

Production and export of organic fruit and vegetables in Asia



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ISBN 92-5-105241-7

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Acknowledgements

This publication is the report of the *Seminar on the production and exports of organic fruit and vegetables in Asia*. This meeting was jointly organized by the Commodities and Trade Division of the FAO, the Earth-Net Foundation and the International Federation of Organic Agriculture Movements (IFOAM) and took place in Bangkok, Thailand, from 3 to 5 November 2003.

FAO is grateful to the Earth-Net Foundation, Thailand, and the International Federation of Organic Agriculture Movements (IFOAM) for their active roles in the Seminar. It expresses its sincere gratitude to Vitoon Panyakul, General Secretary of the Earth Net Foundation and the whole staff of the Foundation for their constant and dedicated support to the organization of the Seminar.

Many thanks go to the authors of the papers presented in this publication for their contributions to the debates on Organic Agriculture in Asia.

ESC expresses its gratitude to the FAO Regional Office for Asia and the Pacific for its support and the presentations made by its staff members.

This report was formatted and prepared for printing by Daniela Piergentili.

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Foreword

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Consumer demand for organically produced food and fibre products, and society's interest for more sustainable development provide new opportunities for farmers and businesses around the world.

This publication focuses on the market situation and outlook for organic horticultural products and on ways in which Asian countries can take advantage of potential market opportunities. It covers the main issues related to the marketing of organic horticultural products, including outlets, logistics, certification and standards. Some production issues are also addressed as they relate to exports. The paper deals with the specific situation of the Asian countries.

FAO closely monitors international commodity developments, including the emergence of new market segments. We assist countries and the private sector in obtaining reliable information on agricultural production and trade in order to facilitate efforts towards export diversification and a better equilibration between supply and demand. Producing organic fruit and vegetables can contribute to increasing food security by generating incomes in small farms in a way that is sustainable from an environmental perspective.

Since the mid-1990s, the market for organic foods has been expanding rapidly and retail sales will probably exceed the value of US\$23 billion in 2003. In Asia, it is estimated that total retail sales will reach some US\$450 million in 2003. While most of these sales presently take place in Japan, other countries have witnessed a rapid expansion of their organic market. These countries include China, India, the Republic of Korea and Singapore. Organic production has risen steadily across Asian countries in recent years, and the total area under organic management was estimated at 600 000 ha in 2003. The countries with the largest organic area are China, India and Indonesia. To date, China and Japan have established official organic certification bodies, and China, India, Malaysia, the Philippines and Thailand are developing organic legislation.

In order to help countries make informed decisions on these market opportunities, FAO carries out studies of the markets for selected organic commodities. This year, FAO surveyed the markets for organic citrus, bananas, coffee and tea in particular. In October 2001, FAO published, in collaboration with the International Trade Centre (ITC) and the Technical Centre for Agriculture and Rural Cooperation (CTA), a major study on organic fruit and vegetables. This 312-page publication titled *World markets for organic fruit and vegetables: opportunities for developing countries in the production and export of organic horticultural products* will be distributed to you.

The publication provides detailed information on demand for organic fruit and vegetables in the world's largest organic markets (European countries, Japan and the United States), including data on sales and imports. The study also analyses the prospects for further growth in sales in the medium term and gives recommendations on which product categories are likely to provide market opportunities to developing countries. The experts who will speak today will provide you with updated data on production and trade of organic fruit and vegetables.

Based on data collected recently, it can be estimated that total sales of organic fruit and vegetables will approach US\$5 billion in the developed countries in 2003. The main markets are the United States, followed by Germany, the United Kingdom, Italy, France, Switzerland and Japan. In many countries, fruit and vegetables rank first in total organic sales. The market surveys indicate fast growth in sales of organic fruit and vegetables in most developed countries.

However, the growth of sales has slowed from its high rates of the period 1996-2001. For some products, there is a risk that oversupply and prices are expected to decrease in the near future. While the deceleration of the sales' growth is a general trend, the market for organic fruit and vegetables has remained dynamic in many countries such as Australia, France, Italy, Japan and the United States.

One should bear in mind that the organic sector is still a niche in the total food sector. Market shares of organic foods in most developed countries are around two percent of total food sales except higher in some West European countries (e.g. Austria, Denmark, Switzerland) where organic shares are close to 3 percent.

The share of organic sales in the fruit and vegetable sector is somewhat higher than the share of organic sales in total food sales. In most developed countries, organic shares in fresh fruit sales are estimated at about three to five percent, whereas for vegetable sales the organic shares are estimated at up to ten percent in the Switzerland and the United Kingdom. Organic fruit and vegetables offer some opportunities for developing countries. Domestic production of organic products in developed countries is expected to continue rising within the next few years (there is usually a time lag of three years between conversion and production of certified organic produce), but it is unlikely to meet demand for most products.

However, important constraints must be taken into account. Consumers' preference for locally or regionally produced organic fruit and vegetables indicates that the best opportunities are in counter seasonal fresh organic temperate zone produce and tropical products. For products that cannot be produced in the colder climates in northern developed countries (e.g. oranges, kiwis, etc.) most organic supply tends to come from producing countries close to these markets. Basic requirements for success include a more competitive producer and FOB (free on board) price while meeting at least the organic and phytosanitary standards and providing the same quality as conventional products.

Organic agriculture has a legitimate place within sustainable agriculture programmes. Its environmental, economic and social benefits have captured the attention of many countries, presenting both challenges and opportunities for both public and private sectors. In particular, member nations need advice on standard, certification, and labelling and information on the potential of organic agriculture to contribute to environmental quality, income generation and food security. Informed decision making on organic agriculture, within the range of sustainable agriculture options, would allow governments and the private sector – including the farmers – to direct research and extension efforts, and tap national and international market opportunities.

FAO has developed several work programmes on organic agriculture and is ready to assist Asia-Pacific countries in the development of their organic sector. Decreased government support to agricultural inputs indeed offers a unique opportunity for the conversion of low-input agricultural systems into more productive organic agricultural systems. FAO has long concluded that a horizontal expansion of agriculture in Asia is no longer feasible. The emphasis is now on sustainable agriculture such as offered by organic systems, systems which secure bio-diversity, increase agro-ecosystem stability, protect against environmental stress, and – in turn – improve the resilience of farm economies.

In conclusion, the subject of organic agriculture promotes the national and international public debate on sustainability by creating awareness of environmental and social concerns that merit attention. The issue of sustainability is indeed a central theme in FAO's mission to help build a food-secure world for present and future generations.

An Overview and Facts on Worldwide Organic Agriculture Organic Trade: a Growing Reality

Bernward Geier, Director of International Relations, IFOAM

Organic trade is a rapidly growing reality all over the world. The growth rates of the organic sector are showing that organic products come out of the “niche” and enter mainstream markets. The total land under certified organic production has reached world wide 25 million hectares. Farms producing organically but whose production is either for own consumption or sold on local markets, thus not requiring certification, probably account for a similar area.

A condition for the further development of the organic market is a continuous increase of conversion to organic on the farm level. It is impressive that there are about 15 000 organic farmers in Germany, but Italy has even reached a level of about 60 000 organic farms. In Switzerland the organic share for farmed land has reached the range of 10 percent, with the largest canton Graubünden, having around 50 percent. Austria with more than 20 000 organic farmers, totals also around 10 percent organic farming. Sweden and Finland show similar proportions.

Similarly impressive developments can be seen in developing countries like Uganda, where 15 000 farmers cultivate organic coffee and/or cotton or Mexico where ten thousands of small farmers (campesinos) produce organic coffee, as well as staple food for the local market.

Organic trade has also reached impressive dimensions. The organic market in the United States is in the range of US\$11 billion (Table 1) and is forecast to double in the next five to six years. In Germany, the whole baby food sector is on its way to be exclusively organic, having reached already a market share of 80 to 90 percent (box 1). Also the fact that more than 30 percent of the daily bread sold in and around Munich is certified organic gives a clear indication that organic foods are spreading into mainstream markets.

Surprising may be the fact that even in a country like Egypt, organic products become “mainstream”. The biodynamic SEKEM initiative employs about 1 000 people and delivers its products to some 20 000 supermarkets pharmacies and shops in Egypt. Their certified organic herb tea range is “No. 1” selling. Rapidly growing consumer demands are also reported from countries like Argentina, China, Japan, Brazil, Poland or Australia. Especially encouraging is the fact that markets for organic food are also getting increasingly established in so-called “developing” countries.

Table 1 – Overview of world markets for organic food and beverages (Source: ITC)

Markets	Retail Sales 2003 (million US\$/€)	% of total food sales - ca.	Annual growth % 2003-2005	Retail Sales 2005 (million US\$/€)
Germany	2,800-3,100	1.7-2.2	5-10	-
U.K.	1,550-1,750	1.5-2.0	10-15	-
Italy	1,250-1,400	1.0-1.5	5-15	-
France	1,200-1,300	1.0-1.5	5-10	-
Switzerland	725-775	3.2-3.7	5-15	-
Netherlands	425-475	1.0-1.5	5-10	-
Sweden	350-400	1.5-2.0	10-15	-
Denmark	325-375	2.2-2.7	0-5	-
Austria	325-375	2.0-2.5	5-10	-
Belgium	200-250	1.0-1.5	5-10	-
Ireland	40-50	<0.5	10-20	-
Other Europe*	750-850	-	-	-
Total (Europe)	10,000-11,000	-	-	-
U.S.A.	11,000-13,000	2.0-2.5	15-20	-
Canada	850-1,000	1.5-2.0	10-20	-
Japan	350-450	<0.5	-	-
Oceania	75-100	<0.5	-	-
Total	23,000-25,000	-	-	29,000-31,000

Note: Official trade statistics are not available. Compilations are based on rough estimates. Sales are based on an exchange rate of US dollar 1.00 = Euro 1.00

**Finland, Greece, Portugal, Spain, Norway, Poland, Hungary, Czech Republic, Estonia, Latvia, Lithuania*

Source: Compiled by International Trade Center (ITC), December 2002

Box 1 - Some facts on organic marketing worldwide

- 56 percent of US citizens believe that organic foods are healthier
- US\$2.2 billion sale values of organic fruits and vegetables in the United States
- 60 percent of Danes buy often organic vegetables and milk
- 6 percent market share for organic food in Denmark
- “Number one” teas in Egypt are organic teas from SEKEM
- 30 percent of the daily bread in and around Munich/ Germany is organic
- 80-90 percent market share for organic baby food in Germany

The above mentioned facts leave no doubt that organic trade continues to grow remarkably. Organic market analysts forecast annual growth rates between 10 percent and 30 percent a year. The largest organic trader in the United Kingdom expects today’s US\$25 billion world organic market to grow to US\$100 billion in the next ten years with most of this growth taking place in the United States, Europe and Japan. In the context of these figures and forecasts, Denmark’s target of reaching a 20 percent market share of the total food market for organic products sounds quite realistic, as they have already reached an organic share of 6 percent on all food sales. An indication of the future ahead is also the fact that multinational corporations like McDonalds, Nestle, Heinz and Unilever have entered the organic market.

The rapid growth of organic farming and food creates challenges the organic movement. A number of success factors will be needed (Box 2). Of growing importance in this context will be the close cooperation between organic agriculture and the fair trade movement. If the movement does not give up its holistic principles on the “altar of market expansion” it will continue to contribute to the establishment of organic ideas and principles as a starting point for a change in lifestyle and consumption patterns reaching way beyond food and nutrition.

