# Executive Summary

**Background**

This Organic Grains and Cereal Market Research study has been undertaken by MacArthur Group Inc., during the period January – March 2004 for the Prince Edward Island Certified Organic Producers Co-operative Ltd.

The Co-operative has identified the lack of market intelligence in grains and oilseeds as a limiting factor in the growth of the PEI organic industry. While organic wheat and other grains are still only a small part of total organic agriculture production, interest is growing among farmers, food processors, and retailers.

**Market Overview**

The organic market is growing in all areas. Reports from around the world paint a picture of world growth, opportunity, and competition in the organic food sector. In ever increasing numbers, consumers are seeking what they perceive as healthful, safe food, often with the caveat that it is produced in an "environmentally friendly" way. Companies across the spectrum of the food system are working to respond quickly and accurately to these preferences.

Consumer food markets for organic grain products are growing quickly, including the following:

- Organic breakfast products, including ready-to-eat cereals and breakfast bars.
- Organic breads (including new products such as organically produced bannock bread) and baked goods, including yeast-free organic products used in a wide variety of baked goods.
- Snack foods are a large category of future opportunity. More than 80% of Canadians snack every day and 65% have stated they would rather snack on healthy foods. There are as yet very few organic grain products in this category.

Central Canadian buyers advise that demand is high, particularly for spelt. Other cereals in demand include hard red spring wheat, rye, buckwheat, and soft and hard winter wheat.

The organic feed market is growing quickly, because consumers increasingly want meat and animal products that:

- taste great,
- are locally raised,
- come from animals raised in humane management systems,
- come from animals raised in systems that are ecologically sustainable,
- are produced on small family farms, rather than in "factory" farms,



- are unique, are healthy, and
- are raised without antibiotics, genetically modified organisms, or growth hormones.

Soy and rice beverages are a key segment of the consumer market for soy products and include four main segments: lactose-intolerant/allergic consumers; consumers of Asian origins; people concerned about what they eat, who believe that consuming soy beverages and cereals has health benefits; and vegetarians. In Canada, there has been a strong increase in sales of soy and rice beverages in recent years. Although many companies produce some of these products, the majority is not organic. However, Bianca International Organics finds demand strong for organic soybeans in the Canadian market.

According to a 2001 Agriculture and Agri-Food Canada market study, the retail market for organic food in Canada at that time was worth $300-$750 million, with 80% of the products being imported. The factors affecting Canadian food choice are, in order: taste, nutrition and health, ease of preparation, and price. The three main triggers for choosing organic foods are children, food allergies, and healthy lifestyles.

Forty-nine percent of Canadian organic purchases are made in mass-market outlets, while 48% are made in specialty stores, and 3% are mostly made at farmers markets. Loblaws is the largest mass marketer, while Whole Foods Market Inc. and Wild Oats Markets Inc. are two large US specialty chains now in the Canadian market. North American industry analysts expect that by 2008, organic foods will make up nearly 10% of the total retail foods market.

As organics have moved from the fringe to mainstream, North Americans are seeking the same quality and packaging as conventional food offers. As noted by one organic grower in the USA, "*Ten years ago, if you grew organically, you just did the best you could, threw it in a box, and that's what people bought. Nowadays, we take conventional standards and apply them to organic. Same weight, same size, and no bugs*."

**Table 1: Market Distribution of Organic Food and Annual Expenditures in Atlantic Canada**

| | **Market Share Distribution** | **Organic Annual Expenditures** | **% of Total Annual Food Expenditures** |
|---|---|---|---|
| Meat and Fish | 1% | $650,000 | 0.1% |
| Dairy and Eggs | 11% | $7,150,000 | 1.3% |
| Bakery and Cereals | 13% | $8,450,000 | 1.5% |
| Fruit and Nuts | 21% | $13,650,000 | 3.8% |
| Vegetables | 21% | $13,650,000 | 4.0% |
| Beverages | 17% | $11,050,000 | 7.0% |
| Other | 16% | $10,400,000 | 1.2% |
| **Total** | **100%** | **$65,000,000** | |

Source: Statistics Canada 2001.



It is estimated that 85%- 90% of the total organic sales in Canada are imported from the US. Small amounts are also imported from Europe. Using these assumptions, it would mean that the dome stic supply of organic products in Atlantic Canada is currently about $6.5 million annually, of the $65 million in annual expenditures for organic food in Atlantic Canada. The opportunity for product displacement of imported organic products is obviously large.

