenon in Japan. Over the years Japan has faced a range of environmental problems as a result of the unsafe use of modern chemicals, notably the

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serious consequences of Minamata disease (methylmercury poisoning resulting from the dumping of factory waste) which became apparent in the early 1950s. Minamata disease is only one famous and tragic example of many cases of illness and environmental contamination caused by industrial chemicals over a period of rapid economic growth and industrialisation in Japan.

The Japanese organic agriculture movement began more than 30 years ago when consumers, especially in urban areas, became concerned about levels of chemical contamination in food sold on the market. Some consumers began to use existing consumer co-operative structures to obtain safe food, such as the *sanchoku* system, a system which arranges direct transactions between producer and consumer co-operatives to reduce the length of the marketing and supply chain. The Japan Organic Agriculture Association (JOAA), a voluntary non-profit organization, was established among farmers in 1971, and the concept of *Yuki* (organic) began to develop in Japanese society. The organic agriculture movement not only introduced farmers to the idea of growing produce without chemical additives, but also stressed the importance of supportive human relationships between producers and consumers - the basis of the now well-established *teikei* system (a trading partnership system for organic food used by producers and consumers committed to a particular set of social and agricultural principles). The Japanese organic agriculture movement is currently continuing to expand in parallel with growing demand for safe food, and organic food has now become part of the mainstream food market.

At present, the approximate area planted with organic agricultural products in Japan is 5,000 ha, representing just 0.1% of the total agricultural planted area in 1999. (Zennoh, 2001) Table 1 shows the estimated total sales value of organic products through the mainstream wholesale market in Japan (not including the various types of alternative market which are discussed in this paper).

Table 1 shows that the percentage value of organic products within the overall agricultural market in 1998 was small, at just 0.18%. This value might be expected to be higher if figures from alternative markets are also included. The land area dedicated to organic farming is 0.1% of the total agricultural area. The annual value of organic products per unit area, calculated by dividing total area farmed organically by the total value of organic products sold, is about 43 million yen per hectare, which is nearly twice as high as the corresponding figure for conventionally-grown agricultural products. This suggests that the revenue from organic farming may quite high in comparison to revenues from conventional farming.

The market for organic agricultural products initially evolved as small farmers provided food to consumers' groups, allowing a strong trust relationship and shared ideals to develop between producers and consumers. More recently, however, the situation

Table 1 Estimated total wholesale value of agricultural products in 1998 (billion yen).

Item	Total	Organic		Low chemical		Safe products	
	product	Value	%	Value	%	Value	%
Perishable products	70,800	180	0.25	1,870	2.6	2,050	2.9
Rice	45,000	35	0.08	380	0.8	415	0.9
Total	115,800	215	0.18	2,250	1.9	2,465	2.1

Source: Zennoh J.A.

Organic: Not using chemical fertilizer & pesticide.

Low chemical: Minimum using level of chemical fertilizer & pesticide.

Safe products: Using chemical fertilizer & pesticide at a safety level.

%: Percentage of total market value for agricultural products for this product type.

has changed, and the organic food movement is faced with the issues of an aging population, changing dietary patterns, and changing lifestyles, especially among people in urban areas. Other issues are the growth in imported agricultural products and reduced protection for Japanese farmers from international competition, as required under international trade agreements. Japan's Ministry of Agriculture, Forestry and Fisheries has recently introduced regulations for labeling organic agricultural products under the Japanese Agricultural Standards (JAS) scheme, allowing the import of organic agricultural products. How the grassroots organic agriculture movement will fare in these changing times is not yet clear.

The sale of organic agricultural products in Japan has now entered the mainstream market, where produce is sold through both the wholesale market and direct marketing. Alternative marketing systems such as the *sanchoku* and *teikei* systems continue to exist and remain important, operating on direct marketing principles. This research study examines the organizations involved in alternative marketing systems for organic food in Japan; factors which result in successful marketing and distribution; and problems experienced by alternative marketing organizations. The objective of the study was to examine whether and how the alternative marketing of organic agricultural products differs from mainstream marketing of general agricultural products, with particular emphasis on the *teikei* and *sanchoku* systems.

Data was collected through a review of secondary sources (agricultural statistics, articles, and other reports on organic products and related areas) and in-depth interviews with representatives of successful consumers' and farmers' groups involved in the Japanese organic agriculture movement, which were undertaken during a field trip in Japan in September 2001. Limited time for field work and the use of the English language as the medium of communication between an interpreter assisting a Thai researcher in interviewing Japanese-speaking informants resulted in some ambiguities and omissions in primary data, but the general trends within the results are clear and are supported by information from secondary sources.