Box 2: Six success factors

- Strong consumer demand
- High degree of support from food firms
- Sales through „conventional“ supermarkets
- Moderate (<50 percent) price premia
- **One** organic label
- Professional promotion

Reference: The World of Organic Agriculture: Statistics and Future Prospects 2003, 129 pages, Published by and available from IFOAM, also available on the IFOAM web page (www.ifoam.org).

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Chapter 1: World Markets for Organic Fruit And Vegetables

Organic Markets in Europe

Paul Pilkauskas, Senior Commodity Specialist, FAO

Retail sales of organic food and beverages in European countries have enjoyed substantial growth over the past ten years. Sales growth in some countries has been as high as 85 percent. However, organic products continue to be a small percentage of the total food market.

The United Kingdom, Switzerland and Denmark lead in terms of percentages of organic vegetables consumed. Most consumers appear willing to pay a price premium of up to 20 percent. One of the significant problems in analyzing organic markets is the lack of reliable, verifiable data, both in production, prices and imports. Organic import data is not broken out separately, so the real levels of imports are really estimates. Europe cannot be analyzed as a single entity, as each country appears to be behaving differently with regard to organic policy, internal production, consumption and imports.

While distribution channels vary, supermarkets are expanding their role. Although production in Europe is expanding, there is frequently greater demand than supply, thus substantial opportunities for imports of fruits and vegetables, fresh and processed, particularly for counter-seasonal fresh products and non-temperate zone fruits and vegetables. In policy and operational terms, it is important to have national organic legislation, access to certification services that are accepted in the importing countries, good knowledge of organic farming techniques, good post harvest handling, infrastructure and logistics and good partnerships.

More details can be found in the FAO/ITC/CTA publication:

“World Markets for Organic Fruit and Vegetables” (2001)

also available on-line at: <http://www.fao.org/docrep/004/y1669e/y1669e00.htm>

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The North American Market

Rudy Kortbech-Olesen, Senior Market Development Adviser, ITC

The United States of America

With retail sales of organic food and beverages amounting to about US\$12 billion in 2003, the United States is the world's largest market for this product group. Industry sources expect recent years' strong growth (20 per cent or more annually) to continue over the short to medium term. In 2002, organic produce sales even grew by 33 percent (New Hope Natural Media). According to some surveys, retail sales of organic food might reach US\$20 billion in 2005, although other sources are less optimistic and think it will take longer to reach this level.

According to USDA figures, total certified farmland increased from 935 000 acres in 1992 to 2 344 000 acres in 2001, corresponding to about 150 percent. The biggest increase took place in cropland, which reached about 1 305 000 acres in 2001, while pasture and rangeland amounted to about 1 040 000 acres. Vegetables were grown on 71 600 acres. Major crops were lettuce, tomatoes and carrots. Fruit was grown on 55 600 acres. Main crops included grapes, apples, citrus and tree nuts. However, a wide and varied range of fruit and vegetables are grown organically in the United States.

Organic produce is by far the most important organic item, accounting for over 40 percent of all organic food sales. Natural food stores are the principal retail outlets for organic fresh produce. Other important channels include conventional supermarkets and "direct-to-consumer" sales, e.g. farm-gate sales, farmers' markets and "community supported agriculture" subscription (CSA). While both the natural food stores and the conventional stores sell organic produce, they approach the sector differently. The natural food stores usually focus on organic produce and will offer conventional produce only when organics are not available. Most mainstream supermarkets, on the other hand, feature conventional produce and provide limited organic produce to complement their conventional range. However, some conventional supermarkets are also opening their own *natural food departments*.

Amongst the most important processed fruit and vegetable products are fruit juices and other fruit beverages, jams and marmalades, pasta sauces, frozen, canned and dried fruit and vegetables. Organic fruit and vegetables are also used as ingredients in various prepared food categories, including baby food. For most processed fruit and vegetable products, natural food stores are probably still the principal outlet, though for some items like frozen vegetables, the conventional supermarkets are equally important. For organic food as such, conventional supermarkets have now become the largest outlet with natural food stores a very close second.

Foodservice is still extremely small in organic products, including fruit and vegetable, but some of the big companies are starting to realize that there is a huge business potential. As more and more consumers, including school feeding systems and student campus dining services demand organic food, we shall see this sector develop.

National standards on organic agricultural production and handling, labelling and certification, etc. (National Organic Program of the USDA), implemented in October 2002, are having a significant impact on the development of the United States organic industry. Throughout the value chain, from the domestic or foreign farmer to the final consumer, the standards will increase the focus on organic products and help to regulate and promote the trade.

While most of the fresh organic market consists of domestic production, a considerable part of total requirements is imported. Organic fresh produce importers/distributors are responsible for importation, warehousing and distribution of the product. Processed fruit and vegetable products are mostly imported in bulk, e.g. fruit juices, concentrates and pulp/purée, by specialized importers who supply food and beverage manufacturers. There is also some import demand for retail-packed fruit and vegetable products.

Import demand for organic fresh produce includes tropical and other products that are not grown in the United States; off-season products that are grown domestically, but where there is unmet demand outside the US season; and in-season products, also grown domestically but for which there is a temporary or more permanent shortage because of strong and increasing demand.

Canada

With retail sales estimated at US\$850-1 000 million in 2003 Canada is ranked as the sixth largest market in the world for organic food and beverages. The market appears to be growing rapidly, probably by 20-25 percent annually. For some product groups, growth rates may be considerably higher.

Canada is a major producer with a total certified organic production area of about 430 000 hectares (over one million acres), according to Agriculture and Agrifood Canada; the main crops are grains, oilseeds, dried legumes, fruit and vegetables and maple syrup. About 1.2 percent of all farmers and 5 percent of fruit and vegetable growers are organic.

For climatic reasons a large share of the organic food range cannot be grown in Canada and must be imported. Most imports come from the United States, probably at least 80-90 percent (most of which is packaged food). In the case of fresh produce imported from the United States, it must be noted that a considerable amount of this is first exported to the United States from Latin America, in particular from Mexico. Major Canadian distributors also import some products direct from foreign suppliers other than the United States.

Distribution channels are characterized by the huge size of the country, i.e. regional distribution is commonplace. For example, the largest distributor of fresh produce has distribution centres in Vancouver, Toronto and Montreal. Each centre purchases fresh produce locally or in the region, whereas imports for the whole country tend to be handled centrally. It is significant that the big retail organizations, notably Loblaws, have introduced a range of organic fresh produce and other food products.

With the exemption of the province of Quebec (and to some extent British Columbia) there are no legal requirements for organic certification, although a voluntary national standard does exist. A committee is currently looking at ways and means to establish a mandatory national regulatory system. In the meantime, the Quebec standard (compulsory in Quebec) or other recognized certification (in other provinces) will be required by most importers and traders. It is important to note that all documentation and labelling must be in the two official languages, English and French.

Like in the United States, import items include tropical and other products that are not grown domestically, as well as off-season products and other items where there is a temporary or more permanent shortage. There is also a strong interest in items that are new to the market or fairly unknown. A major distributor, for example, is currently looking for baby vegetables (e.g. baby corn), Asian and Caribbean vegetables, ginger, etc. Thanks to a high degree of ethnic diversity in Canada, there is a strong demand for exotic produce and ethnic products.

The market for organic processed fruit and vegetables, like jams and marmalade, frozen vegetables and canned items, is much smaller and most of it is imported from the United States. However, there is some import demand for frozen and aseptic packs of fruit and puree, including tropicals, e.g. mango, guava and passion fruit. Other processed fruit and vegetable items may also find a small market.

Conclusion

Although there are a number of potential risk factors or threats, like oversupply of certain products, reduced price premiums, competition from other forms of environmentally friendly and sustainable agriculture, etc., there is little doubt that the United States and Canadian markets will offer farmers and producers of organic products interesting business opportunities in the future, whether for domestic players or foreign producers, including those in developing countries, who are looking for new markets.

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Certified Organic Fruits And Vegetables In The Japanese Market

Katsushige Murayama, President of IFOAM Japan

Introduction

In this paper, I will examine the actual situation of Japanese organic market and its potential further development.

1. Published data on organic agricultural products

For those who hold an assumption that Japan is the third largest market after those of the European Union and the United States, the small number of organically certified producers as presented in Table 1 below may come as a surprise.

Table 1 - Certified organic operators (as of 30.09.2003)

	Production Directors	Processors	Sub-dividers	Importers	Total
Japan (farmers)	1 817 (4 306)	819	541	102	3 279
Foreign countries (farmers)	281 (4 009)	289	59	0	629
Total (farmers)	2 098 (8 405)	1 108	600	102	3 908

Source: General Food Policy Bureau, Ministry of Agriculture, Forestry and Fisheries

As indicated in Table 2-a, the total number of organically certified vegetables and fruits is very low, and the ratio of domestic versus imported products is quite astonishing. Table 2-b presents data on processed foods. Just by looking at the “total” row, you can see that domestic and imported processed products are close to being even. However, the reality is quite different. While the processing of iconic Japanese foods, such as tofu, natto, and soy sauce, is done in Japan, their ingredients are almost all imported. Frozen vegetables and cut vegetables for restaurants and pre-made foods are also mostly imported. In Table 2-c, the production levels of vegetables, fruits, grains, tea, as well as the percentages of certified products in these categories are presented. We are looking at a very small world.

Table 2 - Grading by authorized venders (F.Y.2001)**(a) Organic agricultural products**

Unit: t

Item	Graded in Japan	Graded in foreign countries	Ratio of domestic vs imported organic products (%)
Total	33 734	154 642	22
Vegetables	19 675	26 221	75
Fruits and nuts	1 391	4 085	34
Rice	7 777	2 672	291
Wheat and barley	722	2 058	35
Soybeans	1 162	61 019	1.90
Green tea (Crude tea)	927	93	997
Others	2 081	¹⁾ 58 493	3.60

¹⁾ Includes buckwheat, almonds, green beans, and black tea (crude tea).

Source: General Food Policy Bureau, Ministry of Agriculture, Forestry and Fisheries

Table 2 - Grading by authorized venders (F.Y.2001) (cont.)**(b) Processed foods with organic agricultural products**

Unit: t

Item	Graded in Japan	Graded in foreign countries
Total	93 638	98 342
Frozen vegetable	1 128	11 826
Canned vegetable	13	532
Other vegetable processed	802	1 243
Beverages	4 739	¹⁾ 64 664
“Tofu”, Bean curd	44 034	0
“Natto”, Fermented soybeans	10 154	0
“Miso”, Bean paste	1 887	273
Soy sauce	19 975	0
Dried noodles	103	823
Green tea (fined tea)	1 270	0
Other processed farm products	9 532	²⁾ 18 980

¹⁾ Includes fruit juices, bottled coffee and tea²⁾ Includes black tea, dried fruits, and vinegar

Source: General Food Policy Bureau, Ministry of Agriculture, Forestry and Fisheries

(c) Gross production and graded quantity in Japan (F.Y.2001)

Unit: t

Item	Gross production volume	Graded quantity (domestic)	Ratio of organic products (%)
Vegetables	15 548 000	19 675	0.13
Fruits and nuts	3 907 000	1 391	0.04
Rice	9 057 000	7 777	0.09
Wheat and barley	906 300	722	0.08
Soybeans	270 600	1 162	0.43
Green tea (crude tea)	84 500	927	1.10

Note: Gross production is the data officially announced by the Statistics and Information Department, Ministry of Agriculture, Forestry and Fisheries.