**Production Overview**

As a result of increased consumer demand, improved marketing techniques, and current low prices for conventional grains, production of organic crops is expanding across Canada. In Canada, total annual production of organic grains and oilseeds is estimated to be about 140,000 tonnes, valued at $400-$500 million. Organic grain production is concentrated in Western Canada, with wheat, including durum, contributing one-half of total organic grain. Wheat, excluding durum, is the largest crop, while durum and rye are the second largest crops and roughly equal in output. Buckwheat production is small and is increasing at a relatively slow pace.

Oilseeds make up only 10-20% of total organic production due to problems with weeds and disease, combined with a lack of organic crushing facilities. The major organic oilseeds are flax, canola, and sunflowers. Legume production is relatively small in comparison with other crops.

Over the medium term, Agriculture and Agri Food Canada (AAFC) in 2000 projected that Canadian farm area seeded to organic crops could increase 500%. AAFC notes that by 2005, the organic industry is anticipating that their market share will increase to 10% of the Canadian retail market, and that organic bulk and value-added p roducts currently represent one alternative to conventional farming.

For organic production to be economically viable, premiums are often required to compensate producers for the loss in yields due to the abandonment of conventional pesticides and fertilizers and for the three-year conversion period where yield declines are typical. Over the long run, the sustainability of organic production is dependent on the profitability of the rotation compared to growing conventional crops.

MacArthur Group reviewed various secondary research sources and surveyed a number of PEI organic producers resulting in the following information:

Organic cereal production is presently very limited in PEI. There are a few producers who grow organic feed grain for their own use, a small acreage is grown to supply regional mills and bakeries, and a small tonnage of soybeans is being grown for a local tofu business, as well as for periodic export.

Milling wheat, used to produce flour, is attracting more attention from PEI growers (both conventional and organic) looking for a higher value crop. There are currently between

three to four thousand acres produced on the Island annually, with most of the crop marketed to Dover Mills in Halifax. Some is also shipped to the Speerville organic mill in New Brunswick. *Note: Dover Mills has indicated to the consultant that they may start handling organic product in the near future.*

The following table summarizes key organic statistics for the four Atlantic Provinces in 2003.

**Table 2: 2003 Atlantic Canada Organic Agriculture Activity Summary**

| | PEI | N.S. | N.B. | Nfld. | Total |
|---|---|---|---|---|---|
| # of organic producers | 23 | 45 | 31 | 3 | 102 |
| Plus number in transition | 5 | 1 | 2 | - | 8 |
| # of processors | 2 | 13 | 14 | - | 29 |
| Total Acreage | 1,616 | 1,022 | 2,114 | - | 4,752 |
| Total producer sales | $ 590,000 | $ 807,500 | $ 475,000 | $ 92,500 | $ 1,965,000 |
| Total processor sales | $ 120,000 | $ 1,857,139 | $ 1,075,000 | - | $ 3,052,139 |
| Milling wheat (acres) | 117 | - | 27 | - | 144 |
| Oats (acres) | 50 | 3 | 20 | - | 73 |
| Spelt (acres) | 39 | 6 | 5 | - | 50 |
| Other spring grains (acres) | 47 | 83 | 45 | - | 175 |
| Soy beans (acres) | 82 | - | - | - | 82 |
| Cattle (head) | 50 | 140 | 97 | - | 287 |
| Poultry/eggs (layers) | - | 350 | 400 | - | 750 |
| Sheep | - | 50 | - | - | 50 |
| Pigs | - | 11 | - | - | 11 |

Source: MacArthur Group Inc., derived from 2003 Certified Organic Statistics, Summary of Atlantic Region.

**Opportunity**

The introduction of the National Standard of Canada for Organic Agriculture and the recognition of the Canadian accreditation system by Canada's major trade partners are expected to result in stronger exports of organic grains and oilseeds over the medium term. Consumer demand is also expected to grow substantially in world markets for grains and oilseeds.

There are major growth opportunities for organically grown grain, with the market for bulk organic feeds projected to grow by a factor of ten over the next few years, if enough product is available. And there appears to be even more opportunity on the export level to Europe, USA, and Latin America.

Here in the Atlantic region, the organic meat industry is in its infancy. However, it is noted that there is great potential for organic beef, pork, and other meat products, including pasture raised organic chicken. Chicken is easy to grow, easy to handle, has a quick turnover, and is popular with the consumer. Bianca International Organics of Montreal advises that the organic feed products for which demand is increasing are yellow peas, soybeans, and barley.

