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Organic Flax Supply Chain Profile

1. Introduction

The supply chain for organic flaxseed in Saskatchewan involves production, processing, and the distribution of flaxseed and products made from flaxseed to a variety of locations around the world. The organic flax supply chain encompasses all activities occurring between the production of flax and its final use by consumers. The main objective of this paper is to provide an overview of the organic flaxseed supply chain, including its products and their uses, a description of how the organic flaxseed industry is organized in its various distribution channels, and issues related to market access. Understanding how the supply chain is organized is critical to identifying various issues and opportunities related to the marketing of organic flax and its related products.

1.1 Approach of the Study

The flaxseed profile is part of a larger study that seeks to describe the marketing steps for four organic commodities as they move along the supply chain from producer to consumer. This research involved gathering information from existing literature to describe the supply chains for organic wheat, oats, flax and lentils, and then supplementing this literature with information obtained through surveys and interviews with stakeholders at each successive stage of the supply chains, from producer to retailer. The groups surveyed include producers, marketers, processors, distributors and retailers. Participants from each group were asked to provide details about their transactions with other companies along the supply chain and to describe their relationships with

these companies. In addition, information about distribution channels, industry structure, certification, cost and price data, inefficiencies, barriers, and opportunities within the organic supply chains was requested. Each group was asked roughly the same questions. This "mirror image" approach was used to determine if all industry participants perceive the same problems and opportunities, and to identify the degree to which a lack of market information along the supply chain is a problem for producers, processors, marketers, and others in the industry. This paper primarily focuses on describing the organic flax supply chain in terms of its processes and participants. Many of the broader issues described above are discussed in other industry papers related to this study.

1.2 Organization of the Study

The paper is organized in the following manner. Section 2 describes flaxseed and flaxseed products as well as their uses. Section 3 provides a description of the flaxseed supply chain in general terms and then discusses the major companies involved at each stage of the chain. A supply chain price profile and a discussion of transportation costs, institutions and organizations are also included in this section. Section 4 discusses issues of market access including certification, accreditation and the requirements for exporting organic flax to the United States (US) and the European Union (EU). Finally, Section 5 provides a summary and conclusions that can be inferred from the flaxseed supply chain profile.

2. Flaxseed, Flaxseed Products and Their Uses

2.1 What is Flaxseed?

Flaxseed, known internationally as linseed, is an oilseed crop that has been grown in Saskatchewan from the time of settlement, prior to 1900. It is grown primarily for its seed, which is crushed to produce linseed oil and linseed meal. Linseed oil is used for industrial purposes and more recently for human consumption, while linseed meal is used as livestock feed. A second type of flax, referred to as fibre flax because the high fibre content in its stem, is used extensively in textile production, and is not typically grown commercially in Canada. Flaxseed types grown in Canada include brown flax (which has a brown seed coat), and golden flax (which has yellow seed coat). Brown flax is the more common of the two types even though they have equivalent nutritional value (Flax Council, 2004).

In Canada, flaxseed is produced primarily in Manitoba and Saskatchewan and is grown on approximately 630,000 hectares annually. Saskatchewan produces approximately 70 percent of Canadian flaxseed and has an average production of about 425 thousand tonnes and an average harvested yield of 1230 kg/ha. Flaxseed is produced conventionally (with chemical fertilizers, pesticides and herbicides) as well as organically. Acreage of organic flaxseed in Saskatchewan is estimated to be 65,000 acres (Whitmore, 2005).

Flaxseed tends to be grown on heavier clay soils. There is very little flax grown in the Brown soil zone located in the southwest part of Saskatchewan. Approximately 60 percent of the area harvested is in the Dark Brown and Black soil zones in east central Saskatchewan. Most of the organic flaxseed grown in Canada is exported as either a raw or processed commodity, to the EU and the United States, while some is consumed domestically. This will be discussed in greater detail in Section 3 of this paper.

2.2 Flaxseed Products and Their Uses

The seed portion of flax is crushed to produce linseed oil, which is used in the production of oil based paints, stains and inks, and in the manufacture of linoleum flooring. Additionally, it is used throughout the world for food, medicine, and as a source of dietary fibre. As mentioned previously, the meal is used primarily for livestock feed, although it is also used as a baking ingredient.