Source: General Food Policy Bureau, Ministry of Agriculture, Forestry and Fisheries

Table 3 shows stakeholders in the organic fruit and vegetables marketing channel. In all product categories, cooperatives and consumers groups play a significant role. The importance of retailers in the distribution channel is extremely small because organic producers prefer mutual agreements to auctions in retail market. However, fruit and vegetables are traditionally sold in regional markets as they are perishable and mostly produced in distant areas. Recently as the law on distribution channel has been revised auctions at retail market are being rapidly replaced by mutual agreements.

Table 3 - Ratio of shipment of JAS graded organic products by destination

Unit: %

Main JAS graded organic products	Total	Agricultural cooperatives, collectors and shippers	COOPs & consumer groups	Direct sales to consumers	Retailers & restaurants	Food processors	Wholesale markets	Others (includes personal use & gift)
Total	100.0	33.8	14.8	9.4	23.6	13.5	2.7	2.3
Rice	100.0	50.7	8.4	26.4	10.1	2.9	-	1.5
Wheat and barley	100.0	x	x	x	x	x	x	x
Pulses	100.0	7.0	9.1	19.4	8.7	55.9	-	-
Potatoes	100.0	4.4	11.8	1.1	31.1	38.0	-	13.6
Non protected field vegetables	100.0	34.1	18.4	3.7	29.1	10.3	3.0	1.4
Protected vegetables	100.0	15.7	17.2	1.2	54.5	1.2	9.9	0.2
Non protected field fruits and nuts	100.0	34.9	11.8	21.7	18.8	2.7	7.0	3.1
Protected fruits and nuts	100.0	x	x	x	x	x	x	x
Industrial crops	100.0	20.9	13.0	11.0	4.3	49.6	1.1	0.1
Other crops	100.0	25.6	-	-	-	6.0	-	68.4

Note: Figures here are the ratios to the total shipment of JAS graded agricultural products (=100)**Source:** F.Y. 2001 Status Survey on Sustainable Production Environments: Outline of the Survey on Production and Shipment of Agricultural Products by Eco-Friendly Farming, Statistics and Information

Department, Ministry of Agriculture, Forestry and Fisheries

2. The case of Polan

Polan is a nation-wide grass-root organization that consisted of more than 60 retail shops and home-delivery services that handle organic agricultural products. It was founded 20 years ago. At present, it also serves as the secretariat of IFOAM Japan.

Polan's mission is "to expand organic agricultural farms in Japan." Their annual sale is 12 billion Japanese Yen. All of their products are certified organic. Table 4 presents the quantity of vegetables and fruits that Polan handles annually. Please note that the data dates back only to 2001, since their previous records are no longer available.

Table 4 - Vegetables and fruits handled by Polan

	Onions (t)	Carrots (t)	Potatoes (t)	Sweet potatoes (t)	Welsh onions (t)	Japanese radishes	Cabbages
2001	400	400	500	7	6	500 000	530 000
2002	500	400	360	9	7	450 000	420 000

	Lettuce	Broccoli	Asparagus (bunches)	Spinach (bunches)	Chinese chives (bunches)	Potherb mustard (bunches)	Cucumber (t)
2001	320 000	200 000	40 000	330 000	200 000	50 000	80
2002	280 000	200 000	50 000	350 000	300 000	300 000	90

	Pumpkins (t)	Tomatoes (t)	Eggplants (t)	Kidney beans (t)	Oranges (t)	Rice (t)
2001	70	120	60	13	13	230
2002	60	100	70	13	11	270

Note: Quantities are rough estimate of organic vegetables handled by Polan.

Since the introduction of the JAS law, the quantity of certified organic onions and carrots purchased by restaurants, bar chains, and supermarkets has risen. However, these new customers do not share Polan's ideologies about the organic agriculture environment and food safety benefits. Instead, they are driven by market laws; they are interested in these products merely because of the price premium. Due to these fundamental differences between them, Polan is struggling to make these customers understand that their supplies, which consist of domestic organic production, can fluctuate with abnormal weather conditions, insects, diseases, and so on.

a) Price gaps

Both the quantity and the price are agreed upon and fixed before products are produced and shipped. To give you a rough idea, let's hold the prices of organic products at a constant and compare them with those of conventional products. When conventional agricultural products are produced in abundance and their prices drop, the prices of organic products become relatively expensive; when conventional ones experience poor harvest, on the other hand, organic products would become relatively cheaper. Please note that, even though this comparison is based on the prices of organic products being fixed, there are a few organic producer groups that are considering adjusting their product prices relative to market fluctuations. Although some school nutritionists have reported that their annual average costs of conventional and organic products came out to be virtually the same, supermarkets generally price organic products 1.3 to 1.5 times higher than conventional ones.

b) Food products with a potential growth

A number of food-related incidents, such as BSE and false labelling, have occurred in the past couple of years, and the public awareness has risen as a result. Despite it, we have not experienced yet any organic boom since the introduction of the JAS law. This may partly be due to the attitude of the agricultural policy makers, but it also owes to the facts that organic agricultural products are not yet well understood and that Japan has been experiencing inflation. At present, consumers tend to prefer safe but cheap foods, rather than demanding products that are strictly organic per se. But this tendency may change in a near future and that safe and convenient processed foods such as cut vegetables and pre-made meals, may have a potential demand in a close future.

c) President of Polan expectations from Exporters to Japan¹:

“The presence of organic agriculture and its principles are essential in order to protect Japan’s environment, and they shall not ever be threatened.

I would like exporters to prioritize agricultural products that are not being produced in Japan (e.g. spices, black tea, fruits, etc.) in their handling. Despite my wishes, I have little doubt that other products will also be exported to Japan, for the Japanese food industry is waiting anxiously to buy imported organic products as processing ingredients. I only hope that such products will be produced and transported in ways that are legitimately organic. Specifically, I hope that potentially problematic issues with these imported organic products, such as residual pesticides, will be handled with much care in order to ensure that the image of organic products will not be damaged by their activities.”

3. BIO FACH Japan

BIO FACH Japan 2003 ended on the 14th of October. Although the NIKKEI Japan’s representative media enterprise, collaborated with the Nurnberg Global Fairs for the first two BIO FACH Japan events, they withdrew from the 2003 event claiming that their financial contribution was too important in the past. IFOAM Japan has been involved as a special collaborator from the first event, assisting in the search of exhibitors, creation and implementation of regulations on displayed items and so on.

Table 5 - BIOFACH Japan

	Countries	Companies			Exhibition stands	Registered Visitors
		Domestic	Foreign	Total		
2001	22	77	107	184	177	13,769
2002	17	51	121	172	136	14,001
2003	15	59	67	126	167	13,956

According to the Nurnberg Global Fairs, the decrease in the number of foreign exhibitors in 2003 was due to the scheduling conflict with some other food exhibition abroad that held around the same period that the Third BIO FACH Japan.

Proposition: When IFOAM informed IFOAM Japan that the Nurnberg Global Fairs, for which IFOAM is a special collaborator, was interested in sponsoring a fair in Japan, we didn’t hesitate to accept the offer. We knew that we would not be able to find any organic producers that would be interested in organizing such fair in Japan. Nevertheless, we accepted it under the condition that the fair would be organized as “a place to make the organic sector known to the general public in Japan.”

¹ This is a statement from Mr Imai, the president of the Kanto Division of Polan, and the general secretary of IFOAM Japan.

After hosting these three fairs, it may still be too early to determine its success or failure. However, it is very clear that the scale has been very small. Compared to Foodex, one of the most reputable food fairs in Japan, exhibitors and visitors of the Bio Fach Japan have been approximately ten times fewer. At Foodex, most of the products are non-organic and the exhibitions are full of advertising of exhibitors' products that are supposedly 'safe' and 'healthy.' Unfortunately, this phenomenon reflects accurately the level of interest in food safety that currently exists in Japan.

4. Surveys

As I have said earlier, there are few available organic-related data. In our attempt to supplement what is lacking, IFOAM Japan has begun a variety of investigations in collaboration with the Sogo Shijo Kenkyusho, Inc., an institute specialized in market surveys. We are conducting surveys by category: producers, retailers and consumers (subdivided into members of organic-only organizations, consumer cooperative members, general, etc.). Although this year's data have not been completed yet, I can inform you that we have not found any indication showing that the organic label is highly recognized. The interim report of these surveys, that I have read, showed certain tendencies on the perception of organic produces by the market. Please contact IFOAM Japan if you are interested in more detailed informations.

5. What it means to be certified

While the topic of this presentation contains the word "certified" as it was requested by the conference organizer, I question the necessity to limit the discussion only to what is certified. Unlike in other countries, Japan's organic agriculture began with *Teikei* and its variations. Although many different types of mode of distribution such as home-delivery services², collective purchasing³, have come to exist, the basic concept or mission remains unchanged, which is to build "face-to-face" relationships. Such relationships promote local production-and-consumption, as well as the utilization of local resources (e.g. collecting consumers' leftovers or garbage to make manure and feed), and thus do not need any certification system, private or public. Therefore, when the government tried to legislate certification and its guidelines, they encountered a lot of opposition. The government ignored the expertise and the long history of organic producers in the process of creating organic production standards, and instead only took into consideration principles supported by CODEX and WTO. Among those involved in *Teikei* or its variations, only a few have become certified, while most are choosing not to accept it. Therefore, I would like to note here that data that I have presented above relate only to producers that follow national standards, implying that they do not include the majority of Japanese organic producers.

6. Japan's agriculture – An overview on vegetables and fruits data

I have not yet described the whole picture of the markets of vegetables and fruits. Table 6 presents the changes of non-organic vegetables prices from the producers to the consumers. Please note that prices of organic products are 1.3 to 1.5 times higher than those of non-organic products. In general, producers prices are said to be 20 to 30 percent of retail prices. This percentage is very low compared to the 70 to 80 percent that is earned by producers in the case of alternative mode of distribution such as *Teikei*. This comparison serves as a good criterion when considering how prices received by the producers can be improved.

Additional data on fruit and vegetables are at the end of this paper. They were published by the Ministry of Agriculture, Forestry, and Fisheries in September 2003. I hope that prices and trend shown will be useful, even for those involved in organic agriculture. For more detailed data on Japan's agriculture in general, please refer to my paper that will be presented at the IFOAM Trade Conference.

² It connects producers and consumers who are both members of the same distribution organization (IFOAM Japan's members are engaged in this mode of distribution)

³ It has evolved from the combination of *Teikei* and the consumer cooperative movement

Tables 7, 8, 9, 10, and 11, as well as Figures 1, 2, 3, 4, and 5 of this document are all from the Statistics of Agriculture, Forestry, and Fisheries.

7. The agricultural sector is paying the price

Restaurants, pre-made food makers, and supermarkets have been trying to respond to consumer interests in food safety and security. Although still continuing to deal with some domestic producers on the base of mutual agreements, they have come to rely more on imported products of which they can be certain to obtain the quantity that they require. In fact, many of the Japanese companies and supermarkets have transferred abroad their investments, technology, and other assets, and they are importing products from their contracted productions. This strategy is exactly the same as the one used in other economic sectors. One of my colleagues with whom I had a discussion in preparation of this presentation stated that:

“It seems that the agricultural sector in Japan is paying the price for the global success that has been accomplished by the country’s industrial sector. One could say that there is nothing unfortunate in this phenomenon, because it is only perfectly in accord with what ‘developments’ mean today.”

