

## **UMAJI VILLAGE COOPERATIVE INDUSTRY NOTE**

### **A. JAPAN'S ASSOCIATION OF AGRICULTURAL COOPERATIVES ("JA")**

#### **Its roles and issues**

#### **1. JA Introductory Background**

Since agricultural cooperatives play an important role in the socio-economic growth and development of the agricultural sector in Southeast Asia, the underlying issues and background of Japan's association of agricultural cooperatives ("JA") may be worth introducing.

The miraculous growth during the post-war economy of the Japanese can be partly attributed to the systematic work done by JA Group in consolidating people, land resources, food production and providing the needed services for the community. The JAs are a good example of an integrated framework in the service of the farmers. JA stands committed for "3-H Agriculture-Health, High Quality and High Technology".

Some of the interesting features of the agricultural cooperatives include:

- i) a sustainable and progressive amalgamation of cooperatives to make them more economically-viable and service-oriented;
- ii) farm guidance and better living services to enrich their economic and social life; and
- iii) protection of interests of farmer-members.

#### **2. Systematic Approach**

##### **1) Guidance on Farm Management and Technologies**

JA provides guidance to individual members on agricultural production, e.g. technologies and farm management, etc. for a more efficient farm operation, and to promote the organization, the technology to develop and improve agriculture in the communities. Farm guides provide advice on quality improvement and other aspects of production and marketing. Members, with appropriate farm guidance, jointly use machinery and facilities, and purchase production materials, to boost production of regional specialty products.

##### **2) Marketing**

The basic features of the JA marketing systems are:

- a) Unconditional consignment – farmers consign the marketing of their products to JA without any price, time and destination conditions.
- b) Sales commissions –JA collects commissions from the sales proceeds, which cover personnel, communication, and travel expenses, and give the remainder of the money to the farmers.

c) Price averaging – Farmers pooling of same quality products shipped simultaneously and collect a stable income, based on price averaging. Farmers who remit their products in the prefectural whole sale markets or in Tokyo wholesale markets are paid weekly, based on average price. Payments are directly deposited to farmers bank or ATM accounts. However, although the annual traded volume of JA products increased, sales revenues were not improving significantly due to declining prices, as a result of strong yen and increased imports, made worse by stagnant rice prices, caused by a shift in consumer preferences and changing eating habits.

### **3) Processing, value-adding and traceability**

To improve the quality of products for Japanese consumers, JA established several plants for product processing, packaging, cleaning, sorting, grading of farm produce collected from the farmer members,.

For their products, a traceability system was established for quality management. Labels of product packages containing barcodes and information on date produced, JA member-producer where the particular product came from, and other relevant information.

### **4) Small scale-processing**

Some JAs and prefectural federations have the facilities to process significant volumes of agricultural products into quality food. However, most JAs have comparatively small plants used for marketing products for community consumption. Small scale processing of goods also exists, through women associations who are able to access facilities of the cooperative for processing miso and pickles for home consumption.

In some prefectures, the principle of a “one-village, one-product” was practiced, similar to OTOP. JA supports the processing of local delicacies (rice cakes, rice crackers, etc) that promotes regional industries and revitalize small communities.

### **5) JA funds**

In April 2005, the JA Bank began offering Agribusiness Loans to agricultural corporations engaged in various activities like the production of rice, vegetable and livestock, product processing and sales and marketing.

The JA Bank also supports the financial stabilization of agricultural corporations through investments made by the Agribusiness Investment and Consultation Co. Ltd., an affiliate company of the Bank.

In November 2006, the National Federation of Agricultural Cooperative Associations, Kyoei Mutual Fire and Marine Insurance Co., and the JA Bank worked together to introduce a new finance system for effectively using livestock (cattle and pigs) as collateral.

The JA Agricultural Equipment Loan and Greenhouse Loan provides quick response financing for agricultural equipment, greenhouses and other funding needs.

### 3. Lessons from JA

The operation of JA's processing and packaging plants with strict quality control management demonstrates strong commitment for product quality standards which is highly in demand and appreciated by Japanese consumers. JA's adherence to quality standards enables capturing a large market share.

