



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*



FOOD SAFETY AND SUSTAINABILITY: THE CASE OF THE NEW ORGANIZATIONAL ARRANGEMENTS BETWEEN RURAL PRODUCERS AND } CONSUMERS OF ORGANIC PRODUCTS IN JAPAN.

*Izabel Cristina Takitane¹
Tania Nunes da Silva²
Eugenio Ávila Pedrozo³*

ABSTRACT

The relationship between consumers and producers is changing, and has impacted governments, organizations, production, and the agribusiness. New standards in food consumption, with a strong emphasis on safety food and production sustainability have becoming worries for these agencies. The Seikatsu Club Consumer's Cooperative (SCCC), case study focused in this paper, can help spread these concepts, improving the relationship with the natural environment. In Japan, this type of cooperative has new contractual arrangements between rural producers and final consumers, called Teikei System, that it was build from of a trusty commitment of them. A brief history of Japanese immigration in Brazil and their large contribution to the Brazilian agriculture development, it was discussed the possibility of these arrangement can established in some cooperatives of rural producers Nikkeys (descendent of Japanese) in Brazil.

Key words: sustainability, network consumers-rural producers, organics food consumption, Japan

INTRODUCTION

Nowadays agribusiness is affected by large changes, one of which is that consumers wish to have more information in the production process; this can modify the traditional supply chain. In this scenario, fair trade occupies an increasing space, concerned not only with economic law, but also with social and environmental aspects.

Agreements which deal with sustainable development improve solidarity at local and international levels, where rural producers and urban consumers attempt to reduce the supply chain, and therefore have major control of production and consumption.

They are revolutions in behaviour which include the concepts of organic production, sustainability and food safety. There have been great changes towards the end of XX Century which have brought people of the world together to fight for larger or global environmental and social causes.

OBJECTIVE

The objective of this work was to study the Seikatsu Club Consumers' Cooperative (SCCC), and how it works with environmental and food safety issues in their daily activity. The network organized between organics Japanese consumers (SCCC) and rural producers under the approach of the production sustainability, network governance and institution

¹PhD Professor, Management and Agroindustrial Technology Department, College of Agricultural Science – FCA/UNESP – Brazil (e-mail: iztak@fca.unesp.br)

²PhD Professor of CEPAN/UFRGS – Agribusiness Researches and Studies Centre, Federal University of Rio Grande do Sul (UFRGS) – Brazil (e-mail: tnsilva@ea.ufrgs.com.br)

³PhD Professor of PPGA/EA – Graduate Management Program – Management School, Federal University of Rio Grande do Sul (UFRGS) – Brazil (e-mail: eapedrozo@ea.ufrgs.br)

process was another objective analysed in this paper.

METHODOLOGY

This is a Case Study which YIN (1994) describes as an empirical research investigating a contemporary phenomenon within a true life context when the borders between the phenomenon and the context are not clearly evident and multiple sources of data are used.

The nature of this study is exploratory (SELLTIZ et al. 1975), it aims to understand how the Japanese consumer cooperatives work, their origin, principles, relation with production sustainable and food safety concepts.

Secondary data were collected from selected bibliographies and material on this type of cooperative. The primary data was from non-structured interviews with Japanese researchers and personal observations by the first author, who lived in Japan between October 2001 and April 2002, and was submitted to context analysis.

Observations occurred during visits to organic distribution companies, who get their products from individuals or groups of rural producers; there are many private distribution companies in Japan. Interviews were conducted with Japanese professors from Kokugakuin University and Tokyo University of Agriculture and Technology, both located in Tokyo.

The data referring to the Nikkeys, rural producers and Japanese immigration in Brazil, were collected from selected bibliography; observations and contacts with managers of many Nikkey cooperatives were made at the 4th Seminar of Revitalization of Nikkey Cooperatives; this event was coordinated by the Japanese International Cooperation Agency (JICA) and the Central Agricultural and Colonization Cooperative of Brazil (NOTAKYO), in January 2004, in Sao Paulo, where the first author participated.