In recent years there has been a growing interest in flaxseed and its components for its health benefits. The seed contains forty-three to forty-five percent oil, twenty-one to twenty-five percent protein, and both omega-3 and omega-6 fatty acids. Flaxseed is believed to be nature's richest storehouse of omega-3 fatty acids, containing more than twice as much omega-3 oil as fish oils. Flaxseed Omega-3 oil has been shown to reduce the risk of arteriosclerosis and improve overall cardiovascular health. Flax is a rich source of dietary fibre that can help lower cholesterol levels. Long before people knew about the health benefits of flaxseed oil, they used whole and milled flaxseeds as a laxative. The laxative effect comes from the mucilage in flaxseed. Flaxseed also contains plant nutrients that are natural estrogen-like substances with the ability to lessen the discomfort of menopause.

In addition to the benefits described above, literature on flaxseed describes the following health benefits associated with flaxseed consumption (Flax Council, 2005).

- There are benefits from adding flaxseed to one's diet if there is elevated cholesterol, heart disease, high blood pressure, menstrual pain, psoriasis, eczema, or rheumatoid arthritis.
- Flaxseed may reduce the itching, swelling, and redness associated with certain skin disorders such as acne.
- Flaxseed reduces LDL (low-density lipoprotein) cholesterol (the body's "bad cholesterol") and lowers triglyceride levels.

- Flaxseed oil gives much better protection against heart attacks than canola oil or olive oil.
- Flaxseed may reduce cancer risk because it contains rich sources of lignin building blocks, which play a major role in preventing cardiovascular diseases and cancer. New research indicates that the lignin in flaxseed has both short-term and long-term protective effects against colon cancer.

transform flaxseed into intermediate and finished products and then distribute these products to consumers. The output of one company is often the input of another, and value is added at each successive stage of the chain until a final product is produced. Although the flaxseed supply chain is quite complex, in simple terms it consists of producers, cleaners, marketers/brokers, processors, distributors, and retailers. A diagram of the organic flaxseed supply chain is provided in Figure 1.

3. The Organic Flaxseed Supply Chain

3.1 General Overview

The organic flaxseed supply chain can be broadly defined as a network of companies and firms that