The next section of the paper describes the concept of social capital and its importance in relationships within Japanese society. This is followed by a description of conventional marketing systems for agricultural produce in Japan and a comparison between conventional and alternative marketing systems. The discussion on the level of social capital in the organizations of each system and the conclusion of alternative marketing systems for organic produce in Japan.

Social capital: Intangible capital

Coleman's 1988 study into compulsory education (1988) develops a conceptual framework to explain social capital and how it can be used to create human capital. According to Coleman's concept, social capital is defined by its function. It is not a single entity but a variety of different entities with two elements in common. All forms of social capital relate to some aspect of social structure, and they facilitate certain actions of the actors present - whether individuals or corporate actors - within this structure. Social capital exists in three forms: obligations and expectations, information channels, and social norms.

Putnum (1993) expanded the concept of social capital further in his longitudinal study of Italy. He found that the crucial factors contributing to success in socio-economic development in the region of Italy studied was civic involvement or civic tradition. Putnum equates social capital with features of social organization such as networks, norms, and social trust that facilitate coordination for mutual benefit or collective benefits.

Uphoff (1999) developed the ideas of Coleman and Putnum further by using structural and cognitive elements to define social capital. According to Uphoff, "the structural category is associated with various forms of social organization, particularly

roles, rules, precedents and procedures as well as a wide variety of networks that contribute to cooperation, and specifically to mutually beneficial collective action (MBCA), which is the stream of benefits that result from social capital. The cognitive category derives from mental processes and the resulting ideas are reinforced by culture and ideology, specifically norms, values, attitudes and beliefs that contribute to cooperative behaviour and MBCA. Both the social structures and cognitive realms are linked in practice by the subjective behavioural phenomena known as expectations." A summary of Uphoff's complementary categories of social capital is shown in Table 2.

Social capital is intangible capital which distinct from other forms of capital. Unlike physical capital, but like human capital, social capital accumulates in an organization or society as a result of its use. It is therefore both a requirement for and a product of collective action. Social capital has a public goods characteristic, not being subject to rivalry and being non-exclusionary in its use.

Although the concept of social capital has not been universally accepted and still has many critics, it is an attractive idea for governments and development agencies because it can assist decision-makers in making social investment that increases the efficiency and probability of success in development. It also reduces the costs of social interaction and can be a solution to the problem of the 'tragedy of the commons' (Thomas, 1996). The concept of social capital has now entered the discourse of the World Bank, which has not only supported a considerable amount of research on social capital at the country level, but has also emphasized its importance as a key indicator of sustainable development (World Bank, 2001).

Japan is typically portrayed as a highly group-oriented society which has traditionally nurtured both categories of social capital within the Japanese way of living. Examples of cognitive type social capital in Japanese society include a civic culture which combines a high discipline and punctuality, and trust, which is deeply ingrained in the Japanese way of living and helps to ensure transactions are based on a principal of reciprocity. In a nation where agricultural land areas are limited and there is a constant threat from severe natural phenomena such as earthquakes, social attitudes have evolved in Japan which value the need for co-operation, appreciate the scarcity of natural resources and the need to preserve such resources, and see collective ownership and sharing as a way of reducing the risks which emerge when one person is the sole owner of key resources. The historical division of roles within society, such as *samurai* and farmers, led to reciprocal arrangements under which, for instance, *samurai* were able to provide protection while farmers provided food. The Japanese word *otagai sama* means reciprocity.

Table 2 Complementary categories of social capital.

	Structural	Cognitive
Sources	Roles and rules	Norms
	Networks and other	Values
	interpersonal relationships	Attitudes
	Procedures and precedents	Beliefs
Domains	Social organizations	Civic culture
Dynamic factors	Horizontal linkage	Trust, solidarity,
	Vertical linkage	Cooperation, generosity
Common elements	Expectations that lead to cooperative behaviour, which produces mutual benefits.	

Source: Uphoff, 1999.

An example of the element of social capital relating to social structures is demonstrated by a business environment where a wide range of networks, associations, clubs and voluntary groups are important. Japan has become famous for industrial supply chains which involve large numbers of small and medium enterprises (SMEs). Porter (1998) has cited the success of the Japanese SME model in support of his theory of competitive advantage and the cluster concept.

Although social capital is embedded in the history of every country, Japan is one of the few nations where it has been preserved, and even extended from the community to the inter-community and national levels as a crucial asset in development of the country. However, levels of social capital at the present time are not as strong as they were in the past. The use of technology and other developments have enabled individuals to survive on their own without the need of support from others. The entry of western culture, emphasizing individualism and consumerism, has led to new generations being unwilling to follow traditional culture as strictly or closely as preceding generations have done. But although the current generation may have lost some elements of cognitive social capital, structural social capital retains a strong base in society. Recognition of the success of the previous generation in using social capital to create a new nation after the World War Two remains deeply implanted in the present Japanese generation, and social capital continues to be manifested through factors such as company loyalty.