The culture of these Japanese descendents led to the creation of big rural cooperatives in Brazil such as Cotia Agricultural Cooperative (CAC) and the South Brazil Agricultural Cooperative, according to Census of Cooperative Nikkeys, performed by the Central Agricultural and Colonization Cooperative of Brazil (NOTAKYO, 2004), after bankruptcies in 1990's, ex-cooperative members created 42 new cooperatives to maintain the producers on theirs land.

LITERATURE REVIEW

Forsman and Paananen (2002) emphasize the importance of working with a short supply chain and local food production system when producing food on a small scale, with triangular participation of producers, local processors, and consumers and food units working towards improving value.

Organic food (without chemical or with a reduced amount of chemicals) consumption in Japan, represents US\$4 billion per year; this consists of vegetables and fruits (70%), rice (20%), processed and other foods (10%). This market has a growth rate of 20% per year, with a forecast of 15% yearly growth over coming years. It is estimated that the conscious consumer will be willing to pay 20% to 30% more for organic products compared to traditional ones. This is why in 2001, the Japanese government launched new rigid standards for the organic food industry. This article discusses solutions to these problems focusing on Japanese knowledge and practices on the convergence of consumers and food producers, agricultural sustainability and food safety.

SUSTAINABILITY AND FOOD SAFETY

Sustainability is understood as “a transformation process in which the exploration of resources, direction of investments, orientation of technological development, and institutional



change harmonize and reinforce current potential , to be able to see the human needs and aspirations” (CMMAD,1991). It deals with a global development strategy which in 1970’s and part of the 1980’s was known as eco-development and more recently sustainable development. This approach is concerned with biological diversity, the quality of life for future generations, and minimizing poverty and generating jobs (DOWNES 1998).

In Japan, sustainability involves working with organic agricultural products with the application of new and appropriate technologies which require investments in environmental management systems, which in turn causes an impact on intensive production systems. Nowadays there are about 2,300 different agrochemical products in about 270 crops worldwide; foods on supermarket shelves contain a variety of chemical residues, that not only impact the soil, but also to the human health. Consumers are worried about the risk of water and food contamination which is a direct consequence of traditional production. Its impact on the ecosystem is growing and it has become an area that requires multidisciplinary studies.

The term food safety can mean food security and safety. The first is related to the available quantity or capacity of food in countries to satisfy the safety/security of its people’s needs (TEIXEIRA 1981; OLIVEIRA and THÉBAUD-MONY 1997). Food safety is related to the quality related to the health and safety of consuming healthy products (SPERS, 2000).

COMMUNITY SUPPORTED AGRICULTURE (CSA) OR THE JAPANESE TEIKEI SYSTEM

In Japan, Community Supported Agriculture (CSA) known as the Teikei System, has established a direct relationship and cooperative between producers, consumers and the land, according to the seasons, and produces organic food for a balanced diet and with good nutritional characteristics that mean secure food that arrives weekly in consumers’ houses (safety food).

This system represents the JOAA (Japanese Organic Association of Agriculture), which was founded in 1971 and is a voluntary non-governmental organization that supports itself exclusively from member contributions and does not permit advertisements related to economy in its monthly paper, which remains independent.

The Teikei System is an alternative distribution system independent of the conventional market, a dynamic philosophy which is applied in the consumer cooperatives (Seikatsu Club), with the objective of collective purchasing. Damstrom (2001), mentions that Japan imports 60% of its food needs, although there is a government goal to reach 45% self-sufficiency by 2010.