He is right, but neither he nor I agree with such a phenomenon. Since 1999, 16 new legislations have been implemented under the New Basic Law on Agriculture. Their main intentions are to implement marketing principles and to establish sustainable agriculture. In addition to these concepts that are being globally promoted today, the government has also cleverly incorporated some very uniquely Japanese strategies among them.

Japan has maintained very firm trade barriers to limit the importation of conventional agricultural products. However, under WTO, such barriers are now subjected to deregulation. At the same time, CODEX’s organic guidelines, which are based on the European and the North American concepts, are requiring certain conditions that Japan cannot fulfil with regard to its current population and its geographical and climatic conditions. As a result, the so-called “specially grown products,” that are only vaguely defined in Japanese ministry’s guidelines, spread confusion among consumers because they are unable to make the difference between what is ‘organic’ and what is ‘specially grown.’ The government has done nothing to clarify this situation. Unless the government stops flattering the industrial sector and reorganizes the legal system to place organic agriculture as the core of agricultural laws, such ambivalence and confusion will continue; and those who know what ‘organic’ really means will move further away in pursuit of alternative directions.

IFOAM Japan will host an organic forum in Tokyo on the 14th of November (2003?!?). During this forum, a few of the former agricultural policy makers from China, Korea and Japan, as well as some representative figures in the sector of organic agriculture will be invited to exchange information and ideas about agricultural policies on organic and “specially grown” products, as well as their marketing and trade. We hope that this forum will be an opportunity to formulate a common agenda on the development of organic agriculture in East Asia.

8. Conclusion

Those involved in organic production and/or consumption, because of their ideology or because they follow the movement, tend to operate in small-scales. They can be collectively called ‘little organics.’ When the revised JAS law was introduced, those of us who had been engaged in organic agriculture for a long time became very concerned that such a law would sacrifice ‘small organics farmers,’ leaving only ‘large organics farmers’ to survive. We therefore attempted to approach our government with our concerns. Unfortunately, the government didn’t consider our preoccupations.

As in any other countries, organic agriculture in Japan is steadily becoming ‘industrialized. We are taking advantage of the diversity of IFOAM Japan members (small, large organic producers and industrials in organic sector) to maintain the diversity of organic production. This diversity will

inevitably lead to the pursuit of different purposes. Small organic producers will probably try to take a leading role in the regional development movement by strengthening their business relations with the distribution channel and the processing industry. Large organic producers will continue to receive governmental supports and will also have to face foreign competition. Industrials are expected to consolidate their position in Japanese markets. They will be supported by WTO and the government. What these developments imply seems different in nature from the question of 'authenticity' that IFOAM pursues in promoting organic agriculture. Regardless, I would like to request all of you for your support and encouragement as we work hard to save Japan's organic agriculture and its markets.

Table 6 - Price at various stages of distribution channel and the price ratios of major vegetables and fruits

Unit: yen per 10kg

Item	Prices at various stages of distribution channel						Price ratios	
	Producers selling prices	Price received by farmer or import	Sales price by importers	Wholesale price	Middleman price	Retail price	Retail price/producers price	Retail price/wholesale price
Vegetables								
<i>Domestic</i>								
Japanese radishes	164	343	-	570	773	1 401	4.08	2.46
Carrots	573	801	-	1 076	1 444	2 588	3.23	2.41
Chinese cabbages	95	172	-	333	654	1 260	7.33	3.78
Cabbages	87	234	-	459	560	1 054	4.50	2.30
Spinaches	2 710	3 171	-	4 200	4 988	7 875	2.48	1.88
Welsh onions	2 074	3 093	-	3 850	4 760	6 003	1.94	1.56
Broccoli	1 296	2 021	-	2 700	3 313	4 371	2.16	1.62
Lettuces	474	657	-	1 050	1 301	2 106	3.21	2.01
Cucumbers	1 547	2 089	-	2 567	2 835	4 357	2.09	1.70
Pumpkins	1 650	1 792	-	2 100	-	3 307	1.85	1.57
Eggplants	2 265	2 304	-	3 556	4 220	5 750	2.50	1.62
Tomatoes	2 705	2 819	-	3 772	4 296	5 625	2.00	1.49
Sweet peppers	1 988	2 142	-	2 826	3 092	5 075	2.37	1.80
Onions	290	290	-	631	735	1 409	4.86	2.23
<i>Imported</i>								
Broccoli	-	1 782	1 943	1 943	2 048	3 725	2.09	1.92
Pumpkins	-	630	-	2 153	-	2 888	4.58	1.34
Fruits								
<i>Domestic</i>								
“unshu” mandarin	1 241	1 270	-	1 978	2 328	3 534	2.78	1.79
Apples “Fuji”	2 191	2 223	-	3 109	3 808	5 503	2.48	1.77
Japanese persimmons	1 254	1 371	-	2 181	2 778	4 051	2.95	1.86
<i>Imported</i>								
Valencia oranges	-	1 450	2 128	2 128	2 468	3 637	2.51	1.71

Source: Refers to the report of Prices on Vegetables and Fruits: Report of Survey on Tracing Food Prices at Various Stages of Distribution (Surveys on Vegetables and Fruits in Nov. 2000 & 2001), Statistics and Information Dep., Ministry of Agriculture, Forestry and Fisheries.

Table 7 - Wholesale volume, sales value and price of vegetables and fruits

Item	Wholesale Volume ²⁾	Wholesale Value ³⁾	Wholesale Price ⁴⁾	Changes from previous year ¹⁾		
				Wholesale Volume ²⁾	Wholesale Sales value ³⁾	Wholesale Price ⁴⁾
Vegetables	1 266	22 779	180	99	98	99
Fruits	560	13 413	240	97	95	98
Total	1 825	36 192	-	98	97	-

1) %

2) 10 thousand ton

3) 100 million yen

4) yen/kg

Table 8 - Wholesale volume, sales value and price of vegetables

Item	Wholesale Volume ²⁾	Wholesale Value ³⁾	Wholesale Price ⁴⁾	Changes from previous year ¹⁾		
				Wholesale Volume ²⁾	Wholesale Value ³⁾	Wholesale Price ⁴⁾
Total of Vegetables	1 266	22 779	180	99	98	99
Root crops	242	2 541	105	98	100	101
Japanese radish	125	974	78	98	95	98
Carrot	78	821	106	99	101	102
Leaf & Stem Vegetables	339	4 618	136	99	93	94
Chinese cabbage	103	582	57	98	83	85
Cabbage	146	1 078	74	99	91	91
Spinach	21	777	368	98	91	93
Welsh onion	40	1 178	292	99	97	98
Western Vegetables	90	2 020	224	101	99	98
Lettuce	64	1 078	167	101	94	93
Fruit Vegetables	228	6 053	266	96	102	106
Cucumber	67	1 614	242	97	102	105
Eggplant	37	1 054	283	97	103	106
Tomato	68	2 035	301	97	102	105
Green pepper	18	591	333	98	98	101
Beans	12	632	549	90	100	111
Tubers & Corms	279	3 141	113	100	93	93
Potato	85	707	83	100	79	78
Taro	12	242	198	97	103	106
Onion	132	837	63	104	82	79
Mushroom	29	1 514	515	93	96	104

1) %

2) 10 thousand ton

3) 100 million yen

4) yen/kg

Table 9 - Wholesale volume, sales value and price of domestic fruits

Item	Wholesale Volume ²⁾	Wholesale Value ³⁾	Wholesale Price ⁴⁾	Changes from previous year ¹⁾		
				Wholesale Volume ²⁾	Wholesale Value ³⁾	Wholesale Price ⁴⁾
Total of Domestic Fruits	434	11 239	259	98	93	95
Mandarin orange	108	1 915	177	94	95	101
Iyokan orange	19	223	120	94	71	75
Apple	77	1 396	182	114	84	74
Japanese pear	26	636	240	99	102	104
Persimmon	21	416	198	92	97	105
Peach	13	507	397	96	93	97
Grapes	15	893	603	105	103	98
Strawberry	20	1 939	987	97	94	97
Melon	29	1 152	397	90	93	104
Water melon	51	682	134	90	84	94

¹⁾ %²⁾ 10 thousand ton³⁾ 100 million yen⁴⁾ yen/kg**Table 10 - Wholesale volume, sales value and price of imported fruits**

Item	Wholesale Volume ²⁾	Wholesale Sales value ³⁾	Wholesale Price ⁴⁾	Changes from previous year ¹⁾		
				Wholesale Volume ²⁾	Wholesale Value ³⁾	Wholesale Price ⁴⁾
Total of Imported Fruits	1 262	2 175	172	92	104	113
Banana	715	973	136	91	120	132
Pineapple	79	117	147	103	97	94
Lemon	78	190	243	99	98	99
Grapefruit	195	303	155	95	93	98
Orange	86	161	188	74	76	103
Cherry	7	78	1 056	75	85	114
Kiwi fruit	34	128	379	127	137	108
Other Fruits	67	225	335	93	95	102

¹⁾ %²⁾ 10 thousand ton³⁾ 100 million yen⁴⁾ yen/kg

Table 11 - Wholesale volume, sales value and price of imported vegetables

Item	Wholesale Volume ²⁾	Wholesale sales value ³⁾	Wholesale Price ⁴⁾	Changes from previous year ¹⁾			Imported/Domestic ⁵⁾	
				Wholesale Volume ²⁾	Wholesale sales value ³⁾	Wholesale Price ⁴⁾	Domestic Price ⁴⁾	Price Ratios ¹⁾
Total of Imported Vegetables	359	864	241	(82)	(87)	(106)	-	-
Asparagus	10	66	688	(79)	(88)	(111)	955	72
Broccoli	45	119	263	(89)	(99)	(111)	307	86
Pumpkin	107	152	143	(90)	(101)	(113)	171	84
Field Pea	12	31	259	(64)	(69)	(108)	867	30
Onion	31	19	60	44	39	90	63	95
Garlic	16	22	135	(82)	(84)	(102)	497	27
Ginger	17	30	178	(99)	(95)	(96)	418	43
Fresh Mushroom	18	62	338	(71)	(71)	(100)	1 007	34
Other Imported Vegetables	103	364	352	(99)	(89)	(90)	-	-

1) %

2) 10 thousand ton

3) 100 million yen

4) yen/kg

5) Imported Vegetable's Compared Price, Domestic 100

Note: Please be cautious when you use numbers changes from previous year attached () is mere reference number made from information on comparison to previous year since items are newly separated and added ones. (pas clair à mon avis)