Through farm guidance, JA provides for the welfare of its members and other sectors in the communities, guidance for daily living, insurance, providing credit windows and other production and basic social services. It supports the development of local industries by providing processing facilities for small scale and community-based industries.

Lastly, through its highly diversified businesses, JA's activities contribute to agricultural productivity and food sufficiency while protecting the welfare of its members, thus providing a strong foundation for Japan's agricultural economy.

### 4. The Underlying Issues and the Period of Transition

However, in spite of the efforts and leadership of JA, the Japanese agricultural sector still had fundamental problems on the decreasing farming population.

In 1970, the 8.11 million farming population decreased to 3.32 million by 1995 and further decreased to 2.6 million by 2010, with the farmers above 65 years at 12.1% in 1970 and rising to 50% during the same period. This meant that only 2% of the population supports the agricultural food requirement of Japan.

Aging population in Agricultural sector → Abandoned cultivable farm land →  
Decreased food self-sufficiency rate → Further liberalization of import of agricultural product

As a result of this vicious circle, the contribution to GDP of the agricultural sector dropped from 9% in 1960 to a mere 1% in 2010.

Japan's food self-sufficiency rate also dropped from 79% in 1960 to 39% in 2010. The domestic agricultural products became less competitive in pricing against imported ones. For example, the price of Japanese rice was lower than the international market up to 1953 but now the central government subsidizes the rice farmer by imposing 800% tariff on imported rice.

To cope with such underlying issues, JA has to take steps to implement new strategies in the 21st century.

As one of the immediate measures to tackle this problem, JA started recruiting farm workers from overseas, who were assigned to member-farmers. According to the recent survey conducted by JA, an addition of one young worker contributed to an increase in revenue by

Yen 10 million per year for each farm.

As a long term solution, therefore, JA is expected to promote “Organic and Sustainable Farming” as organic agriculture is growing in the world. Over the past 20 years, the global growth rate is over 15%. However, in Japan, organic agriculture grows very slowly.

According to the Ministry of Agriculture, Fishery and Forestry (MAFF), the rate of organic food is only 0.17%. The most popular item is green tea, with a market share of 1.68%. The amount of domestic organic food is low. Domestic organic produce is 48,596 ton, while imported organic produce is 1,295,266 ton annually. This means that the market share of domestic organic produce is only 3.6%.

Environment-friendly agriculture, including organic farming, can revitalize rural areas and help stop the aging and declining populations in agricultural villages, because organic farming requires more labor, thereby increasing opportunities for employment.

Environment-friendly agriculture also use less energy, because it essentially recycles local resources without using any chemical fertilizers or petroleum-based pesticides. The amount of water required is reportedly about one fifth of that used in conventional agriculture. For the many coming generations, organic farming is the key to sustainable agriculture and JA is expected to play a vital role to promote organic farming practice in Japan.

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References:

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“A Short Cultural History” by Robert Bullock
2. “Development of Agricultural Cooperatives” by Dr. Daman Prakas
3. “Agricultural Cooperative Law, its problems and prospects”, Central Bank  
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## **B. CITRUS FRUIT MARKET**

### **1. WORLD CITRUS FRUIT MARKET**

World production of citrus fruit has experienced continuous growth in the last decades of the 20th century. Total annual citrus production was estimated at over 105 million tons in the period 2000-2004. Oranges constitute the bulk of citrus fruit production, accounting for more than half of global citrus production in 2004. The rise in citrus production is mainly due to the increase in cultivation areas and the change in consumer preferences towards more health and convenience food consumption and the rising incomes. World citrus production and consumption has witnessed a period of strong growth since the mid-1980s up to 2005. Production of oranges, tangerines, and lemons and limes have all expanded rapidly. Larger production levels have enabled higher levels of total as well as per capita consumption of citrus. Even faster growth has been realized for processed citrus products as improvements in transportation and packaging have lowered costs and improved quality.

With rapid output expansion and slower demand growth for some citrus products, however, has come lower prices for both fresh and processed citrus products, especially at the grower level. As a result, the rate of new plantings has slowed. Hence, projected growth rates in both production and consumption over the next ten years are expected to be lower than those realized over the last ten years.