**Potential Buyers**

Speerville Mills in New Brunswick processes and distributes flour grains, including spelt, oats, winter soft wheat, rye, and hulless barley. Other products in demand are sunflower seeds, lentils, split peas, and certified herbs. They purchase 50-80 tonnes from Island growers currently and 75% of products are organic. They buy grain year round in small amounts, with total purchase annually being: 95-100 tonnes of wheat, 60-75 tonnes of oats, 30 tonnes of rye, and 40-50 tonnes of spelt. They will not dry grain if less than five tonnes. Prices are stable, with approximate buying prices being $400 per tonne for wheat, $500 per tonne for spelt, $300-$400 per tonne for rye, depending on quality, and $350 per tonne for oats. Although Speerville Mills is not dealing in soybeans now, they will be looking at processing soybeans in the fall. They see an opportunity and will be looking for suppliers.

Pioneer Organics of Waterville, NS, tried to export products but had difficulties filling minimum orders. Needed to be able to fill 30 tonne capacity tractor-trailers with grain, but farmers were not able to supply sufficient volumes. In order to fill a truck, Pioneer had to get grains from here and there (often only a few bags at a time), and this meant mixing lower quality grains with higher quality grains, resulting in lower sale prices. Also, in o rder to export grain, farmers have to be federally inspected and this takes time and money.

Pioneer Organics did not find the grains and oilseeds business sustainable in Atlantic Canada because of the lack of suppliers and product. An additional barrier is shipping costs because export markets are far away.

Co-op Atlantic in Moncton, NB, buys for Co-op livestock feed mills in Atlantic Canada. Supply is limited in Atlantic Canada due to small number of producers who are certified organic. Demand from their mills is for layer feeds, hog feeds, and turkey feeds. A major problem is that some feeds require 10-12 ingredients, and each ingredient must be certified organic. Coop Atlantic is developing a new price list and, in the meantime, suggests producers use Homestead Organics price list (See Section 4.2.11 of this report.)

Valley Flaxflour Ltd. in Middleton, NS, processes flax seed into flour. The company expects to become organic in two to three years, depending on demand. Most of the flax product is bought from Manitoba, but they would prefer to buy locally to reduce costs.

Local organic bakers within the region are purchasing certified cereals and often are required to import their needs, as local supply is unavailable. The small bakeries generally do not have



much storage space for grain and prefer to purchase smaller tonnages. When they import such amounts the cost is very high due to transportation costs to haul partial tonnages from Ontario.

Atlantic Superstores foresee excellent growth in the organic food market in the Atlantic region. Although customers usually say they want to buy local; if quality and price are not consistent with other sources, they won't buy. The most popular organic products are produce and they mirror items in demand under conventional farming (e.g. bananas, potatoes, grapes). For packaged products, organic items such as coffee, tea, snacks, cereal, dairy products, and frozen foods are popular. Everything has to be certified organic.

The Sobey's, Stellarton, NS, person responsible for purchasing for the organic flours and baking goods products says their only Maritime organic supplier is Speerville Mills. Many products come in from Western Canada. The most popular organic product sold in Sobey's bakeries is white flour. Sobey's would support more local companies if assured supply was there and, contrary to the Charlottetown store spokesperson, the Stellarton office says farmers could sell direct to some Sobey's stores.

Home Grown Organics in Halifax sells organic fruits and vegetables, meats, baking goods, pasta sauces, and more. It has the only delivery service of its kind in the Metro Halifax area. It buys various products through Seaspray in PEI, including turnips and potatoes, and also buys from Speerville Mills – has a total of 100 suppliers of products.

Home Grown Organics' main business is wholesaling to restaurants and other food retailers. Products in high demand from consumers are spelt flours, gluten free products, oats, multigrain products, buckwheat, brown rice, and flax seeds. An increasingly popular product is freerange beef and chicken.

As of May 1, 2004, the operation is moving to a better location and bigger storage facility. This will allow the firm to buy more produce direct from farmers (mainly fruits and vegetables). They will compete directly with Pete's Frutique.

The Root Cellar in Charlottetown sells the following organic products: alfalfa, soybeans, soymilk, soy sauces, other soy products, oats, spelt flour, buckwheat, herbs, organic snacks; plus vegetables such as broccoli, cauliflower, carrots, lettuce, yams, sweet potatoes, beets, and green beans. Their most popular items are gluten free products. Between May and October, the store buys 85% of their organic produce from local farmers. For the rest of the

year, organic products are supplied by outside sources, such as Pro Organics.
There are various potential buyers (see main body of this report) in Quebec, Ontario, and New England, who are very interested in purchasing organic grains and oilseeds from PEI producers.