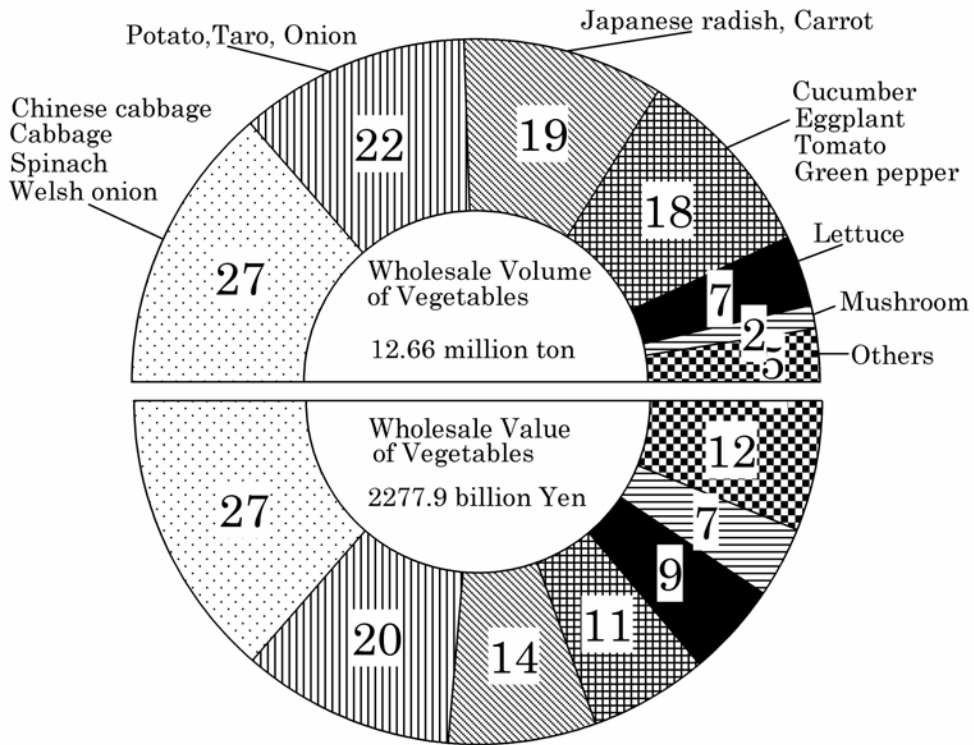


Fig. 1 Breakdown of Wholesale Volume and Value of Vegetables

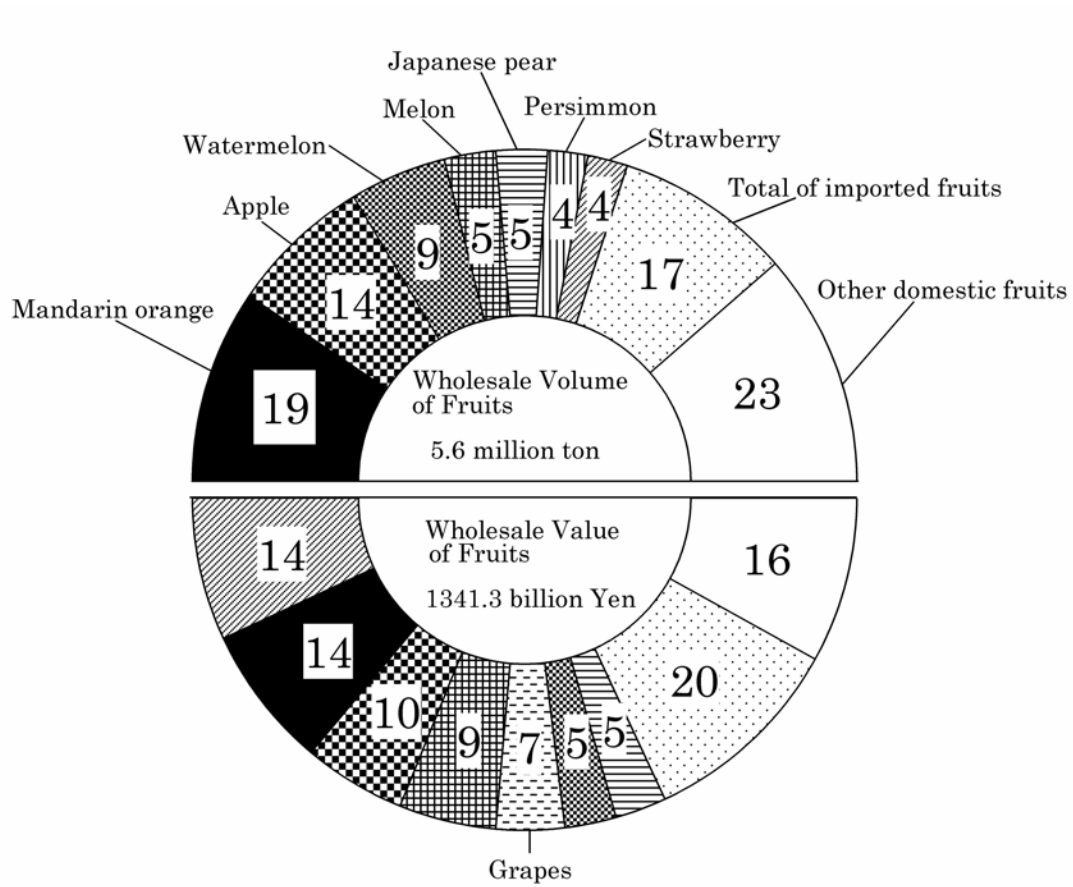


Fig. 2 Breakdown of Wholesale Volume and Value of Fruits

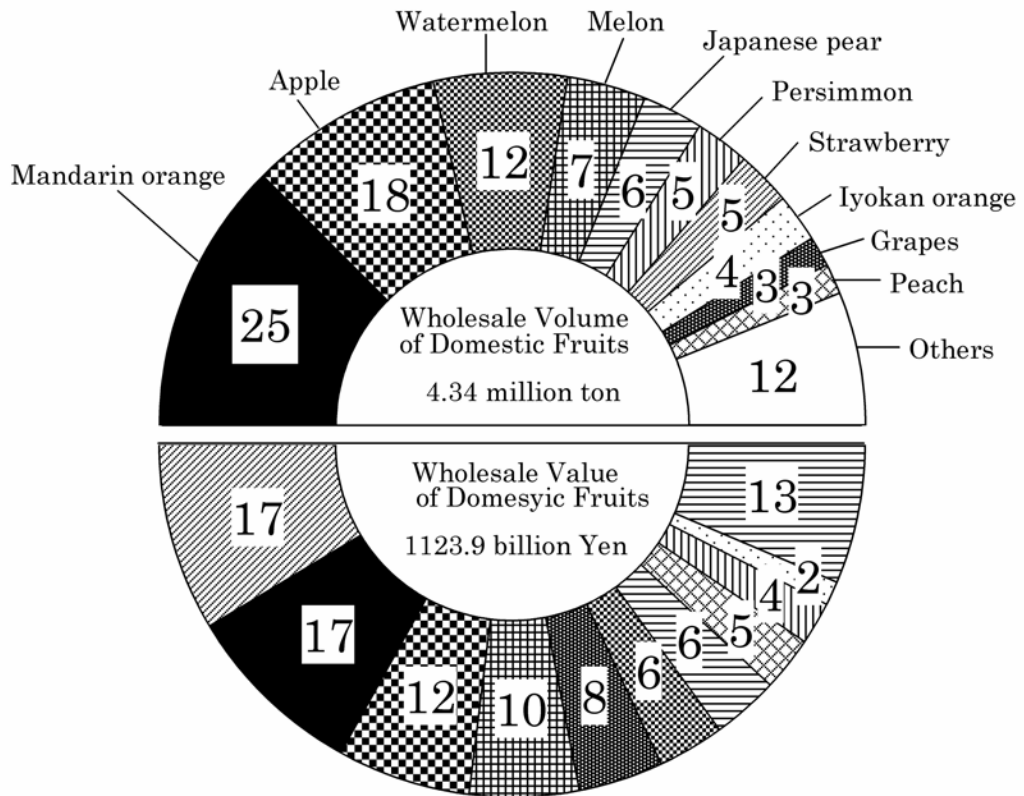


Fig. 3 Breakdown of Wholesale Volume and Value of Domestic Fruits

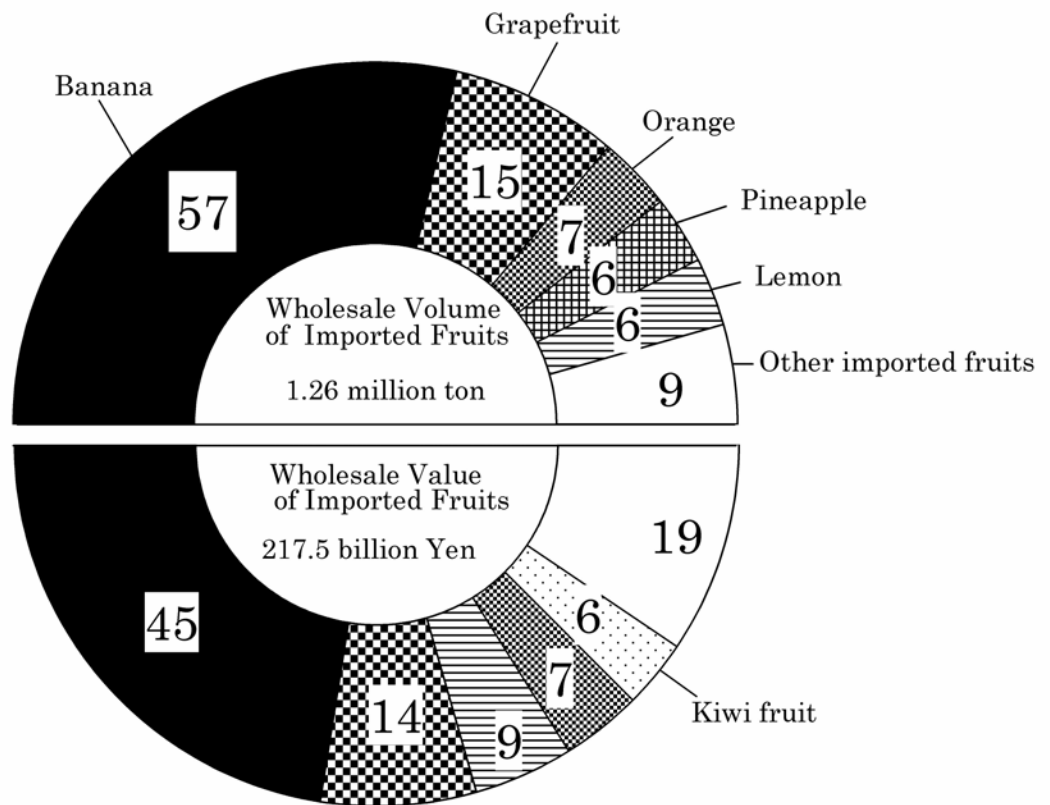


Fig. 4 Breakdown of Wholesale Volume and Value of Imported Fruits

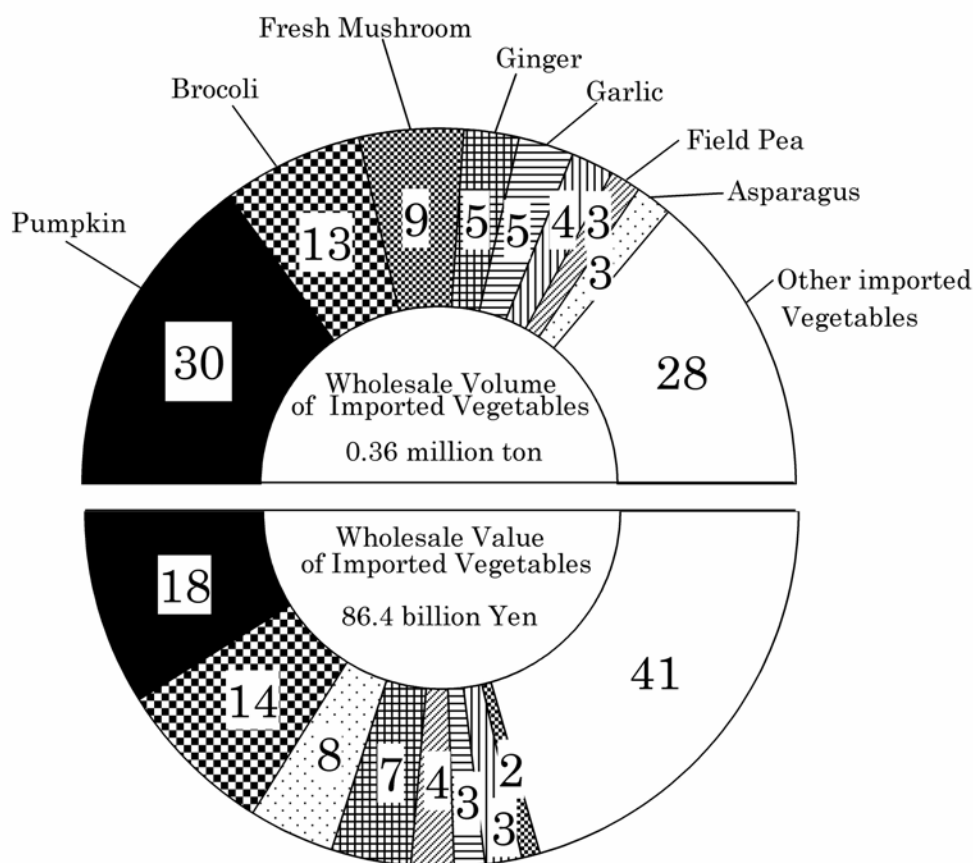


Fig. 5 Breakdown of Wholesale Volume and Value of Imported Vegetables

Katsushige Murayama

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Born in Tokyo in 1940. After working as a journalist, he travelled abroad extensively. Upon returning, he founded the Kojinsha Organic Farm. He has served as a member of the IFOAM Standard Committee and World Board. Currently he is the president of IFOAM Japan and JOAA's national board member.

Chapter 2: Market Access Issues: Standards and Regulations

Organic Standards in Importing Countries: Differences and Similarities

Gunnar Rundgren, President of IFOAM

Abstract

The paper focuses on standards in the European Union and the United States. Occasional references are also made to Japan. The IFOAM Basic Standards are also referred to, as they are the basis for many non governmental standards. The paper highlights some areas of major importance. The basic organic standards, such as the prohibition of use of agro-chemicals and the requirements for certain crop rotation or similar is not addressed in the paper as they are supposed to be understood by participants. Standards regarding livestock are not addressed, as the seminar's scope is related to fruits and vegetables.

1. The different types of standards

There are basically three different kinds of standards that producers must relate to

- Regulations (voluntary or mandatory)
- Private sector standards
- Market standards or consumer preferences

Too often exporters/producers believe that only the first level is of interest and may experience market failure because of lack of information or understanding of the other levels.

If there is a mandatory regulation, that regulation must always be fulfilled. To fulfil the regulation in the importing country is not in itself always sufficient to ensure market access. In some markets there are strong private sector standards (or rather the labels that represent the standards) that have such a dominating role in their markets that products will benefit from being re-certified according to those standards. This is a rather common phenomenon in Europe, but not the case in the United States or Japan. Examples of such certification agencies are Soil Association (United Kingdom), Bio Suisse (Switzerland) and KRAV (Sweden). Most of these private certifiers will to a certain extent rely on the IFOAM Basic Standards for their approval of imports.

Another level of need for approval from a non governmental certification body is where a processor certified by such a body wants to use ingredients certified by another body.

In the United States the Organic Trade Association (OTA) has developed the American Organic Standard (AOS) which is a common private sector standard with which a large proportion of the US sector has committed to comply. At the moment it is difficult to assess the market implications of this standard.

NB: the US rule seems to prohibit private certifiers to make additional claims in the market place. It is still not clear how this will be implemented (or circumvented) in reality.

In addition there may be special preferences from the market that is indirectly or directly limiting full market access. That may occur on several different levels:

Importers having own set of standards – not very common, but likely to increase especially for special food such as baby food. May exclude certain inputs, or require stricter documentation or social standards.

Retailers setting own standards – there are numerous examples of this: Danish supermarkets rejecting fruits sprayed with copper despite the fact that copper is approved in the European Union, Sainsbury's (United Kingdom) and KF (Sweden) insisting that products shall be certified by an IFOAM accredited certifier.

Consumer preferences – e.g. consumers may prefer Demeter certification or they may prefer locally produced food as being more consistent with organic principles.
Being legal is often not enough!

2. Regulations

Scope

The organic regulations are typically regulating the marketing of a product with the claim 'organic' or similar. That is the case both for the US and EU regulations. In addition the regulations may be the basis also for special support programmes, i.e. in order to benefit from a special support such as the organic subsidies in the European Union, you may have to follow the regulation and be certified. The Japanese rule is limited to labelling; other market claims (signs, advertisements etc.) are not regulated.

Terminology

The US rules regulate the claim that the product is:

- '100 percent organic'
- 'organic' (>95 percent organic ingredients)
- 'made with organic ingredients' (70 percent-95 percent organic ingredients)
- use of 'organic in ingredients panel

Other words ('ecological', etc.) are not regulated in the rule and therefore permitted to use.

The EU regulation regulates the claim that a product is:

- 'Referring to the organic production method' (this also includes synonyms such as 'ecological', 'biological' and the diminutives 'bio' and 'eco').
- 'Organic' - >95 percent organic ingredients
- 'Made with x percent organic ingredients –70 percent-95 percent organic ingredients

No statement is allowed for products below 70 percent organic ingredients.

Categories of production

The EU regulation applies to:

- Unprocessed agricultural crop and livestock products
- Processed agricultural crop and livestock products for human consumption
- Feed stuff

Processing of wine is excluded. What is not covered under these categories, i.e. textiles, wild fish, wild animals etc. is not regulated, i.e. organic claims can be made.

The Japanese regulation includes agricultural, marine and forest products and processed products thereof excluding liquors, drugs and cosmetics

The US regulation covers ‘crops, livestock and other agricultural products’. Some categories of production are still missing detailed regulation, such as apiculture, aquaculture and mushrooms. Cosmetics are not included in the rule. Raw-materials in textiles can be referred to as being organic.

Non-governmental standards typically regulate the use of a label. Some of the non-governmental agencies (in particular those with a strong market position) have developed standards for textiles, forests, aquaculture, cosmetics etc.

Implementation