Environmental and child education is fundamental in the spread of this philosophy which originated in the 1960’s in Germany, Switzerland, and Japan. In the latter in 1965, Japanese housewives were worried about the increase of imported foods and the loss of agricultural lands, so they began the first CSA project called the Teikei System (SAWANOBORI 1993), which has received huge support from Japanese people worried about environmental degradation, contaminated food, and the intensive use of chemical additives. According to Sawanabori (1993), the Teikei System’s principles can be summarized as follows, 1) build creative and friendly relationships, not just commercial partnerships; 2) produce to a previously adapted plan agreed between producers and consumers; 3) accept all products delivered by the producers; 4) establish price based on mutual benefit; 5) sound two-way communication, with mutual respect and trust; 6) administrate its own distribution, whether by producers or consumers; 7) be democratic in group activities; 8) take an interest in studies related to organic agriculture; 9) maintain the appropriate number of members in each group; and, 10) maintain good progress always directed towards the administration’s ultimate goal the striving for organic agriculture and an ecologically healthy life.

SANCHOKU SYSTEM

After the Second World War new ways of cooperative life began to spring up all over the country with strong pleas for quality of life. The definition of consumer livelihood cooperative, for example, was adapted from the Consumers' Cooperative Act in 1948.

In the 1960's, in response to the increased demand for agriculturally safe products, the consumer cooperatives began to have discussions with rural producers in various regions of Japan to find an agreement which would allow direct transactions between producer/consumer; this was the beginning of the Sanchoku System. According to Evanoff (1998), this is a decentralized model, and the opposite of the current global market model; it was established from the Teikei System.

There are several systems like the Sanchoku System in Japan, which was developed by the Seikatsu Club; these agreements can vary from agent to agent, but there are three basic principals, which mark all cooperatives involved:

1. production locales and producers can be identified;
2. growth and rearing methods (agricultural chemicals, fertilizers, animal fattening methods, feeds, etc) must be identified; and
3. producer consumer meetings must be held regularly.

In 1999, consumer cooperative turnover using the Sanchoku System reached ¥300 billion (US\$250 billions) in all Japan; according National Research in 1994, 34.2% was vegetables and fruit, 33.4% rice and cereals, 17.6% fish, and 16.3% perishable processed food sold by the consumer cooperatives (OMORI, 1999).

SEIKATSU CLUB

The Seikatsu Club means life, trying to make a fair world, practicing a more sustainable lifestyle in people's daily activities. It is the largest network of consumer cooperatives in Japan, and the club's local societies can include thousands of people and runs up to 15 farms. Many farms created using the Community Supported Agriculture approach, formed associations or networks to exchange information and ideas, to educate consumers and to maintain new or running farms. The Seikatsu Club consisted, in 2002, of 600 cooperatives, with 250,426 members, and attended 21.04 million people in Japan (total population: 127 million), the majority being women. It has an association of 21 consumer cooperatives, spread over 15 administration divisions (counties) of Japan (Outline of Seikatsu Club, 2002).

The basic organizational unit of the Seikatsu Club is the HAN, which is a small local group of 7 to 10 neighbours with their own administrative activities. The 200 Hans are responsible for collecting the orders, for sending these orders to the local centre, and for receiving the products that are delivered by lorry. The products are delivered twice a week in the neighbourhood of the Han, and subsequently distributed to the members. It eliminates the need for artificial preservation methods, such as irradiation; there is no need for stores or commercial investments in buildings; these savings result in lower prices for the consumers (EVANOFF 1998).

For the XXI Century, the Seikatsu Club established four main directions for its operations: creation of new life styles that protect the environment and people's health; promotion of fair trade; resistance to control by the State or corporations with personal interests; and help for women to have more independence (BANSAL et al., 2000).

The Seikatsu Club operates under 2 basic principles; one is autonomous democratic administration, stimulating participation from all members; and the second is to maintain the close relationship between members of the cooperative (consumers) and the producers, according to



environmental principles creating an economic feeling where consumer cooperatives supply household goods without compromising health or the environment. According to Worth (1993) quality inspection is performed by representatives specifically elected for this function. The Seikatsu Club acts as follows: "Think globally, act locally".