This study aims to demonstrate that social capital is embedded in alternative marketing systems for organic agricultural products in Japan, making the significantly different to a mainstream marketing system.

Marketing systems for agricultural products in Japan: mainstream versus alternative

The major distribution channel in the mainstream Japanese marketing system for agricultural produce is wholesaling auction markets, especially auction markets for perishable products such as fruit, vegetables and meat. A typical marketing channel from producers to consumers is shown in Figure 1. Producers retain ownership of their produce until it is purchased by a retailer or store owner at auction. Agricultural co-operatives and auction houses receive a fixed percentage of the sale price. The products for sale at an auction are classified by producer and quality attributes. The agricultural co-operatives and auction houses involved in the sale have a strong incentive to maximize the prices paid to producers, as they receive a fixed percentage of the sale price, but this does not appear to have succeeded in making Japanese agriculture attractive to a new generation of farmers. The number of full time Japanese farmers continues to decrease and most farmers have reached or are approaching old age (MAFF, 1999).

Direct marketing between farmers and professional distributors to supermarkets is another marketing channel encountered in Japan. This approach eliminates one stage in the marketing chain, but does not differ substantially to the auction system.

The price of goods in a mainstream market

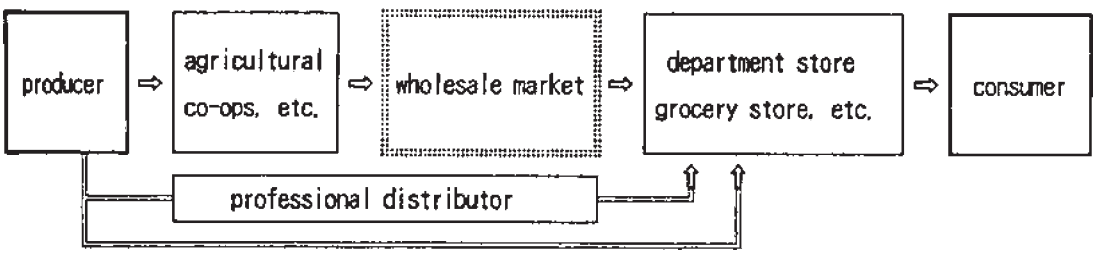

Figure 1 A typical mainstream marketing channel in Japan (Kazuo,1987).

is determined by the consumer's need and the appearance and quality of the product. The origin of the product, conditions under which it was grown, and issues such as human dignity and the environment are of no concern. The sale of organic agricultural products in mainstream markets is based on market mechanism or supply and demand alone, with prices being determined by profit motives.

The situation is different for organic agricultural products, which are distributed through alternative markets. Alternative marketing provides more than just a direct link between producers and consumers by an organization or agent. It also encourages everyone involved to think about equity issues and construct relationships which link farmers and consumers together within the community. Examples of equity issues are a philanthropic approach aimed at tackling poverty and creating social justice and ecological awareness which aims to conserve the environment by supporting farmers whom use less external input. This system allows the social capital embedded in society to play a crucial role in weaving a relationship between consumers and farmers and created a new institutional arrangement or community

A range of different agents operate in an alternative market system, including consumer or farmer cooperatives, NGOs representing farmers or consumers, delivery agents, and others. Even though the amount traded in alternative market systems is currently small when compared with the mainstream market, alternative markets are growing at a healthy rate. The sustainable development agenda, which aims to balance social, environmental, and economic needs, supports the growth of alternative market systems.

Alternative marketing systems came to prominence in Japan more than 40 years ago, based on an effort to solve the problems of the time by forming co-operative to use existing social capital to create a collective purchasing network. The Seikatsu Club, a Japanese consumer co-operative (see below), describes the context in which alternative marketing systems developed as follows.

"All over the country, the Japanese worked long hours with few vacations for little pay. Eager to further spur incentive, in 1960, Prime Minister Hayato Ikeda promised to double personal income within ten years. Although he remained true to his pledge, the cost to the Japanese people was an annual inflation rate of 10 percent. Motivated by the fundamental need to combat rising prices, in June 1965, one housewife from Tokyo organized 200 women to buy 300 bottles of milk. It was one of the first collective purchases." (Seikatsu club consumer co-operative, n.d.)

The alternative agricultural marketing movement in Japan is based largely around the *sanchoku* and *teikei* systems. Both systems have developed in parallel with the mainstream market. They emphasize not only the commercial value of the product, but also the value of the quality of human life (for both farmers and consumers), and social and ecological awareness. However, they differ in details of organization or structural form of social capital such as size and structure of organization, and include the various level of cognitive form of social capital in the exchange between consumers and farmers.