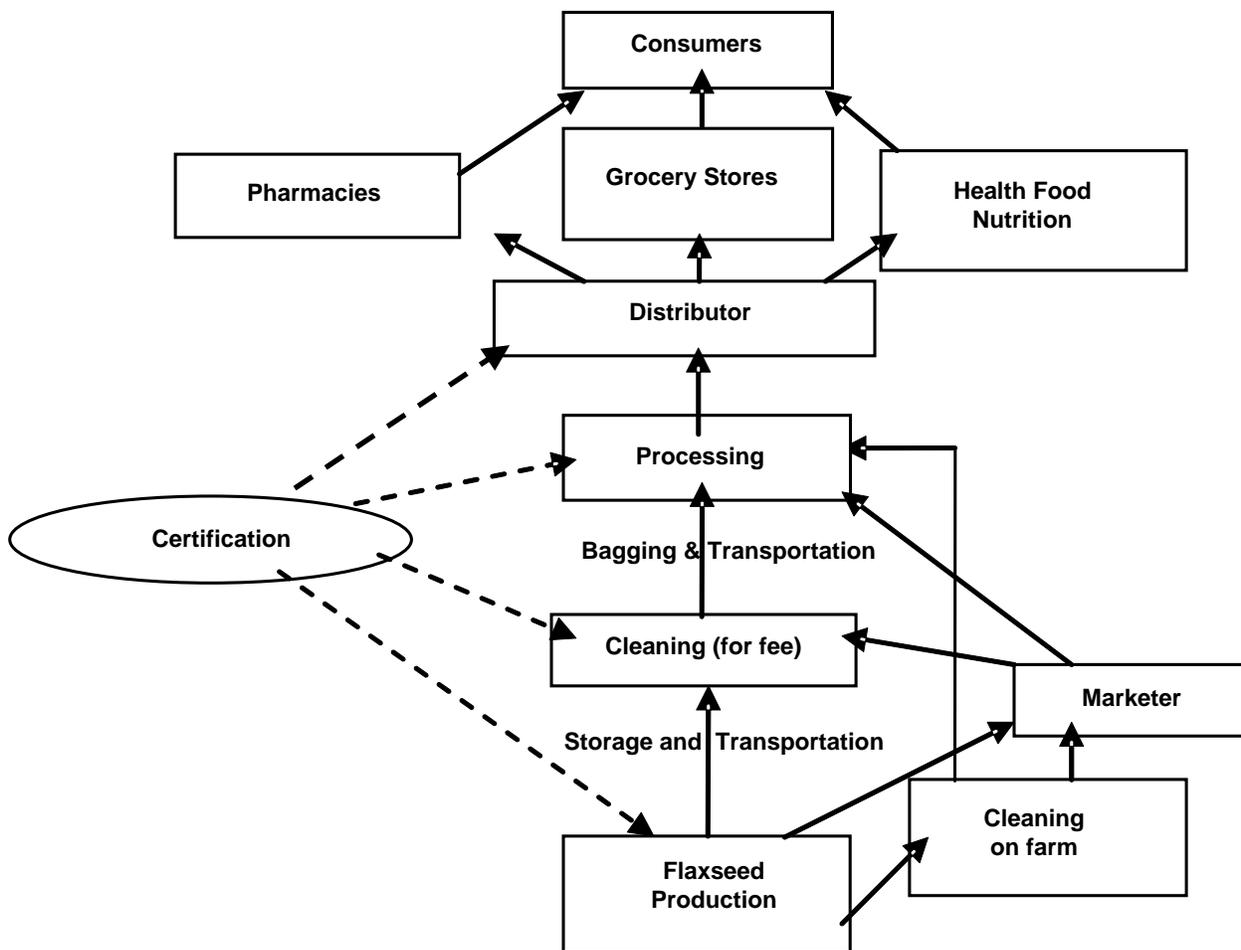


Figure 1: Organic Flaxseed Supply Chain
Source: Author

3.1.1 *Producers*

Producers are typically viewed as the first stage of the organic flaxseed supply chain, as they are responsible for the production of the raw commodity that is subsequently transformed into final products that are used by consumers. Producers anticipate making a profit but face both production and marketing uncertainty that can sometimes reduce profits. Production uncertainty includes factors like weather, insects, and weeds, some of which can be offset by purchasing crop insurance. Marketing uncertainty might include unexpected changes in price or not being able to find an appropriate buyer for a crop. These uncertainties are often reduced by entering into a deferred delivery or production contract with either a marketer or a processor. In these contracts the buyer agrees to purchase the flaxseed for an agreed upon price at harvest or later, provided that it meets specified standards¹. In some cases, a fixed price is part of the contract. At harvest, organic flaxseed is typically stored on-farm until such time that the buyer calls for delivery. If the flaxseed has been contracted, the farmer will forward a representative sample to the buyer to ensure that meets quality requirements. If the flaxseed was not produced under contract, the farmer will forward a sample to attract prospective buyers such as marketers, brokers and processors. Once sold, flaxseed is usually transported by truck from the farm to cleaners who process it for buyers on a fee for service basis.

3.1.2 *Grain Marketers*

Grain marketers are intermediaries between producers and processors of organic flaxseed. There are two main types of grain marketers: grain companies and commission brokers. Grain companies purchase flaxseed from producers, cleaners or other marketers and sell it to processors or other downstream buyers for a profit. They provide service to producers by locating downstream markets for flaxseed that producers may be unable or unwilling to

find themselves. They provide service to downstream buyers by procuring specific quantities and qualities of flaxseed on demand. Payment for these services is achieved by negotiating a price margin between grain purchased and sold. Grain companies often own a grain handling facility. Commission brokers provide the same services as grain companies except unlike grain companies they do not take ownership of the flaxseed. Instead, they arrange for transfer of the commodity between producer and processor (or other buyers) for a fee.

Establishing price is one of the primary functions carried out by marketers. By negotiating both with producers and downstream buyers they effectively send price signals in both directions along the supply chain that reflect costs, scarcity, and consumer willingness to pay. Because there is limited public data on organic flaxseed production (planted area, yield prospects) as well as stocks on farms and in commercial positions, the price discovery function of marketers is critical for all firms in the organic flaxseed supply chain.

Depending on their size, marketers typically employ one of two strategies when buying and selling organic flax. Smaller marketers tend to operate on a back-to-back basis where they do not purchase flaxseed from producers until they have a buyer and price for the crop. This way they eliminate the risk of price decreases that may occur while they are trying to find a buyer. In contrast, larger grain companies may purchase flaxseed prior to securing a buyer on the speculation that flaxseed prices will increase. Companies that take a long position in organic flax are usually financially secure enough to cover their losses in the event that organic flax prices decrease instead of increase.

3.1.3 *Cleaners*

Flaxseed requires cleaning prior to being shipped to a processor. This function is carried out either on the farm or by a firm that specializes in cleaning. In most

¹ More information on contracting is available in report Number 7: Contracting in Organic Grain.

cases, it is unlikely that a cleaner will take ownership of the flax it is cleaning. Rather, the cleaning is done on a fee for service basis.