JAPANESE IMMIGRATION IN BRAZIL AND AGRICULTURE

After having presented the new contractual arrangements that exist in Japan between rural producers and consumers, we will now give a brief history of Japanese immigration in Brazil where the tradition vocation of agriculture for Japanese immigrants and their descendents, actually in the fourth generation (yonsei).

Japanese immigration began in 1908 and there were about 260,000 Japanese immigrants who moved to different regions of Brazil. They were concentrated in the states of Sao Paulo and Parana (SAKURAI, 1998). In the 1990's, there were approximately 1.3 million Nikkeys (Japanese and descendents) in Brazil, 900,000 of whom were in Sao Paulo State, making up the largest Japanese descendents community in the world.

In spite of the huge contribution these immigrants and their descendents have made to the Brazilian agriculture development, during the period 1940 to 1970; in 80's decade with a stagnant economy, many Nikkeys, who suffered financial losses in rural activity, or who were receiving low salaries or were unemployed in the cities, resulted in the phenomenon Dekassegui, with many thousands of Nikkeys going to work in Japan. It was estimated that currently 40% of the economically active Nikkey population in Brazil, around 230,000 are in Japan, the main objective being to help to support their families who remained in rural Brazil, or to become owners of some type of commercial or services enterprise in their home city.

A promising strategy for economic survival of family agriculture resides in sustainable production, by its scale that favours minimizing environmental impact, exploiting market niches, with product differentiation. Diversification allied to higher value products is a competitive differential for small producers in maintaining economic and social viability. Organic farming is an example of maximizing economic, social, and environmental variables; and according to a study by the BNDES technical team (ORMOND 2002), crops with the largest production areas given over to organic management are: fruit (11.26%); sugarcane (11.19%); heart of palm (7.72%); coffee (4.82%); soybean (4.64%); and vegetables (1.11%). In relation to producer numbers, organic crops are; soybean, vegetables, coffee, and fruit.

The possibility of implementing contractual arrangements similar to those found in Japan between rural producers and consumers can be studied helping to develop strategies for rural Nikkey producers where a part of these producers work with the perspective of sustainable production for the best quality products which could be destined for the internal market and export, bringing value to the product and consequently improving the income and quality of life of these family Nikkey producers.

There are no reports on implantation of the Teikei or Sanchoku System in Brazil. But since many Nikkeys are already in production cooperatives, it is important that this experience of direct relationship with consumer cooperatives would be tested.

FINAL CONSIDERATIONS

The Japanese are very concerned about the concept of food safety and fair trade favouring production and local commerce in such as that they produce healthy non-polluting products, free of chemical additives, veterinary remedies, synthetic fertilizers and pesticides.

Since the 1960's they have been organizing new relationships between producers and con-

sumers. Thus, appeared the Seikatsu Club consumer cooperative, which also valued the quality of agricultural products along with commercial requirements. This is more than an interesting economic relationship; it is the willingness to pay more for products which are monitored and guarantee consumer quality requirements.

The Teikei System through an integrated production network following the principles of food safety, sustainability, and fair trade, share the benefits with the organic producers who have the guarantee of a fair price; this would significantly contribute to the development of Nikkey farmers in Brazil since many of them have found themselves in financial difficulties

This type of operation that links non-profit organizations and socially responsible business with the objective of working in both an equality-oriented and an efficiency-oriented approach can make a significant contribution to not only improving social, environmental, and ethic values, but also to the relationship between the high-power Japanese buyers and the poorer Nikkey producers in Brazil. This alternative needs to be more fully investigated with further research under the scope of Brazilian agribusiness.

REFERENCES

BANSAL, PRATIMA & ROTH, K. Why companies go green: a model of ecological responsiveness. *Academy of Management Journal*, vol. 43, n.4, 717-736, 2000.

CADASTRO de cooperativas nikkeys. São Paulo: Cooperativa Central Agrícola e de Colonização do Brasil (NOTAKYO), 12p, 2004.