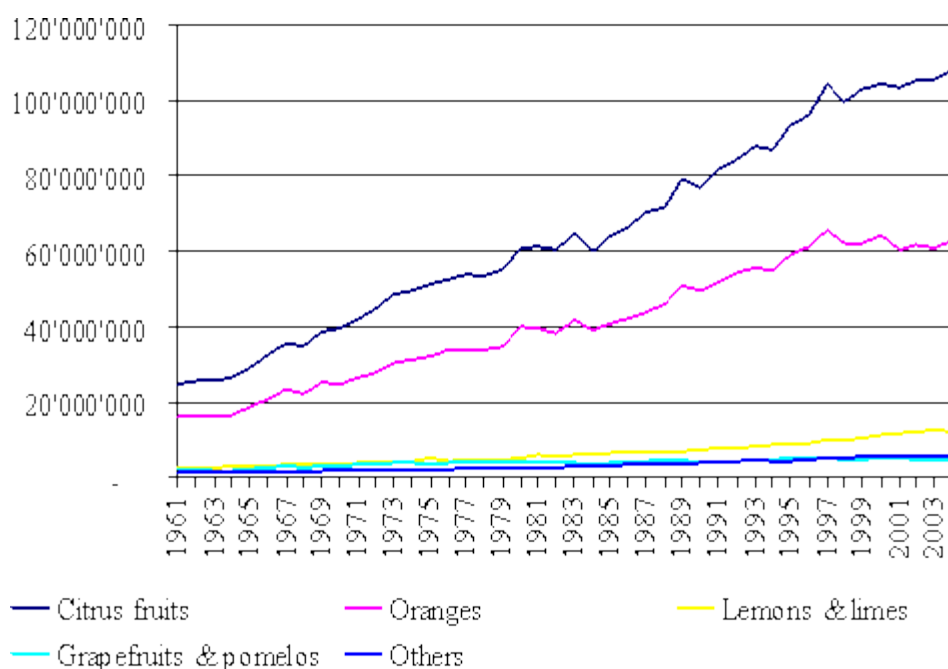
The two largest citrus producing countries: Brazil and the United States are expected to retain their leadership. Sao Paulo, Brazil and Florida, United States will continue to be the two largest processed orange producing regions in the world. With the growth of clementine consumption, Spain is expected to expand its production of tangerines. China will also realize expanded production and consumption of oranges and tangerines. China may also become an important market for processed citrus and fresh grapefruit. Other Latin American producing countries such as Argentina, Mexico, Cuba, Belize, and Costa Rica are also expected to continue to expand production, but at a slower rate. Apart from Spain, European producing countries are expected to continue to experience small declines in production.

Citrus production and consumption in Asia is also expected to expand, but consumption will be supported primarily from domestic production. Many of these countries maintain high tariffs on imports of citrus. Citrus producers in the Near East will continue to compete with other non-agricultural demand for land and water.

Given the uncertain political and economic environment in Africa, production is expected to expand only in those countries along the Mediterranean Sea and in South Africa. Historically there has been little trade among the countries of Africa.

The following chart shows the evolution of world production for total citrus fruits and the different types of citrus:

**World citrus fruit production 1961-2004 (in tons)**



Source: UNCTAD from FAO data

Citrus fruits are produced all around the world. According to FAO data, in 2004, 140 countries produced citrus fruits. However, most production is concentrated in certain areas. Most citrus fruits are grown in the Northern Hemisphere, accounting for around 70% of total citrus production. Main citrus fruit producing countries are Brazil, the Mediterranean countries, the United States (where citrus fruits for consumption as fresh fruit are mainly grown in California, Arizona and Texas, while most orange juice is produced in Florida) and China. These countries represent more than two thirds of global citrus fruit production.