**Strategic Considerations**

1. Instead of providing only a market research study, this report attempts to map out an overall organic grains and cereals strategic plan that takes into account all of the factors necessary to build a stronger PEI organic grains and cereals industry.
2. The future and success of this segment of the Island organics industry will depend on developing a strong and vibrant overall organic farming industry in PEI.
3. Although conventional agriculture in PEI is a world leader in terms of production, processing and related value-added (e.g. packaging, branding), organic agriculture in PEI is in its infancy and is developing at a rate considerably behind other jurisdictions, most of which are not as advanced in conventional agriculture as is PEI. There is simply not the existing organic capacity, at the organizational or production levels, in PEI to move forward with large, value-added projects as is happening in organic agriculture in some other jurisdictions.
4. Most of the issues facing the PEI organic grains and cereals sector are production or infrastructure related, not marketing issues.

**Recommendations**

***Recommendation #1***: The PEI Certified Organic Producers Co-operative should play the lead role in advancing the PEI organic agriculture industry, including the grains and oilseeds sector. This will require substantial additional human and technical resources within the Co-operative.

***Recommendation #2:*** The PEI Certified Organic Producers Co-operative should immediately seek buy-in and enhanced, comprehensive, and ongoing support from the Government of Prince Edward Island, with such support centred in, but expanding beyond, the PEI Department of Agriculture, Fisheries, Aquaculture and Forestry.

***Recommendation #3***: With the Government of Prince Edward Island firmly behind the strategy, the PEI Certified Organic Producers Co-operative should next ensure that the federal government is equally supportive. While the contribution of the Province will be largely in the area of institutional and human resources, the federal contribution should be primarily in funding. Approaches need to be made by the Co-operative at both the officials and the Member of Parliament levels.

***Recommendation #4***: Initial development activities for grains and oilseeds (and for the larger PEI organics sector) should focus on existing organic producers. As successes are achieved within the existing industry, they can make it much easier to convert conventional growers in increasing numbers.



***Recommendation #5***: Any and all strategic initiatives must recognize the fundamental importance of quality and dependability in the marketplace. Quality means all products being certified, with the objective of achieving the most demanding certification requirements such as those of the European market. Quality also means excellent packaging/presentation, freshness, branding, etc. Dependability means being a dependable supplier at all times and one that the buyer can always count on, in every situation.

***Recommendation #6***: A first marketing objective for the Co-operative and its members should be to serve existing, easily accessible local and regional markets. There is an opportunity for product displacement of imported organic products, and the opportunity is large. In fact, the opportunity is far larger than the limited number of Island organic producers can fully address.

***Recommendation #7***: To displace imported product and to develop markets further, there is a need for PEI organic producers of grains, oilseeds, and other products to work more closely together. This need can best be addressed by the Co-operative, and relates to joint marketing initiatives, jointly filling orders from buyers, co-operating on storage, transportation, and other infrastructural needs.

***Recommendation #8***: There is a n eed to develop new product development and import substitution organic opportunities, which are built on the capabilities and interests of Island organic producers (e.g. organic meats, expansion of soy processing).

***Recommendation #9***: The PEI Certified Organic Producers Co-operative should play the lead role in two distinct communications/marketing strategies:

1. Ongoing marketing/awareness program, through Internet, seminars, etc. directed at existing PEI organic producers and conventional producers on production and marketing information, trends, activities, etc.
2. Marketing/awareness program with PEI consumers on the benefits and availability of PEI organic products through Internet, farmer's market, and in store displays and point of purchase materials, tourism promotions, etc.

***Recommendation #10***: The foregoing nine steps can provide a firm foundation for the PEI organic industry to get its house in order, to replace imported product coming into the region, and to enhance the incomes and futures of organic producers, which, in turn, will entice conventional producers to convert to organic production.

Once the foregoing is secured (2-3 years), the PEI organic industry should identify a series of niche organic markets involving growing and, in most cases, processing products in PEI for export in and beyond Atlantic Canada.



**Objectives**

In 2003, approximately 250 acres of organic grains and 82 acres of oilseeds were grown in PEI. These are small acreages for an agricultural province like PEI, which espouses the merits of sustainable agricultural production. An ambitious, but achievable, objective should be to increase organic grains production (including in transition acreage) in PEI to 1,000 acres within three years and to increase organic soybean production to 500 acres in the same time frame.

On the value added side, there is already one soy processor in PEI, but there is room for substantial expansion of that operation and introduction of new grain processing capabilities, likely of a small scale, but important to the growth of the industry. In a three-year timeframe, a realistic objective would be to at least double the activity of the existing soy processor and add two or three new grain processing operations.

There is a substantial opportunity, both at the production and at the processing level. This is an industry in its infancy in PEI, and the next several years will be needed to take the organic grains and oilseed sector in PEI to a new plateau of growth and sustainability. When this is achieved, the scale and base will be in place for PEI to become a leader in organic grains and oilseeds.