CMMAD - COMISSÃO MUNDIAL SOBRE MEIO AMBIENTE E DESENVOLVIMENTO DAS NAÇÕES UNIDAS Nosso futuro comum. Rio de Janeiro: Editora Fundação Getúlio Vargas (FGV/RJ), 1991.

DAMSTROM, C. Food supply market for Japan. Available in: <http://www.norsoy.com/html/japan_market_profile.html> Accessed on: April, 22, 2003.

DOWNES, A. Education and sustainable development: historical perspectives and projections for Barbados. In: *Education: Inter-American Review of Educational Development*, v.39, n.120, p.60-82, 1995.

EVANOFF, R. A look inside Japan's Seikatsu Club Consumers' Cooperative. *Social Anarchism*. Baltimore, v. 26, 1998. Available in: <<http://library.nothingness.org/articles/SA/en/display/247>> Accessed on: June, 5, 2003.

FORSMAN, S. & PAANANEN, J. Customer value creation in the short food supply chain: theoretical aspects and explorative findings. In: TRIENEKENS, J. H.; OMTA, S. W. F. (eds.). *Paradoxes on food chains and networks*. Agricultural University – Management Studies Group Wageningen University. In: *Proceedings of the Fifth International Conference on Chain and Networks Management in Agribusiness and the Food Industry*. Noordwijk, 06-08 June 2002. Wageningen: The Netherlands: Wageningen Academic Publishers, p. 153-163, 2002.

OLIVEIRA, S. P.; THÉBAUD-MONY, A. Estudo do consumo alimentar: em busca de uma abordagem multidisciplinar. *Revista de Saúde Pública*. v. 31, n. 2, abr. 1997.

OMORI, H. Food safety and Japanese Sanchoku System. In: *Proceedings of ICA Congress and General Assembly, Québec, Canadá*. Adding value to membership: the co-operative challenge for the new millennium, 1999.

ORMOND, J.G.P. et al. *Agricultura orgânica: quando o passado é futuro*. Rio de Janeiro, RJ:BNDES, 2002. 31p. (BNDES Setorial, n.15).

SAKURAI, C. Imigração japonesa para o Brasil. Um exemplo de imigração tutelada – 1908- 1941. In: *Encontro Nacional da ANPOCS, 1998, Caxambu, MG*. Available in: <<http://>



www.anpocs.org.br>. Accessed on: March, 19, 2003.

SAWANABORI, S. Teikei system, the producer-consumer co-partnership and the movement of the Japan organic agriculture association. In: IFOAM Asian Conference, 1993, Saitama, Japan. Available in: <<http://www.jca.apc.org/joaa/english/teikei.html>>. Accessed on: July, 6, 2003.

_____, Outline of Seikatsu Club Group introduction, 2002. : Available in: <<http://www.seikatsuclub.coop/english/top.html>> Accessed on: April, 27, 2003.

SELLTIZ, C. et al. Métodos de pesquisa nas relações sociais. São Paulo: EPU/EDUSP, 1975.

SPERS, E. E. Qualidade e segurança em alimentos. In: ZYLBERSZTAJN, D. & NEVES, M. F. Economia e gestão nos negócios agroalimentares: indústria de alimentos, indústria de insumos, produção agropecuária, distribuição. São Paulo: Pioneira, 2000.

TEIXEIRA, Ib. Segurança alimentar ameaçada. Conjuntura Econômica, Rio de Janeiro v. 35, n.12, pp. 109-113, dez 1981.

WORTH, M. Community economics. In Context. In: Toward a sustainable world order, v. 36, fall 1993, p.24. Available in: <http://www.geocities.com/RainForest/7813/c_teikei.htm>. Accessed on: March, 23, 2003.

YIN, R.K. Case study research: design and methods. 2ed. Thousand Oaksca: SAGE Publications, 1994.