3.1.4 Processors

Processors are companies that transform organic flaxseed from a raw commodity to intermediate products that are used by other processors and/or final products that are purchased by the end consumer. Processors typically purchase flaxseed from grain companies, brokers or direct from producers. Often a processor will enter into a production contract with a producer who agrees to sell his/her crop to the processor for a specified price, once the crop is harvested. Once the flax is processed, it is typically sold to other processors (as an ingredient) or to distributors (as a finished product). In most cases, processors enter into production contracts with distributors who specify the type and quantity of products that they want.

Organic flaxseed undergoes both primary and secondary processing. Primary processing of flax has two main forms: crushing flaxseed into oil and meal constituents or milling flaxseed into ground flax. Secondary processing involves the processing of flax oil into a variety of different industrial and food products, and the processing of flax meal (which still contains between 10 and 15 percent flax oil) into livestock feed or food ingredients. Some processors specialize only in primary processing, while others do both primary and secondary processing. Flax oil is often sold to other processors in bulk form and can also be purchased in a variety of other forms, including: oil capsules, in bottled form, as powder, and as mixtures with other food oils (e.g. fish). Products like these are then used as ingredients in nutritional, pharmaceutical and food products. Ground flaxseed is packaged and sold as a health food or as an ingredient for baking.

The Crushing Process

Organic flaxseed for processing is typically cleaned to 99.9 percent pure seed and moisture levels are

between 10 and 11 percent. When it arrives at the plant, it is first taken into storage and is then moved by a pneumatic system from storage to an expeller for crushing. The crush is made at maximum temperatures of 28° to 30°C, in order not to damage or alter the molecular structure of the flaxseed (typical oilseed extraction is carried out at temperatures above 70°C). Unlike conventional oilseed processing, which uses hexane to obtain a higher yield of oil from the seed, chemicals are not used in the extraction of oil from organic flaxseed. Once crushing is complete, the crude oil is filtered, bottled, labeled, stored and distributed for further processing. The flaxseed meal (which is referred to as cake) is packaged and distributed for processing into livestock feed or food ingredients.

3.1.5 Distributors

Distributors are intermediaries between processors and retailers in the organic flax supply chain. Their primary function is to purchase flax products from processors and sell it to retailers. They provide service to processors by finding retail markets for processed products. They provide service to retailers by procuring organic products that are in demand by consumers. Additionally, they manage the logistics of moving processed products into the marketplace. Like marketers, they profit by negotiating a price margin between the products they buy and sell. In some cases, processors will carry out the function of a distributor by securing contracts directly with retailers. In other cases, retailers play a more active role in distribution so that they have more control over the movement of products into their stores. In cases where a distributor is not integrated with processors or retailers, they will take product orders from retail stores, places orders with the processor, and arrange for transportation of products from the processor to the retail outlet.

One key factor in the transaction between distributors and retailers is payment. Distributors who are not integrated with retail stores will have conditions for

payment. This might consist of payment within one to two months following delivery. If payment is not received within the specified time frame, buyers will be notified that an interest charge is being applied, often at two percent per month. Similarly, if payment is made early, distributors will often offer discounts of up to two percent.

In addition to functions associated with procuring processed products for retailers, distributors provide several other services as well. These include searching out and providing information on new products to client stores, promoting and advertising of products, as well as helping retailers with the pricing and presentation of products.² Advertising may involve placing ads in local newspapers or distributing product flyers in newspapers. The distributor may sometimes offer a promotional discount on certain products, and may request that retail stores participate in this offer. For example, one distributor requests that retailers reduce the retail price of certain items by 15%. The distributor will absorb most of this discount by lowering the price at which it sells this item to the retailer but the retailer is often expected to absorb up to 5% of the reduction itself. Distributors will also occasionally offer discounts for transporting products to retailers based in the value of the products purchased by the retailer. This is a way of enticing retailers to purchase products in quantities that economics of size in transportation can be achieved.

3.1.6 Retailers

Retailers are the final stage of the organic flaxseed supply chain, as they are responsible for purchasing finished products from distributors or processors and selling these products to the end consumer. Products to be sold are typically purchased on contract from processors and distributors with whom long-term relationships are often developed. Retail outlets for flaxseed products include health and nutrition stores,

pharmacies and small and large grocery stores, either mainstream or exclusively organic.

In addition to selling products, retailers are to a large extent responsible for identifying products or sets of products that consumer groups specifically want, and then sending signals back down the supply chain to ensure that these products are produced. Like distributors, retailers are also heavily involved in the advertising and promotion of products to the consumer. Promotion might involve advertising on television or radio and through mail-out flyers. Retailers also use promotional techniques such as free samples in order to increase the demand for some of their products. Generally, retailers request that suppliers contribute 5% of the value of their sales towards advertising and promotion at the retail level. However, some retailers prefer to receive a discount from suppliers instead of requesting a contribution for advertising and promotion.