The *sanchoku* system: consumer co-operatives working through a delivery agent

Japanese consumer co-operatives, or s*ie kyo,* were originally founded before World War Two, but they were shut down by the militaristic government of the time before starting again in the 1960s. Under the *sanchoku* system, co-operatives operate through a distribution agent who acts as a consumer representative serving the needs of members. Although the agent's role is not unlike that of a middleman in the conventional market, personal profit is not the central aim of their work.

The *sanchoku* marketing system is based around three basic principles which can be summarized as follows: (Ada *et al.*, 2000)

1. The origin of the product and the name

of the producer should be clear to the consumer.

2. The consumer should know the method of production. The essence of the *sanchoku* system is that producers are contracted by consumer co-operatives to supply primary products directly from the farm or fishery to the co-operative.

3. There should be exchanges between consumers and producers. Consumers are encouraged to visit suppliers' farms and special events are organized by co-operatives to allow members to see how their food is produced.

Consumer co-operatives have contributed to the development of social capital in its cognitive form in urban areas by starting on a small scale among members who were usually housewives and establishing joint management through volunteer staff. Social capital in the structural form has developed as groups have subscribed to the *sanchoku* principles, set up their own rules for managing themselves, and agreed on principles and activities which would allow them to achieve their goals. The structural form of social capital in a co-operative usually falls under the control of the staff and management team of the co-operative.

Japanese consumer co-operatives have used a variety of activities to weave relationships between themselves and their members. *Han,* or joint buying, is the first example of these activities which we will examine. *Han* is an important characteristic of Japanese consumer co-operatives, accounting for around 45% of total regional co-operative sales. The objective of *han* is to reduce the price of products and to provide a fresher, healthier product to members, but it also encourages the accumulation of social capital by developing relationships among members and between co-operatives through the placing of joint advance orders.

Using the joint buying system, members living in the same neighborhood form a *han* group, which places weekly orders using a catalogue for delivery in the following week. This system does not involve the large investment required for stores and is seen by many members as very convenient, saving shopping time and contributing to a better household economy through planned purchases of essential household items. It provides a weekly meeting for the members, who are mainly women, and also fosters and strengthens the spirit of mutual sharing and caring among members**.** (Ada *et al.*, 2000)

The *han* system is efficient and effective, and has been enhanced by the advent of optical character readers and computerization to handle the weekly order forms and direct debit payment from members' bank accounts. At the present time, the membership of *han* groups has been decreasing for a variety of reasons such as the influence of Western culture, new technology, and increases in the number of convenience stores. Consumer co-operatives have nevertheless tried to maintain this service as much as they can.

Communication between consumer co-operatives and their members is another example of how relationships are enhanced. Leaflets from farmers, packaging, and producer information contain not only important details about the product, including its origin, the production process, and methods for using it, but also pictures and histories of producers. Weekly or monthly catalogues from which members order products show farmers' faces and give information about them. These methods of communicating with members generate a cognitive form of social capital at the same time as conveying information.

Consumer co-operatives also arrange a number of different activities for members relating to the environment, welfare, society and culture. These are organised by various committees which consist of both members and co-operative staff. Typical activities include study groups, forums about topics of interest, workshops about cooking or home maintenance, parties among *han* members, or farm visits.

Another example of relationship building among Japanese consumer co-operatives is the production of Co-op Brand products, including processed food and general merchandise. These

products are made at the national level by organizations such as the Japanese Consumer Co-operatives Union (JCCU) or *Seikatsu* Club Consumers' Cooperative Union (SC – see below) and distributed to the prefecture level or individual co-operatives. There are now more than three thousand Co-op Brand products and each product are guaranteed for safety and reliability and laboratory tested. A current example that demonstrates a concern for providing safe products is the banning of products derived from genetically modified organisms (GMOs).

Every co-operative supports the distribution of Co-op Brand products, and sale of Co-op Brand products not only generates profits to co-operatives for return to their members at the end of the financial year, but also increases awareness of ecology and environmental protection and fosters philanthropic attitudes among members. Sale of the products helps to build stronger relationships among consumer co-operatives and also within the Japanese consumer co-operatives network which is coordinated by JCCU at the national level.

JCCU (1994) is a central organization for consumer co-operatives. It provides services to support consumer co-operatives, including:

1. A wholesale service, for example by producing Co-op Brand products for distribution.
2. Consumer activities at the national level, such as a recycled paper campaign.
3. Education for co-operative staff for both on-the-job and off-the-job training at JCCU's own co-operative college.
4. Co-operation with other co-operatives outside Japan and import of products for Japanese consumer co-operatives.