The EU regulation has been implemented since 1992. The EU regulation has been revised more than 20 times since its publication and the implementation period for new rules are often very short. The US regulation has been in force since October 2002. The Japanese regulation governing imports of organic products have been implemented since April 2002.

3. Conversion period

‘Conversion’ is the terminology used in the European Union while ‘Transition’ is used in the United States.

Conversion requirements can be split in different parts:

Length of the period

Start of the period (what management changes shall be implemented before the period starts running officially)

Verification of start

Verification of period

Length of the conversion period

United States: a crop shall come from land that has been free from prohibited materials for 36 months before harvest. No exception is mentioned.

Japan, European Union: the principles shall normally have been applied for at least two years before sowing of annual crops, or three years before harvesting of perennial crop. Exceptions are provided for, and in a number of member states generous exceptions are granted. NB: there are proposals to limit the exceptions.

IFOAM: 12 months before sowing for annual crop and 18 months before harvest for perennial crops.

Start of the period

United States: When last prohibited material was used.

European Union: organic management

IFOAM and many private certifiers: organic management + application to certification body

Verification of start

United States: not specified, i.e. conversion can be retrospective.

European Union: the start to be calculated from the date of the farm’s application to a certification body

IFOAM and many private certifiers: application to certification body enables inspection

Verification of period

United States: No specific requirement other than that an initial inspection must be made before certification (affidavit).

European Union, IFOAM: conversion shall be monitored. A number of private certifiers (US and EU) have implemented inspection during conversion period as a requirement in most cases, however exceptions are granted for 'new' or 'idle' land and in many cases also for traditional systems where no inputs are normally used.

4. Approved inputs

The US rule has a different approach than the EU, Japanese and IFOAM regulations
Principle in the **United States:** Natural is OK unless specifically prohibited, Synthetic is not OK unless positive listing.

Japan and the European Union: All inputs used must be in a list
Private certifiers may be more restrictive than required by law.

For details re inputs: see respective regulation.

The most controversial difference is that sodium nitrate is allowed for up to 20 percent of the crops nitrogen requirements in the US rule. It is prohibited in IFOAM and EU rules.

Manure

The **European Union** has limitations on the origin of manure. Not composted conventional manure may be used if it originates from 'extensive animal husbandry'. Composted conventional manure may be used unless it comes from 'factory farming'. There is a limit on the quantity that may be used.

Japan requires all manure to be composted.

The **United States** has requirements for composting (with some exceptions) of manure regardless of origin. No limitation of origin of manure.

IFOAM: composting not required. Manure imports are restricted in terms of both quality and quantity.

Private standards may have considerably stricter requirements as regards composting, origin, quality and quantity.

5. Seeds and planting materials

Both the EU and US regulations as well as the IFOAM standards have a basic requirement for organic seeds and transplants. However, as organic seeds are not yet available in sufficient quality or quantities, a number of derogations are made.

European Union: until 31 December 2003 conventional un-treated seeds may be used after approval by national government. If that is not available conventional treated seeds may be used.

In the **United States** there is also a possibility to use conventional seeds if an equivalent organic seed is not available. Treated seeds will only be possible if the substance is added on the National List or if treatment is required by other regulations. Conventional plants for perennial crops shall have a one year conversion period.

In **IFOAM** standards are similar to the EU regulation. However a number of non governmental certifiers will not accept any treated seeds.

6. Parallel production

The EU regulation is restrictive in relation to parallel production, i.e. production of the same crop both organic and not organic in the same holding. Only crops of different varieties may be grown with exception for perennial crops. Inspection must cover also the non-organic part of the holding. These rules are under revision and may be stricter in the future.

The US rule does not address parallel production, i.e. there are no special restrictions or limitations for this scenario. However the ‘organic plan’ must relate the management practices to prevent ‘commingling’.

IFOAM requires that crops are visually distinguishable OR that there is a system of harvesting where the actual harvest can be verified (e.g. inspection between the harvest of the organic and conventional crop).

Some private certifiers ban parallel production.

7. Contamination

Contamination from outside

The **European Union** has no regulations regarding contamination from the outside. NB: it is proposed by the EU Commission to implement “zero tolerance” in the EU regulation.

The **US** rule: products may not contain prohibited substances (read pesticides) at levels greater than 5 percent of EPA tolerance. The rule requires defined boundaries and buffer zones.

Many private standards have restrictions re production site, e.g. not close to roads or other major contamination sources. **IFOAM and private certifiers** usually require precautionary measures such as buffer zones, planting of hedges.

GMO contamination is not clearly regulated in any of the systems.

Contamination within the farming system

Heavy metals are regulated in a number of EU approved inputs (e.g. Cadmium in Phosphates). There are no such regulations in the United States. Irrigation water is not regulated in EU and US regulations. IFOAM and private certifiers may be more restrictive.

8. Environmental aspects

Conservation of biodiversity is mentioned in the definition of organic in the US rule and environment is mentioned in the preamble of the EU regulation, which has rules on manure storage. No specific rules exist in the regulations. IFOAM requires relevant measures for the provision and improvement of landscape and biodiversity. Many private standards have a number of specific requirements, such as buffer zone to waterways, preserving hedges, set aside of a proportion of the farm for bio-diversity etc.