3.2 Major Firms and Distribution Channels

The previous section provided an overview of the major participants of the organic flax supply chain in general terms. This section provides a specific description of the various companies involved at each stage of the supply chain.

3.2.1 Producers

Saskatchewan is believed to be the largest producer of organic flaxseed in the world today, with an estimated 65,000 acres under production in 2004.

This is a 45% increase in acreage over 2002.

Organic flaxseed producers in Saskatchewan compete with producers from the U.S. northern plains region, China, and Argentina.

3.2.2 Grain Marketers

Although some organic flax producers obtain production contracts with processing firms, marketers and brokers play a major role in finding downstream markets for organic flax. Major organic flax marketers in western Canada include RW Organics, Galarneau Farms Ltd., Growers International Organic Sales Ltd,

² For more information on the functions of distributors and retailers refer to report Number 14: How Retailers Procure Organic Products – Opportunities for Saskatchewan.

Dartmore Farms Ltd., Sunrise Foods International Ltd., Shamrock Seeds Ltd., Poplar Valley Organic Farms Inc., Farmer Direct Co-operative Ltd., and Benson Quinn Commodities Inc. In Saskatchewan, before flax is transported to processors it is typically cleaned at one of approximately 15-20 organic flax cleaners in the province.

3.2.3 Processors

Organic flaxseed produced in Canada is typically destined for food and nutritional product markets, as opposed to industrial products. Some processors specialize in producing organic flax oil and related products, while others specialize primarily in providing bagged and bulk organic flax products for direct consumption or further processing. Major processors of organic flaxseed oil and related products include Bioriginal Food and Science Corp., Barlean's Organic Oils, Golburn Valley Oilmill, Omega Nutrition, Gold Top Organics Ltd., and Spectrum Organic Products Inc. Processors of bagged, bulk, or milled organic flax include Northern Quinoa Corp., Bi-pro Marketing, CanMar Grain Products Ltd., Cloutier Agra Seeds, Country Lane Organic Grain and Milling, InfraReady Products Ltd., Johnson Seeds, Klagenberg Farms Ltd., Midlake Specialty Food Products, Northern Lights Flax, Nunweiler's Flour Co., Prairie Flax Products Inc., Sabourin Seed Service Ltd., SK Food International, Hamblin Organic Farms, Eskdale Seed Farm, and the Saskatchewan Wheat Pool.

3.2.4 Distributors

Many processors of organic flax rely on distributors to find retail markets for their products, while others have direct contracts with retailers, and some rely on both options. In addition, many processors have distributors based in foreign markets such as the U.S. and the EU, which are the two most common destinations for organic flax products. Based out of Saskatoon, Greenline Distributors delivers a variety of organic products (including flax) to health food stores and pharmacies across western Canada and northern Ontario. Greenline sources its organic flax from

processors as well as producers across Canada.

Other potential Canadian distributors of flax products include Pro Organics, which distributes bulk organic products, and Puresource and Horizon Distributors, who distribute packaged products. U.S.-based distributors include United Natural Foods Inc., which is the largest organic/natural food distributor in North America, and Tree of Life.

3.2.5 Retailers

In terms of retail markets, the majority of organic flax products are exported to either the United States or the EU. Oil based health and nutraceutical products are typically destined for both markets, while food ingredient products are primarily exported to the EU (Whitmore, 2005). Flax products that aren't exported are usually sold in health food stores, pharmacies, and small and large retail outlets. In Saskatchewan, major retailers that carry organic flaxseed products include Superstore, Extra-foods, Safeway, IGA, and Co-op. Of these retailers, only Superstore and Extra-foods (both owned by Loblaw's) have their own private label. The others carry organic products under an assortment of brand names. Small retailers of organic flaxseed products in Saskatchewan include Steep Hill Co-op, Dad's Nutrition Center, Herb and Health, Eat Healthy Foods, Nature's Best Foods, and Old Fashion Foods. In addition, the health sections of many pharmacies carry organic flaxseed or flaxseed oil. Whole Foods, Trader Joes, Capers and Blue Moon Organics are examples of devoted organic/natural retailers that have stores in larger Canadian cities.

3.3 Price Profile for Organic Flaxseed in the Supply Chain

Having described the organic flaxseed supply chain in detail, it is useful to examine the value of flaxseed products as they move along the supply chain from producer to consumer. Table 1 below illustrates how value is added to one bushel of flaxseed at each successive stage of the supply chain during the production organic flax oil.