JCCU's activities and organization represent a cognitive form of social capital, which is especially important in developing trust among co-operatives.

Japanese consumer co-operatives are among the largest consumer buying groups in the world. With more than 17 million members, a 2.6% share of the Japanese retail market and a 7% share of the Japanese food market, co-operatives are the largest retail group in Japan. There are 437 retail co-operative societies located throughout Japan, with at least one major co-operative in each of the 47 prefectures. (JCCU, 1994)

The *teikei* system: organizational diversity but common goals

Teikei is an alternative distribution system independent from the mainstream market. Though the forms of *teikei* vary, it is basically a direct distribution system through which producers and consumers contact each other and negotiate to support their own deliveries. The *teikei* system usually delivers produce to set delivery stations, where consumers living nearby (usually 3-10 families per point) can pick up the delivered goods (Figure 2). Distribution agents within the *teikei* system can come from a variety of backgrounds, such as farmers, NGOs, or private delivery agents. They distribute only chemical-free organic products.

The Japan Organic Agriculture Association (JOAA), a non-profit voluntary organization, was originally formed by a group of consumers and farmers and has become the main organization promoting organic agriculture in Japan, introducing the concept of *yuki* to Japanese society in the early 1970s. JOAA not only introduced farmers to the idea of growing organic produce without chemical additives, but also introduced the idea of a 'human relationship' between producers and their consumers. JOAA is now the coordinating agent in a network of consumers, farmers and other delivery agents at the local and national level, and the JOAA network believes that the *teikei* system is a fundamental requirement for conserving nature and allowing farmers to exist with dignity.

JOAA has established ten principles of *teikei* to define how *teikei* systems should operate. The ten principles were first introduced in November 1978 and can be summarised as follows: (Minamada, 1995)

1. To build friendly and creative relationships, not just meeting as mere trading partners.

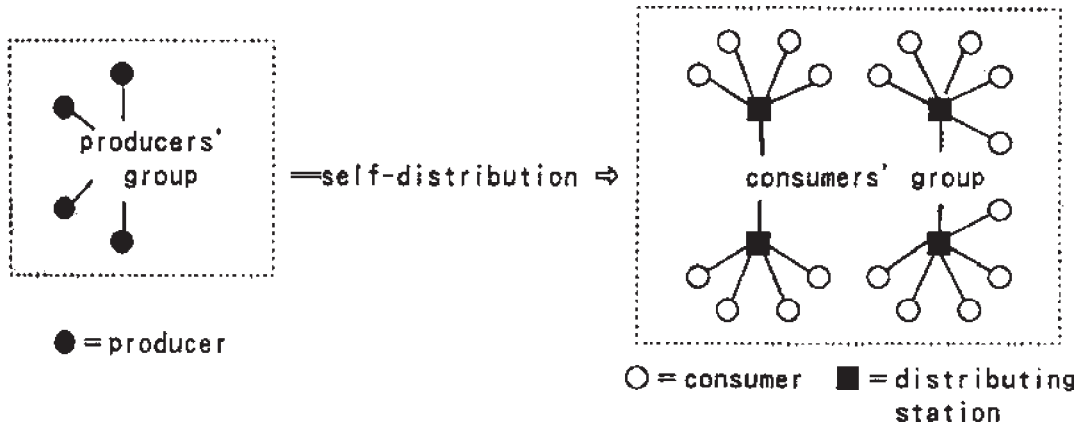

Figure 2 Example of a typical *teikei* distribution route between producers and consumers (Marayama, 1993).

2. To produce according to pre-arranged plans to meet an agreement between the producer(s) and the consumer(s).

3. To accept all the produce delivered from the producer(s).

4. To set prices in a spirit of mutual benefit.

5. To deepen mutual communication so as to generate mutual respect and trust.

6. To manage self-distribution, either by the producer(s) or by the consumer(s).

7. To be democratic in managing group activities.

8. To take an interest in studying issues related to organic agriculture.

9. To keep membership of each group to an appropriate number.

10. To continue in making steady progress even if slow, towards a final goal of organic agriculture and an ecologically sound life.

These principles bring farmers and consumers together as partner and members of the same group or community and help generate a structural form of social capital. Principle number 9 ensures that the size of a *teikei* group is small and therefore closer and easier to manage, facilitating a more rapid accumulation of social capital. Besides promoting healthy products, ecological awareness and alternative relationships, the *teikei* system also promotes self-sufficiency. Food is distributed and consumed in the same area as it is grown.

Various activities take place which help to weave stronger relationships, such as meetings to develop techniques and management skills, promotion of communication among members through the monthly magazine 'Soil and Health', and co-operation in activities with other organizations, such as supporting the Ministry of Agriculture, Forests and Fisheries in establishing the Japanese Agricultural Standards scheme. These activities allow deeper communication and information sharing among *teikei* communities, representing accumulation of a cognitive form of social capital.