9. Social aspects

Not regulated in the European Union, United States or Japan standards. IFOAM has general provisions, which are being expanded.

10. Labelling and consumer recognition

Private labels

As mentioned earlier there are a number of strong private certification labels that are almost a must for having access to certain markets. IFOAM has launched a Seal for products certified by an IFOAM Accredited certifier (“IFOAM Accredited”).

Governmental labels

There are a number of governmental labels for organic products. They are not always accessible for foreign operators.

EU logo – only for EU products not available for imports.

In the EU member states there are a number of national logos. France has had one for many years. Germany launched its logo two years ago. The Danish and Finnish logos are also valid for imports but must be applied within the country.

The USDA Seal and JAS mark are also available for foreign production.

Conclusion: the application of the standards to imports: equivalency or total compliance?

As seen above, while there may be many differences between the various standards, these differences are often not so great. According to the WTO Technical Barrier to Trade (TBT) agreement import rules should be based on equivalence and not on full compliance with the importing country’s standards. Another option promoted by the TBT agreement is the use of international standards (such as Codex or IFOAM) for acceptance of imports.

The concept of equivalency is laid down in the EU regulation but when it comes to implementation this is not always followed. The US rules mention equivalency in the context of bilateral governmental equivalency agreements, but not in the other scenarios laid down for imports.

The IFOAM Basic Standards were developed as a standard for standards, i.e. the Basic Standards regulate the type of standards that can be acceptable on the national level. The IFOAM system is based on an international standard and allows for variations. Considering the fact that organic agriculture shall be based on local conditions, IFOAM believes that this approach is the best. It fits well with the preference for international standards as expressed in the TBT agreement. As a starting point IFOAM is asking governments to accept IFOAM Basic Standards and IFOAM Accreditation as a mechanism for import acceptance.

In 2002, FAO, IFOAM and UNCTAD created an International Task Force for the Harmonization of Organic Standards. Representatives of governments and the private sector participate in the Task Force, which has met three times.

There are many similarities between the various organic standards in importing countries. However, there are a number of issues where there are differences which may be of high relevance for exporters.

Such issues are among others:

- Definition of conversion period
- Monitoring of conversion periods
- Administrative and management requirements for the operator
- Scope of Regulations
- Inputs
- Seeds
- Parallel production
- Contamination
- Environmental and social aspects
- Labelling

In addition to regulatory standards there are numerous private sector standards which may have more restrictive requirements than the legal level.

Certification bodies increasingly offer a menu of certifications to allow their producers market access to the various markets.

References

The following web sites have information regarding the organic regulations:

European Union: <http://europa.eu.int/eur-lex/en/index.html> (search for 1991R2092)

IFOAM: www.ifoam.org

Japan: www.maff.go.jp/soshiki/syokuhin/hinshitu/organic/eng_yuki_top.htm

United States: <http://www.ams.usda.gov/nop/>

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USDA's National Organic Rule

Shelton Weinberg, World Board member, IFOAM

The United States is the largest and most dynamic organic market in the world, and while there is substantial organic production in the United States, this market offers plentiful export opportunities for organic producers in Asia and around the world.

In October 2002, the US Government enacted the National Organic Program (NOP) which regulates how organic food to be sold in the United States is produced and labelled. NOP requires any farmer, wild harvester, processor, manufacturer or handler, whether within or outside the United States, to comply with the NOP. There is government enforcement with a penalty for violations.

The NOP is codified in a set of standards that covers crop standards, livestock standards and handling standards. The NOP standards are process standards, regulating how a product is produced, not end-check standards measuring the qualities of the finished product. Certain substances and production methods, such as use of Genetically Modified Organisms, are expressly prohibited.

Products sold in the United States must be certified by an NOP Accredited Certifying Agent. Any company wishing to export organic products to the United States must contract a certifier who has been granted accreditation from USDA. As of 25 September 2003 there were 88 certifiers accredited to certify to the NOP standards. Of these 53 were US based (60 percent) and 35 were based outside of the United States (40 percent). Of the certifiers outside the United States, 18 are from Europe (51 percent), 9 are from Latin America (26 percent), 6 are from Canada, and 2 are from Australia. There are currently no Asian certifiers recognized by USDA as accredited to the certify to NOP. Organic Agriculture Certification Thailand has applied.

Choice of a certification service provider is a critical decision for any Asian producer wishing tap the US market. Since there are no NOP accredited certifiers in Asia today, I recommend contracting with a US based certifier who has invested in building international certification and cultural expertise. While there is no substitute for a producer being directly and thoroughly familiar with the NOP, a qualified certifier can be of great assistance.

I also recommend that Asian producers work directly with national and regional certifiers in Asia, emphasize the importance of gaining NOP accreditation, and encourage them to apply. This may seem a daunting task, but in the long run, it will be worth the investment of time and resources. US certification expert consultants can be hired to help guide them through this process and help them learn to understand and overcome the hurdles.

Sheldon Weinberg

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Weinberg is an organic industry professional with 20 years' experience. He has a successful track record of business development, project management and entrepreneurship, domestic and international, for both small and large companies.

Weinberg spent 10 years with USA organic foods pioneer Cascadian Farm, and its successor companies Small Planet Foods and General Mills. Positions he has held at Small Planet include Director of Purchasing, Vice President of Operations, Vice President of International Sales and Business Development and Vice President of Global Organic Initiatives. He also served as Business Development Director, Organic Foods for the International Division of General Mills.

He is currently the principal of, a business development consultancy with focus on organic trade, international development, project management, brand development, strategic planning, third-world crop improvement and sustainable growth. Weinberg & Associates combines Mr Weinberg's years of experience with the expertise of his world-wide network to add value to a broad range of clients including multi-national companies as well as regional and local companies, start-ups, and not-for-profits.

Weinberg is the North American World Board Member of the International Federation of Organic Agriculture Movements (IFOAM), with a special focus on organic trade issues. He also serves on the Organic Trade Association's International Relations Committee, and on the UK Food and Drink Federation's Organic Liaison Committee. He has an international reputation as a speaker and champion of the organic movement.

Regulations For The Importation And Labelling Of Organic Foods In Japan

Kenji Matsumoto, World Board member, IFOAM

Organic foods are now regulated in Japan by the law of standardization and proper labelling of agricultural and forestry products (the JAS law).

In this paper I explain very briefly the outlines of JAS organic regulations and then how to export organic foods to Japan.

The regulations consist of JAS Standard, Criteria for organic operators and criteria for certification organizations. For more details, please look at the English translation of the home page of the Ministry of Agriculture, Forestry and Fisheries (MAFF): <http://maff.go.jp>.

The Japanese Government has an equivalency agreement with the 15 countries of the European Union, Australia and the United States. The other countries have no equivalency agreement with Japan. Organic operators in a country without equivalency agreement who want to export to Japan have to obtain JAS organic certification by a registered certification organization or a registered foreign certification organization. Any JAS organic operator must meet the technical criteria stipulated in MAFF notifications.

Once an operator has been certified as JAS organic, it has to affix the JAS organic label on its product. I will explain how to label organic products to export to Japan. More details on Quality Labelling Standard of Notification No.513,514,517 are provided in the home page of MAFF.

Scope of JAS certified organic foods

The organic JAS mark may apply to organic agricultural products and foods obtained through the processing of these products. Some types of organic products are not regulated by MAFF. In this case, the organic JAS mark is not allowed for use. This is the case for mushrooms grown in forest, alcoholic beverages, livestock and aquaculture products.

There are various types of organic operators recognized by MAFF:

1. Production Process Management Director
 - -farmer
 - -farmers group, cooperative, corporation
2. Processor
3. Sub-divider (packer)
4. Importer

Criteria for operator:

- Organization and field/facility
- Internal regulation for quality control
(how to manage organic quality)
- Grading regulation
(how to audit quality management & to control organic labelling)
- Internal auditing and education

Who can put the organic JAS label?

- Farmer/processor who is certified by a certification body registered at MAFF (Japanese or foreign certification body)
- Certified Importer
 - to evaluate equivalency of imported organic product without organic JAS mark
 - with certificate issued by the relevant government
 - If compliant with JAS regulation, importer has to put organic JAS mark before shipment

Certified organic operators as of 31 July 2003

	Production Director ¹	Processor	Sub-divider	Importer	Total
Japan (farmers)	1 750 (4 330)	814	533	101	3 198
Foreign countries	258 (3 746)	269	54	0	581
Total (farmers)	2 008 (8 076)	1 083	587	101	3 779

¹ Data in brackets are the numbers of farmers

1. Grading regulations

Grading manager must have authority independent from the production and sales division.

*To evaluate conformity of its operation with Internal regulations and/or Organic JAS by checking the operation records.

* To approve grading as organic on the products after evaluation

* To deal with unapproved products after production and before shipment

* To make sure labelling is made in accordance with Organic JAS

* To store and ship approved organic products

* To control organic JAS mark and make records of its use/and disposal of disapproved products

* To undergo inspection and auditing by the certification organization



2. Labelling (Grading) of JAS Organic

[1] Consumer packaged organic products

Labelling of JAS Organic can be printed on the package beforehand or can be affixed on the package with a labelling sticker or piece of paper or cloth etc.

For agricultural product such as rice, ingredients must be written in either way of “organic product rice” or “organic rice” or similar word in Japanese.

2) For processed food such as soy sauce, a) “organic soy sauce” b) name of ingredients such as organic soy bean, organic rice, salt, and so on.

c) in addition to the specially required for organic products, the general rule of labelling for processed food must be observed.

[2] Bulk organic products

For bulk shipment for trading, Method 1. or 2. must be used.

Method 1.

Affix the label of JAS Organic on the bulk products and also write “JAS Organic” on the invoice and shipping documents / slips.

Method 2.

Affix the Label of JAS Organic (JAS organic mark with the certification body name (and the operator’s number) on the invoice and write “JAS Organic” on the invoice and shipping documents/slips.

[3] Note

1).The lot number should be written on the products and the invoice/shipping slips.

2).The grading manager is responsible for printing and affixing the label of JAS Organic before shipment.

3). JONA’s requirement:

Labelling review is required. JONA requests submission of draft of labelling before making final packaging materials in order to check the compliance with the JAS system. For the final printing of the JAS Organic label, you need to use the clear proof of the JAS –JONA mark.

(Please read carefully Article 5, in the JAS Organic Standards and the Labelling Standard for processed food, fresh produce and rice/ milled rice)

3. Internal regulations for production process management

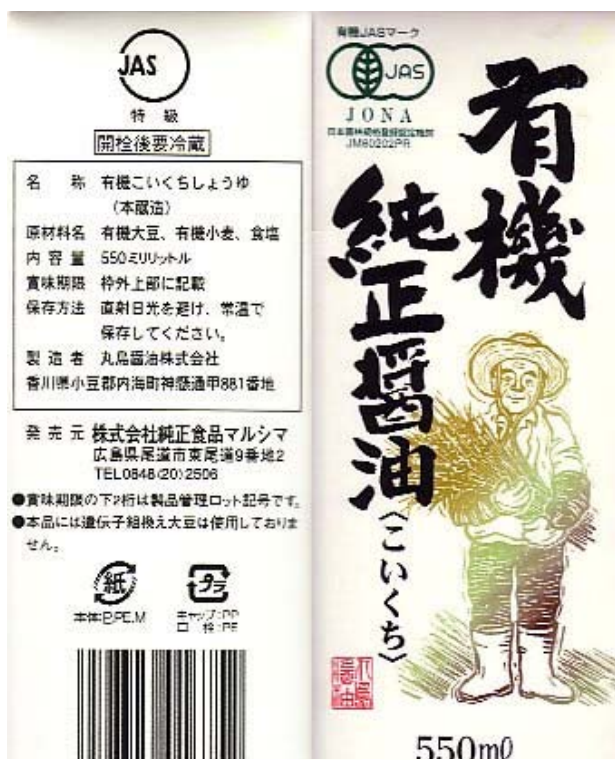
Procedures to carry out organic quality management

- Annual production plan
- Cultivation plan - seed, fertilization, pest and weed control, crop rotation
- Maintenance, cleaning and washing of machinery, equipment and tools
- Lot control from harvest to shipment
- Processing on the farm - washing, drying, cutting, selecting, storing, packing
- Record keeping - farming, harvest, shipment, loss
- To report to the certification body and undergo inspection and auditing by the certification organization.
- To check and improve internal regulations periodically - internal auditing
- Claim policy and manual
- Education and training of staff and workers.