Table 1: The value of one bushel of organic flaxseed as it moves down the supply chain[†]

	Value Added/Service	Units Produced	Price Received	Margin
Producer	Flax Production	1 bushel	\$29-\$40/bushel	\$29-\$40/bushel
Marketer	Marketing of Flax	1 bushel	\$45/bushel	\$5-\$16/bushel
Processor	Conversion to flax oil and bottling	~ 20 bottles (550 ml each)	\$7.50/bottle or \$150.00/bushel	\$6.70-7.25/bottle \$134-\$145/bushel
Distributor	Marketing of flax oil to retailers	~ 20 bottles (550 ml each)	\$9.50/ bottle or \$190.00/bushel	\$2.50/bottle \$40/bushel
Retailer	Selling of flax oil to end consumer	~ 20 bottles (550 ml each)	\$16.50/bottle or \$330.00/bushel	\$7/bottle \$140.00/bushel

[†] This table focuses on the value of flax as it pertains to oil production. A major product of crushed flaxseed is flax meal which is often used in animal feeds or as an ingredient in baked products. One bushel of flaxseed typical yields around 14kg of flax meal, which can be purchased for use in animal feeds from processors for approximately \$0.88/ per kilogram (Homestead Organics, 2005). Flax meal used as a baking ingredient will obtain significantly higher prices.
Source: Author's calculations

Table 1 illustrates that the value of flax increases dramatically as it moves along the supply chain through each successive stage. In total, it is estimated that the value of one bushel of flax increases by approximately 700% to 1000% by the time flax oil is purchased by the end consumer. The increase in value or price at each stage is attributable to firms having to cover their costs of production (for processing or other services) plus earn a profit. The single largest value-adding step appears to be processing. This is not surprising, as processors are largely responsible for transforming raw flax into products demanded by consumers.

3.4 Transportation Costs³

Transportation costs are included within the margin of different levels of the organic flax supply chain. Transportation from the producer to the location of the grain marketer (or to the location where containers are put on rails) costs an average of \$2.40/bushel (\$90/tonne) for organic flax, assuming an average trucking distance of 250km (taken from the organic producer survey). The cost of transporting a 20 tonne container from Saskatoon to a port in the EU is about \$125/mt. Trucking bagged grains from Saskatchewan

to Vancouver costs up to \$350/tonne in some cases. Transportation costs are a very large portion of total costs in the supply chain, and depend on how much transportation is required from producer to consumer.

3.5 Institutions in the Organic Wheat Supply Chain

3.5.1 The Canadian Grain Commission (CGC)

The CGC offers a number of services to the grain industry as grain makes its way from the producer's field to markets. The CGC establishes the grading guidelines that operators of primary elevators must use. The CGC also provides a dispute resolution service when producers and buyers disagree on grades. When grain is unloaded at terminal elevators and some transfer elevators, CGC staff grade the grain, verify its weight, and register its receipt. They follow similar procedures when grain leaves the elevators. Grain leaving terminal and transfer elevators is bound for domestic or export customers, usually by ocean vessel or by "laker" (used for marine transport in the Great Lakes).

Canadian grain is graded by its visual characteristics. Grades are carefully established to describe the processing qualities of the grain. In western Canada, the CGC licenses primary, process and terminal elevators, as well as grain dealers. The CGC

³ More information on costs in the organic grain supply chain can be found in marketing study report Number 12: Costs in the Organic Grain Supply Chain.

oversees delivery only at terminal and transfer elevators and publishes maximum charges for services offered by elevators and for the use of elevator space. The CGC may also arbitrate in disputes over grain quality between buyers and sellers of grain.

3.5.2 Information in the Organic Flax Market⁴

Price discovery for organic grain is very different from price discovery for conventional grain (Ferguson 2005). For conventional flax, the government and other private firms conduct extensive surveillance of the supply and demand situation in all world markets that have a bearing on the present and future Canadian flax price. Public and private organizations use surveys to collect statistics on areas planted, yield, stocks, etc. These organizations disseminate and distribute this information for producers' use. There is one Canadian commodity exchange (the Winnipeg Commodity Exchange) with a futures contract for conventional flaxseed. Futures contracts provide price data that can be interpreted directly by producers or through government or private firms to yield price discovery information. Exchanges also utilize cash closing committees that are responsible for reporting a daily cash price. Radio, television and newspaper communicate flax price data on a daily basis to the public.