JOAA currently has about 4,000 individual and 40 group members all over Japan, with farmers, consumers, co-operative members, journalists, and others included in the membership. [15]

The level of social capital embedded in each agent made different output & performance.

The level of social capital embedded in each system is summarized in Table 3.

As was mentioned in the sections above, previous generations in Japan has had large amounts of cognitive social capital in the form of norms and values, helping Japan become a very group-oriented society. These social capital elements were also embedded in the mainstream market assisted the performance of exchange systems and reduced the

uncertainty of complex environments. However, there are no formal organization or structural forms of social capital in this system. Although the wholesale market or central market is the basic organizing principle in the exchange system, it is only a business organization or economics institution, not a social institution. In this construct the actors are the buyer and seller which exchange goods and services based on the market (rules) under the maximized profit objective (norms). The exchange value in this system is based on market price or economic value. The decisions of each individual

Table 3 Differences between direct marketing in the mainstream market and *sanchoku* and *teikei* systems.

Marketing System	Mainstream	Alternative	
		Sanchoku	*Teikei*
Social Capital - Structural form:			
Roles	Seller	Consumer representative	Partners
Rules	Market system	*Sanchoku* principles	*Teikei* principles
Relationships	Free market	Membership	Partnerships committee
		Han joint buying service	Farm visits / joint activities
		Product catalogue and newsletters	Product catalogue and newsletters
		Member activities	
		Co-op Brand products	
Networks	Market	JCCU	JOAA
Precedents	-	Voluntary staff from consumer side	Consumer initiated
Procedures	-	Consumer co-op management under *sanchoku* principles	Management differs with each agent under *teikei* principles
Social organization	-	Consumer co-operatives (formal organization)	Farmer, NGO, private agent (formal organization)
Horizontal linkages	Market mechanism	Membership	Partnership
Social capital – cognitive form			
Norm	Maximise profit	Improve human welfare	To create an organic agriculture based society
Values	Economic	Human and economic	Human and ecological
Attitudes	Buyer and seller	Member of a society	Partnership in a society
Beliefs	Information (price and quality)	Consumer co-op as consumer representative	Friendly and creative relationships
Civic Culture	-	Participate in activities on relevant topics	Participate in activities on relevant topics
Trust	Not sure	Between members and their consumer co-op as a consumer representative	Between farmers and consumers as partners or friends
Agent/Distributor	Any agent	Consumer co-operatives	Farmer, NGO, private agent
Output (product)	General	Safe products	Organic products
Performance	General	Equity and mutual help society	Partnership of organic agriculture based Community

actor in the exchange are based on self-interest and the appearance of "perfect" information, which they get such as price and product characteristics. Social capital in cognitive form has remained in Japanese society until the present time. However, the accumulation of social capital is negative and will gradually disappear through time if not continually used.

Value in the mainstream market is defined as a market price negotiated between seller and buyer under the principle of profit maximization. The production of agricultural products may not take into consideration potential environmental impacts. It requires an outside actor, often "government," to intervene in this market to regulate the definition of market value to include environmental considerations. Recently, the MAFF: Ministry of Agriculture, Forestry and Fisheries of Japan established labeling regulations for organic agricultural products under the JAS: Japanese Agriculture System of labeling scheme to control the quality of product. Inspection and monitoring is an additional cost to society, though it is shared between the government and stakeholder. This additional cost is lower or not applicable in alternative markets because it was eliminated or off set by the social capital in their organization to support organic agriculture and other safe growing practices.

Formal organizations or structural forms of social capital exist in the alternative market system as well as cognitive forms such as their concern for human and ecological value and inclusion of social factors in their operations. Although the level of social capital embedded in the *sanchoku* system may be lower than *teikei* system; the scale of organization in the *sanchoku* system makes the chance of collective action among members higher.

Consumer co-operatives perform the role of distributor organization or the structural form of social capital in the *sanchoku* system, creating the cognitive form of social capital through its operational characteristics and various activities. They focus primarily on the chemical safety of agricultural products and generating greater environmental awareness among farmers.

Each of these is an autonomous organization; able to develop services for members or to emphasise any activities it prefers which effect the level of available social capital. The following examples are instructive:

Some consumer co-operatives such as *Osaka Yodogawa* Consumers' Co-operative Society (*Yodo*) and *Tohto* Consumers' Co-operative Society (*Tohto*) accumulated social capital throughout the nation by using a sub-contractor to import safe, low-chemical bananas and shrimp products from Thailand and other countries. *Yodo* have arranged for their consumers to visit Thai farmers and have also invited Thai farmers to visit the co-operative and meet their consumers which make the relationship between Japanese consumers and Thai farmers is strengthened. Even though the price of bananas imported from the Philippines is more competitive than the price of Thai bananas, *Yodo* continue to demand Thai bananas.