For the different types of citrus fruits, major producing countries are the following, ranked as for 2004 FAO data:

|                  |                                                                                              |
|------------------|----------------------------------------------------------------------------------------------|
| Oranges          | Brazil, United States, Mexico, India, Spain, China, Iran, Italy, Egypt, Indonesia.           |
| Small citrus     | Nigeria, China, Syria, Guinea, Japan, Saudi Arabia, India, Sierra Leone, Angola, Tunisia.    |
| Lemons and limes | Mexico, India, Iran, Spain, Argentina, Brazil, United States, China, Italy, Turkey.          |
| Grapefruit       | United States, China, South Africa, Mexico, Israel, Cuba, Argentina, India, Turkey, Tunisia. |

The bulk of exports of fresh citrus fruits is situated in the Northern Hemisphere, accounting for around 62% of world fresh citrus fruit exports in 2003. The Mediterranean region plays a prominent role as fresh citrus exporter, providing nearly 60% of global fresh citrus fruits exports.

For the different types of citrus fruits, major exporting countries are the following, ranked as for 2003 FAO data:

|                  |                                                                                                      |
|------------------|------------------------------------------------------------------------------------------------------|
| Oranges          | Spain, South Africa, United States, Greece, Morocco, Netherlands, Turkey, Egypt, Australia, Italy    |
| Small citrus     | China, Israel, South Africa, Cyprus, India, Netherlands, Pakistan, United States, Spain, Mexico      |
| Lemons and limes | Spain, Argentina, Mexico, Turkey, United States, South Africa, Netherlands, Brazil, Italy, Greece    |
| Grapefruit       | United States, South Africa, Israel, Turkey, Netherlands, Belgium, Spain, Argentina, Cyprus, Bahamas |

## 2. WORLD ORGANIC CITRUS FRUIT MARKET

The world market for certified organic citrus (fresh and juice) is presently small and production accounts for less than 1 percent of global citrus production. World production of certified organic citrus was estimated at 600,000 tons in 2001. It is estimated that at least 30 countries produce and export certified organic citrus.

Organic citrus is produced in a majority of citrus-producing countries in the Americas, the Caribbean, the Mediterranean rim, Africa and Asia. The largest producing countries are Italy, the United States, Brazil, Costa Rica, Greece and Spain (in the reverse order of importance)

Spain, Argentina, the United States and Greece are significant exporters of fresh citrus, while the main exporters of organic citrus juices are Brazil, Israel, Costa Rica, the United States, Italy, Mexico and Cuba.

In recent years, world production of organic citrus has risen rapidly. However, it only accounts for 0.6 percent of total citrus output, which means that there is a large potential for expansion.

## 3. CITRUS FRUIT MARKET IN JAPAN

Until recently, no clear definition of “organic product” existed in Japan, where various categories of “environmentally friendly” or “green” products can be found.

In April 2000, a new legislation was adopted by the Japanese Agricultural Standards (JAS) for organic agriculture, to protect the consumer from many products appearing on the

Japanese market, which inaccurately carried the name “organic”. It is estimated that the JAS regulations resulted in a drop of about 90 percent of products presented to the market as “organic”.

Because there was no clear definition of organic products for a long time, it is difficult to estimate the market value of organic sales in Japan. Many sources give different numbers, sometimes with a factor ten difference.

In 2003, ITC (2002a) estimates that the retail value of genuinely certified organic products reached US\$400 million or less than 0.5 percent of total food sales in Japan.

Sales of organic fruit and vegetables have been curtailed by the new JAS regulation. Most of the fresh produce sold as organic before 2001 did not meet the new regulation and therefore lost its organic label. Organic Monitor (2002c) estimates that volumes shrank by a factor 20 between 2000 and 2001.

As in the case of all fresh organic fruit and vegetables, the quantities of organic citrus sold in the Japanese market are very small. Japan produces small quantities of organic mandarins.

The lack of domestic supply of organic citrus is compounded by the fact that there are tough phyto-sanitary requirements on fresh fruit imports.

A particular problem is the compulsory fumigation done by port inspectors, who have doubts about the safety of the imported produce. Fumigated products lose their organic label (they are then marketed as “no chemical, fumigated”). In addition, the JAS regulation requires that organic products must be certified by a JAS registered certification body.

So far, only a limited number of foreign certification bodies have received JAS accreditation. Further, the tariff on fresh oranges and mandarins is relatively high (from 16 to 32 percent ad valorem, depending on the season and the type of fruit).