There is much less market information available to the organic flaxseed industry as there does not exist any organization that gathers and interprets organic flax price data, nor is there a futures contract for organic flax. While there are several flax transactions made every week, there is no process to share this information that could inform individuals on the market clearing price. Price information is thus private unless transacting individuals choose to make it known to

⁴ More information on information in organic grains can be found in marketing study report Number 4: Organic Producer Perceptions of Market Information Availability, and marketing study report Number 10: Information in the Organic Grain Market

others. Moreover, there is no way to verify the truth of individual's statements on prices paid and received. This results in significantly less market information and lower quality marketing information in the organic flax supply chain regarding the prices of different sellers and expected prices in the future. Unlike downstream marketers and processors, most organic producers suffer to a greater extent because they do not have economies of scale related to price, supply and demand data collection and interpretation. Producers do not know all of the offer prices on a given day, and they have very little means to forecast organic grain prices in order to decide if they should sell now or wait for a higher price. As a result of these organizational limitations to price discovery, producers, intermediaries, and end-users discuss prices on a regular basis through person-to-person communication.

3.6 Flaxseed Organizations

In addition to the many firms that exist at each stage of the organic flax supply chain, there are organizations that provide various services to the flaxseed supply chain as a whole. These organizations are discussed briefly in this section of the paper.

3.6.1 The Flax Council of Canada

The Flax Council of Canada, located in Winnipeg Manitoba, is an organization that represents all components of the flaxseed supply chain from producer to consumer. Its goal is to promote the advancement of flax and its related products through activities related to market development, market and production research, and crop promotion. Much of the Flax Council's work is publicized in its quarterly newsletter, Flax Focus. Although the Council has traditionally focused on finding markets for conventional flax, much of its work has benefited the organic flax industry as well, as conventional and organic flaxseed are often similar in their uses (Flax Council, 2005).

3.6.2 The Saskatchewan Flax Development Commission (SaskFlax)

SaskFlax, located in Saskatoon, is an organization that collects a levy on flaxseed and flax straw from flaxseed producers and utilizes this revenue to promote the flaxseed industry. Specifically, SaskFlax's mandate is to:

- Promote and develop the flax industry in Saskatchewan
- Develop procedures to maximize returns to flax producers
- Encourage production of a uniform, high quality product
- Gather, compile and distribute information relating to the production, consumption and marketing of flax
- Conduct or encourage research on the production, marketing, processing and consumption of flax, and promote and improve understanding among individuals and organizations within the flax industry

The current levy on marketed flax is \$1.18 per tonne of seed and \$0.50 per tonne of straw. The levy is mandatory but is refundable to producers who request a refund. The organization is under the direction of a six member elected board and hired executive director, and represents 18,000 producers in Saskatchewan. (Saskatchewan Flax Development Commission, 2005)

4. Market Access and Acceptance Issues

As noted in the previous section, organic flax and its related products are primarily exported to the United States and the EU. Products that aren't exported are consumed domestically. In order to gain access to these markets, flax exporters must comply with organic regulations employed in these jurisdictions and be aware of any preferences that consumers in these countries might have that would limit their consumption of imported flax products. This section of the paper provides an overview of organic regulations that must be adhered to in each of these markets and discusses the role of market acceptance in gaining access to these markets.

4.1 Definitions

In order to understand regulations that can affect the exporting of organic flaxseed products, it is necessary to define the terms certification and accreditation, as they are central to the organic regulatory process in most jurisdictions.

4.1.1 Certification

Certification is the process by which a certification body verifies that commodities moving along the supply chain are produced, stored, transported, and processed according to principles outlined in an organic standard. At each stage, certification requires adherence to organic principles in production, processing and handling. Documentation and inspections are used in order to verify that organic practices are followed. In this regard, certification signals the organic attributes of organic products to consumers. The certification process plays a critical role in verifying organic authenticity, since the organic attribute of a product cannot be detected by any other means.

4.1.2 Accreditation

Accreditation is the process of ensuring that the organic standards employed by certifiers are at a minimum acceptable level. Accreditation is necessary in cases where there are many certifiers who employ a variety of organic standards (e.g. the global organic industry) because the process of becoming familiar with these standards on a case-by-case basis can be costly and time consuming. By granting accreditation status, an accreditation agency acknowledges that the standards employed by a certification body are equivalent to its own. This gives organic sellers access to those markets for which the accreditation agency has jurisdiction. Some countries (like the U.S.) have government-operated accreditation agencies, which typically means that accreditation to those agencies will provide market access to the countries in which they operate. This will be discussed in more detail in the next section of this paper.