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Matsumoto was elected as director of JONA in 1996. After retirement from a food and beverage company, he was assigned as general manager of JONA in 1997 and restructured JONA's organization to become an international organic certification body following IFOAM Standard and Criteria. He also helped to establish the Independent Organic Inspectors Association of Japan. In 1998, he was nominated as a member of the JAS Committee to propose the Japan Organic Regulations to MAFF. He was elected as a member of IFOAM World Board in August, 2002.

JONA was approved as a registered organic certification organization immediately after implementation of JAS Organic Regulations in 2000.



Regulations For The Importation And Labelling Of Organic Foods In The European Union

Gerald Hermann, Vice-President, IFOAM

Abstract

Organic farming, processing and inspection systems in the European Union are regulated by EU regulation on organic farming 2092/91 (EEC 2092/91).

The production at farmer's level is defined in Annex I of the Regulation. Annex II regulates the use of mineral fertilizers and chemical pesticides. Soil fertility must be maintained or even increased. The EU Regulation regulates plant production and organic husbandry.

An overview about the definition on allowed inputs of organic and non organic origin and the labelling requirements for non processed and processed products is given. Products may be labelled as organic if at least 95 percent of the ingredients are from allowed organic origin. In the case of products with at least 70 percent of organic ingredients, a reference to the organic production may only be made in the ingredients list and on the label referencing the organic percentage. All allowed processing inputs including those of conventional origin are defined in Annex VI of the regulation.

Beneath the definition of production and the requirements for labelling the inspection system is defined in the Regulation (Annex 3). The fundamental requirement is the physical annual inspection of every operator in the chain of production. Additional spot checks are required which might be announced or unannounced. Also the approval of inspection bodies is defined. Either the state authority itself or private inspection bodies approved by the authority are performing inspections.

Equivalent rules for production and labelling apply to imports from non-EU countries. The equivalence of production and processing rules, of the inspection system and of documentation requirements must be proven to the EU Commission in Brussels or to the competent authority of the respective EU member state approving imports. The EU Commission decides on including a non-EU country in the Third Country List (Article 11, 1) or the national authority on import allowances (Article 11, 6).

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Gerald A. Herrmann has a university degree in agriculture. He started his career in organic agriculture in 1985. He worked as organic farm consultant, in certification, marketing, public relations, licensing and had teaching assignments. After being President of the Board of Naturland, an international association of farmers and private certification body, he was its Executive Director. Today he is director of 'Organic Services' his international consultancy for Organic Agriculture and the Organic Food Industry providing services like business development, policy advice, advice in certification and accreditation, in marketing and public relation. Gerald served in different structures of IFOAM, the International Federation of Organic Agriculture Movements, and today as Vice-President. He is also Vice-President of ECOLAND, an organic farmer association in Germany, and member of the Advisory Board of BÖLW, the German umbrella organization of the Organic Industry.

Chapter 3: Producing and Exporting Organic Horticultural Products in Asia

Overview of Organic Agriculture in Asia

Vitoon Panyakul, Green Net/Earth Net Foundation

There are two streams of organic agriculture in Asia, one as part of sustainable farming and the other as export-oriented organic projects. The first group is supported by non-governmental organizations (NGOs) and the other is initiated by the business sector. Historically, the sustainable agriculture movement emerged earlier (in the 1970s) as a reaction to the green revolution, while the commercial organic farms are the product of commercial collaboration between Asian food exporting companies and importers seeking to capture organic market opportunities in industrialized countries. The NGO model is predominantly small-scale, working with family farms and mainly targets the domestic market, while the business model is larger-scale and focuses on export markets.

Due to their export orientation, the private organic projects need to rely on foreign certification services from importing countries, while the NGO projects, at least at the beginning, do not require any formal third party certification. As the market expands, more and more NGO projects have begun to embark on export opportunities while keeping the efforts to develop local markets as their primary objective. Local competency has been developed by assistance from importing countries to establish local organic certification programme.

The Asian governments have become interested in organic farming for the last five years, as the organic market further expands and exhibits its potential and significant market opportunities. Almost all Asian authorities have taken interest in organic certification and accreditation as their priority, even though the major constraints in organic farming in Asia are at the level of farm production. The increasing number of public organic standards and inspection systems makes little contribution to Asian organic growth and, on the contrary, further complicates international harmonization of organic guarantee systems.

Public-private partnership (PPP) is urgently needed if rapid growth in organic agriculture in Asia is to be sustained. Re-orientation of government policies is urgently needed, including the support for farm extension, post harvest technologies, and supply chain management. Closer collaboration between NGOs, the private sector, farmers, scientists, and public authorities can ensure that the efforts of each group are not in conflict with one another and that synergy is achieved.

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Vitoon R. Panyakul has been working with the Thai organic movement since 1991. During his first few years, he worked as researcher for the Local Development Institute, responsible for developing a national organic agriculture programme. In 1994, Vitoon with his colleagues started Green Net, the first national organic food distributor in Thailand where he served as Executive Director. From 1995, Vitoon was involved with the establishment of the national Organic Agriculture Certification Thailand (ACT), the first local certification body in the country. He served as the ACT General Manager until December 1999. Vitoon is currently a member of the IOAS Board as well as accreditation committee

Assessing the Profitability of Converting to Organic Farming: Key Parameters to Analyse

Pascal Liu, Commodity Specialist, Commodities and Trade Division, FAO

A substantial number of conventional farmers consider converting to organic agriculture due to the rapidly growing market for organic products and the possibility of higher prices. However, they are also aware that organic farming may entail some constraints and possibly higher costs, and are therefore unsure whether they will be economically better off if they convert. The economic and financial evaluation method may help them make scenarios to assess the profitability of converting to organic farming. The three indicators used by this method are the Net Current Value, the Internal Rate of Return and the Recovery Period. An example of the application of this method is given in a case study carried out for FAO by the University of Valencia comparing the profitability of organic and conventional citrus production in Spain.

In this example, production costs are higher in the organic farms than in the conventional ones, mainly due to the need for more labour and the higher costs of organic fertilizers. Moreover, yields are lower in the organic farms, in particular during the transition period. After this three-year period, however, they tend to come back to levels close to those of conventional production. The case study shows that the profitability is lower in the organic farms, although the difference is small. It also examines the sensitivity of both production systems to variations in costs and producer prices. The organic system is found more sensitive than the conventional system. The study also shows that the organic citrus production system is more profitable than the conventional one only if the producer price for organic citrus is 30 percent higher than that of conventional citrus.

Of course, these specific findings cannot be extended to all organic production systems and no general conclusions on the comparative profitability of organic and conventional farming can be drawn from this case study. However, this method can be useful to producers who consider conversion to organic farming. It shows that the most important economic parameters that should be analysed are:

- Possible fall in yields (with the possibility of recovery later)
- Difference in production costs (labour costs tend to increase in particular)
- Price difference (organic prices tend to be higher, but not always)

All these parameters vary over time, which implies that various scenarios should be considered.

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Pascal Liu is an Agricultural Economist and has worked as a Commodity Specialist in the Horticultural Products Group of FAO since 1998. His work includes studies of the markets for organic fruit and vegetables and economic analysis of organic production. He was the coordinator and editor of the publication "World market for organic fruit and vegetables", produced in collaboration with colleagues from FAO, ITC and CTA in 2001. Pascal organized the Conference on Supporting the Diversification of Exports in Latin America and the Caribbean through the Development of Organic Agriculture with CTA, CDE and IICA in 2001. He has done research on various types of environmental and social certification programmes and has collaborated in publications on this topic. Before joining the FAO, he worked on agricultural development projects with farmer groups in North Africa and Southern France from 1990 to 1996.

Organic Vegetable Production: A Theme for International Agricultural Research

Heidi Lumpkin, ARC (Thai University of Kasetsart)

The Asian Regional Center (ARC)-Thai University of Kasetsart is a key component of the World Vegetable Center, the leading international centre for vegetable research and development. The World Vegetable Center's mission is to reduce poverty and malnutrition in the developing world through increased production and consumption of vegetables. The Center acknowledges the role organic vegetable production can play in achieving its mission, but also recognizes there is little scientific research in organic agriculture production systems. Millions of subsistence farmers who do not purchase chemical inputs could increase their crop yields if they were provided with information and training in organic production techniques and management strategies.

As a result, the World Vegetable Center has launched a new research and development programme on organic production technologies for vegetables. The Center will focus on components that solve problems specific to organic farming systems, such as sustainable soil fertility and nutrient management, selection of disease-resistant cultivars, and development of IPM/biological control methods suitable for organic farmers.

Specific examples of recent accomplishments to be included in the programme:

Parasitoids of diamondback moth - the most destructive pest of the cabbage family - have been successfully introduced in Asian countries.

Pesticide-free strategies that control eggplant fruit and shoot borer, the most severe insect pest of eggplant in the tropics.

Technologies developed for production of pesticide-free leafy vegetables under net structures, suitable in peri-urban areas where pesticide misuse is especially high.

Disease-resistant, early-maturing mungbean lines incorporated into over 1 million ha of rice-wheat cropping systems in the Indo-Gangetic Plains. Mungbeans enrich the soil, increase farmers' incomes, and improve diets in this impoverished region.

Over 5 000 accessions of indigenous vegetables have been collected in Asia and Africa. Many of these accessions grow well under low input systems and show natural resistance to pests and diseases; thus, they could be promising for organic production and income generation, especially for women.

Food safety is also a major concern. Many of today's vegetable farmers inappropriately use toxic pesticides, pre- and post-harvest. This threatens the health of the farmer, consumers, and contaminates the environment. Everyone, rich and poor, must have access to safe vegetables. We also must become better stewards of our increasingly threatened natural resources. Reducing the use of chemical inputs through the adoption of organic agricultural production methods will help achieve these goals.

Finally, the World Vegetable Center invites the scientific community, NGOs, farmers' associations, and other stakeholders to work as partners in our efforts to assist organic vegetable farmers in solving their production problems, gaining access to information and training, and achieving higher incomes and creating healthier communities.

Heidi Lumpkin (E-mail: thomas_lumpkin@yahoo.com)

Heidi Marie Lumpkin represents the World Vegetable Center through its' regional branch at Kasetsart University in Bangkok, Thailand. She has a bachelor's degree in Soil Science with an emphasis in environmental soil chemistry. She also has been a certified organic farmer in the Pacific Northwest United States since 1992