As a result, imports of organic citrus have been very low since 2001, probably below 2,000 tons. They have consisted of organic oranges, lemons and grapefruit, sourced mainly in the United States.

In spite of the above problems, Japan should open alternative important market opportunities to organic citrus growers in the medium term.

Its population (more than 126 million persons) has a high average income, and a significant percentage of that income (20 percent) is spent on food. The population is aging rapidly, and health concerns have triggered a wide demand for “safe” and “clean” food products.

Japan is projected to consume about 2 million tons of citrus in 2012. A conservative estimate can be calculated, assuming that Japanese organic fruit consumption grows from its low level to reach the current level of more 'mature' organic markets (i.e. 3 to 5 percent) in 2010. This would translate into 60,000 to 100,000 tons of organic citrus.



Domestic organic production is low, given the difficulty of growing foods without chemicals in Japan's warm wet climate. As a result, domestic supply of organic citrus will not grow as fast as demand. It can therefore be assumed that half of the consumption projected in 2012 will be covered by imports, when exporters and certifiers have adapted to the new JAS regulation and the phyto-sanitary standards. The imports would then range between 30,000 and 50,000 tonnes, accounting for nearly 10 percent of all projected fresh citrus imports.

References:

1. "Organic Monitor", December 2010
2. "Organic Agriculture Worldwide", Federation of International Organic Agriculture Movement (IFOAM) 2009
3. "World Market for organic citrus and citrus juices" by FAO, United Nations
4. "Organic Agriculture in Japan" by Natsuko Iino, Japan Offspring Fund
5. "The Global Market for Organic Food & Drink" published: December 2010

#### 4. PONZU MARKET

In the early years, ponzu was mainly used as a dipping sauce for hot pot dishes, thus consumed mainly during winter period in Western Japan. But, nowadays, it is used in a variety of dishes, both within Japan and around the world.

Ponzu is a popular dipping sauce for seafood or small appetizers, though it is also used as a glaze for meats, particularly barbecue; as marinade for fish, or as an addition to any number of salads.

Among Japanese homes, ponzu is an indispensable seasoning. It is now used as an all-purpose flavor booster, while chefs all over the world innovatively use ponzu as an accompaniment to their own cuisines.

Marinating a steak in ponzu, for instance, can lend a deliciously tangy flavor; the same is true for adding the sauce to an ordinary salad dressing. Ponzu can be a quick and easy way to add Asian flavor to a variety of different foods. Because of this expanding application of ponzu, its shipment has been growing steadily as shown in Exhibit I. below. The shipment increased 7.5% within a 5-year period.

Exhibit I.

##### **Ponzu Shipment Value**

| Year | Shipment in Yen<br>(million) | Increase over a year<br>ago |
|------|------------------------------|-----------------------------|
| 2006 | 26,400                       | 103.50%                     |
| 2007 | 27,300                       | 103.40%                     |
| 2008 | 27,800                       | 101.80%                     |
| 2009 | 28,200                       | 101.40%                     |
| 2010 | 28,400                       | 100.70%                     |

Source: Yano Economic Research Institute

Originally Mizkan marketed ponzu nation-wide. They were joined later by two major soy sauce companies, namely, Yamasa and Kikkoman. Since soy sauce is one of the main ingredients of ponzu, the two soy sauce producers entered the market as a diversification strategy. Now these top three producers represent 75% of the market share as shown in Exhibit II.

## **Ponzu Market Share**

Year 2010

| Rank | Company  | Shipment Value in Yen (million) | Market Share |
|------|----------|---------------------------------|--------------|
| 1    | Mizkan   | 15,200                          | 53.50%       |
| 2    | Yamasa   | 3,100                           | 10.90%       |
| 3    | Kikkoman | 3,000                           | 10.60%       |
|      | Others   | 7,100                           | 25.00%       |

Source: Yano Economic Research Institute

The remaining 25% is shared by a variety of local producers like JA Umaji. Based on the total revenue figure of JA Umaji, it is most likely that it is one of the leading producers.