Some co-operatives such as *Tohto* have created a deep relationship with farmers through the *sanchoku* system. *Tohto's* staff not only feed information from members back to farmers, but also discuss marketing trends and suggest new products with a business development section for their producers such as the *JA Yasato* farmers' co-operative. New varieties of product or food processing techniques suggested by existing producers are always introduced to consumers. An organic products section was established in 1999 under the co-operative's 'Ecological Planning Scheme', under which 18 organic farmers supply products which meet JAS organic standards. Product prices first reflect the farmer's cost and profit, with about 25% added to cover overheads and profits for the co-operative.

Even though the prices of organic fruit and vegetables sold by the co-operative are 30-40% higher than prices for low chemical products, these prices are still lower than organic prices in the

supermarket. *Tohto* has very clear aims for conserving the environment and planning harvesting, but cannot produce organic food over the whole year. Consumer demand is currently very small but the trend is gradually increasing. As a result of its activities *Tohto* has become one of the most active co-operatives in organic agriculture.

Although most consumer co-operatives become ingrained social institutions, they still limit their activities among their members and society in their location. The *Seikatsu* Club Consumers' Cooperative Union (SC) is an exception to this rule. SC aims to offer high quality goods and promote sustainable lifestyles which respect human values and the environment and contribute to a just and fair world - a significantly different approach to most other Japanese consumer co-operatives. SC provides similar services to other consumer co-operatives but is also active in politics and is organised as a worker's collective, being motivated by the welfare of the people in its community rather than profit-oriented employment. The co-operative's success in achieving its aims has been reflected in winning two prestigious international awards: the Right Livelihood Award from Sweden, and the 50 Community Award from the United Nations.

There are various delivery agents such as farmers and consumers, both as individuals and groups that act as formal organizations or structural forms of social capital in *teikei* system. They also provide the cognitive form in their operations, deepening the level of social capital available, as shown in the following examples:

Farmer groups in *Myoshi* village have a long continuing relationship with consumers in Tokyo. A small group of housewives from Tokyo to *Myoshi* village in 1973 began this relationship when they asked farmers in the village to supply organic products to the group - which at that time was an innovative idea. Village farmers began to grow organic produce and a relationship of trust and mutual help gradually developed between the consumers, who accepted all the products from the first crop, and the farmers, who tried their best to develop techniques for growing organic products. The relationship continued to develop from being producers and consumers to becoming members of the same group and finally becoming partners in the same community as each organic crop was grown season after season.

Prices were mutually agreed without referring to any market prices and consumers paid a fixed amount of money each month for farmers to deliver a box of fruit and vegetables to their home once a week. The price of some products remained stable for as much as eight years. A number of committees were established to run various activities, such as constructing and operating 'Our House', a place where group members could stay during visits, for example during the farmers' festival or '*en no*' events where they learnt about farm life or pooled their labor with farmers. Farmers explain that a relationship of equality emerged gradually between rural farmers and city consumers, developing each time a box of organic products was sent to the consumer's home. Farmers have had the opportunity to learn about the lives of city-based consumers, which they concluded were not dissimilar to their own.

At present the performance of Myoshi group is not only economic dimension for 29 second generation farmers and 900 consumers, with a revenue of about 160 million yen per year, or an average of 5 million yen per farmer per year. (These earnings are higher than those of a conventional full time farmer are.) But *Myoshi* has also achieved the three goals of running an organic agriculture society, establishing an alternative community, and allowing farmers to maintain a higher economic standard of living than that experienced by the majority of farmers through the accumulation of thirty years worth of social capital.

The size of the *teikei* system is currently limited in scale. However, there are two corporations try to expand the scale of operations under *teikei* principles, the *Daiichi-O-Mamoru-Kai* and *Pola*

Hiroba.

Daiichi-O-Mamoru-Kai developed from a 1960s student activist movement, which was active in campaigning against pollution. After graduating, its activist leaders formed an NGO with support from overseas donors. Realizing that the organization's financial situation was not sustainable; they sought other funding options. They established *Daiichi-O-Mamoru-Kai* in 1975 in Tokyo to raise funds, support organic farmers, and deliver organic products to consumers through a membership system. Number of memberships now is over 53,000 consumers, with 2,500 producers and five corporate members. Although the organization does not follow all ten principles of the *teikei* system, the central *teikei* concept of 'trust' still remains at the heart of the organization, with many joint activities taking place between farmers and consumers, production of a newsletter, and provision of information about farmers.

The founder of *Pola Hiroba* was formerly an active member of staff at *Daiichi* who, aware of limitations in Daiichi's operations (principally that the organization was not always business-oriented and thus found it difficult to expand their service beyond the Tokyo area), started a new company. *Polan Hiroba* now delivers JAS labelled organic products through a *teikei* system over a service area, which covers almost all of Japan. Its activities are divided into 6 distribution areas, with farmers and consumers and delivery offices in each distribution area. Information technology and modern management methods are used to support all distribution offices, helping the *teikei* system to expand to a point where even a general consumer can be a member of a *teikei* alternative community.

The principal activities of the *sanchoku* and *teikei* types of organization are usually similar. The two types of organizations do not act as competitors, but as a supplementary and complementary partnership, which creates activities acting as a channel for the accumulation of social capital in both its structural and cognitive forms. So there are some farmers' groups supply products to both *sanchoku* and *teikei* groups such as farmer group in *Kakinoki* village.

Kakinoki village is famous in Japan for its organic farmers' groups and the local municipality has promoted organic farming for more than twenty years. Organic agriculture in the village started from low chemical and safe products and has progressed to no-chemical, truly organic production at the present time. Farmers work within both *sanchoku* and *teikei* systems. Consumer group volunteers visit to help farmers at harvest time and also support farmers in conserving a traditional *tanado* rice terrace system through a rental scheme and land ownership system. Thirty different groups of consumers pay 36,000 yen per yard per year to farmers and in return receive the total production at harvest-time. Farmers benefit from lower rental fees and assistance from consumers at harvest-time

The performance of social capital is not only limited in organic agricultural product but also link to other community development activities such as community food processing, a roadside shop and Eco-tours. Further schemes are under development, such as a 'One Community Many Products' project (developed from a 'One Community One Product' scheme), and an 'I Turn or U Turn' project to encourage the migration of people from the city back to rural communities. *Kakinoki* village has become a successful example of a community, which has developed not only to conserve its ancestral heritage, but also to show that such communities can prosper in the modern world.

At present, there are a number of obstacles to the continued survival of *sanchoku* and *teikei* systems, including:

1. An ageing membership and reduced numbers of voluntary staff.

2. Consumerism and globalisation, which are often seen as factors causing people to become more individualistic and materialistic.

3. New distribution technology, which provides consumers with alternative, often more convenient, channels to obtain safe or organic products, such as through supermarkets.

Organizations currently employing *sanchoku* and *teikei* alternative market systems are actively attempting to overcome these obstacles and adapt to a new environment. Some consumer co-operative like *Tohto* is actively recruiting new members using brochures, weekly catalogues, and samples of safe foods in campaign work. They also recruited professional staff to manage their organization and incorporate the latest knowledge and understanding of human and ecological factors with in their systems.

JCCU and JOAA are not only the organizations joining effort to combat the negative effects of consumerism and globalization by taking actions such as banning GMO products. They also try to communicate to the new generation to realize the importance of creating alternative communities where people can live together in prosperity, peace and harmony, which is the ultimate goal of both systems.

Organizations of both systems are trying to develop better distribution systems through the use of information technology and the creation of a new collection of activities that will deepen relationship among members and increase the available social capital, guaranteeing their long-term sustainability.

CONCLUSIONS

The difference between mainstream and alternative markets is the level of social capital accumulation in each system. Even though Japan has a high level of social capital embedded in previous generations, the market mechanisms, which are geared toward maximizing monetary value, eliminate the importance of social capital. In contrast alternative market systems such as *sanchoku* and *teikei* provide avenues for the accumulation of social capital as a mechanism to create human and ecological value and ultimately a partnership of prosperity, peace and harmony in the community.

The influence and success of *sanchoku* and *teikei* system are evident not only in Japan's growing organic movement, but also outside Japan in places such as Europe and North America, where similar 'community supported agriculture' projects have been underway for many years now.

IMPLICATIONS

During in-depth interviews with the representatives of consumer groups, their answers to a question about how to start an organic movement in Thailand, were very interesting. Most of their answers were the NGO or any person who is interested to promote organic, should support directly first to consumers not farmer by forming a group of consumer like in Europe and USA. Thai social & economic relationships are still basically feudal (patron-client relationship), which makes it more difficult for the average Thai to take an initiative such as forming a farmer-consumer cooperative which might find itself in conflict with various "patrons". Thus small groups of Thai consumer, who have the same empathy and would like to support farmers, must take time to grow slowly, through social capital accumulation. The success of a Sanchoku or TEIKEI system is not like a sand-castle but more like a Roman city, so it takes time. The formation of a consumer group takes time as well, and a main problem is not to stop but to carry on with activities to create trust and mutual help among members.

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