4.2 Gaining Market Access to the United States

The organic industry in the U.S. is governed by the United States Department of Agriculture's (USDA) National Organic Program (NOP), which requires that all products produced and sold in that country meet the minimum U.S. national organic standard (NOP, 2005). Canadian companies can achieve market access to the U.S. in three different ways: certification to an NOP-accredited certification body, recognition of conformity assessment, and equivalence determination.

Certification to an NOP-accredited certification body is the primary mechanism that most Canadian sellers use to achieve U.S. market access. This process is not difficult, as most Canadian certifiers are already accredited to the NOP. The following certification bodies operating in Saskatchewan have NOP accreditation:

- Canadian Organic Certification Co-operative (COCC)
- Saskatchewan Organic Certification Association (SOCA)
- OCPP/Pro-Cert Canada Inc.
- Organic Crop Improvement Association (OCIA)
- Organic Producers Association of Manitoba Inc. (OPAM)
- Quality Assurance International (QAI)

Recognition of conformity assessment means that the USDA recognizes a foreign government's ability to evaluate a certifier's ability to conform to the NOP. A foreign government can accredit individual certifiers on behalf of the USDA once conformity assessment is obtained by that government. The Canadian government is currently in the process of obtaining recognition of conformity assessment, while the provinces of Quebec and British Columbia (BC) have already obtained status.

An equivalence determination occurs when the governments of two independent nations agree that each other's national standards are equivalent for

trade purposes. Once an equivalence determination is made, sellers in both nations have free access to the other nation's markets. Currently, the governments of Canada and the US are not involved in equivalency negotiations.

4.3 Gaining Market Access to the EU

Council Regulation (EEC) 2092/91 is the primary regulation governing organic agriculture in the EU and is applicable in all EU member states. Despite the widely held belief that the European Commission plays an integral role in administering EEC Regulation 2092/92, it is the member states themselves that have jurisdiction over this function. Each member state is in charge of establishing a certification/inspection system, designating a competent authority to be responsible for the approval and supervision of certifiers, imposing sanctions in the event of fraud, and for admitting exports from nations outside the EU. Member states wanting to import must establish an inspection scheme capable of product identification (e.g. quantity, type, origin, transportation details, and certification), verification of organic authenticity, and the ability to track the movements of individual shipments (The Organic Standard, November, 2002).

At present there are two methods through which exporters can gain access to EU markets:

1. The exporting nation is granted status on the Third Country List, or
2. The importer (or exporter) can prove on a case-by-case basis that products were produced according to procedures deemed to be equivalent to those described within EEC Regulation 2092/91.

To become registered on the EU Third Country List, the exporting nation must have its organic standards evaluated by the European Commission for equivalence to EEC Regulation 2092/91. The equivalence evaluation includes an examination of production and processing standards as well as measures to ensure effective control of those standards. Once Third Country Status has been

granted to a country wanting to export to the EU, exporters in that country are permitted to export freely to all EU member states.

The procedures for establishing equivalence on a case-by-case basis are similar to those described above, except that they must be carried out for every shipment being exported into the EU. The exporter must deal with the competent authority in the destination member state, rather than the European Commission. The EU has stated that this option will be available only until December 31, 2005, after which only nations holding Third Country status will be granted access to EU markets.⁵

4.4 Market Acceptance

Exporters often believe that meeting the legal requirements described above will guarantee market access. However, in well-developed EU organic markets this is not always the case, as both consumers and retailers have been known to reject standards that have otherwise been approved. Sainsbury's, an organic retailer in the UK, has been known to reject products that were not certified by an IFOAM-accredited certifier. Several supermarkets in Denmark have rejected produce sprayed with copper, despite the fact that EEC Regulation 2092/91 permits this procedure. In the well-developed Swedish organic market, consumers have become accustomed to products certified by the private certifiers Demeter and KRAV, and may therefore perceive products bearing other labels as being substandard. These examples suggest that exporters need to be familiar with specific foreign markets as well as with the regulations used in those markets (The Organic Standard, January 2002). In the case of organic flaxseed products, however, this might not be the case, as it is believed that the EU is not a major producer of this commodity and would

likely have to rely heavily on imported products to satisfy consumer demand.

5. Summary and Conclusions

This document has provided a profile of the organic flaxseed supply chain including a description of flaxseed products, a summary of the functions carried out by participants in the supply chain, a list of the participants, and a discussion of market information and market access issues.

Despite its potential as a high value commodity, it is evident that the organic flax supply chain is still in the early stages of development. As the supply chain continues to evolve, it is likely that communication channels will improve and inefficiencies associated with a lack of information will be reduced. Recent increases in production and high prices, combined with the increased use of organic flaxseed in organic food products, health food products and pharmaceuticals, indicates that the commodity represents a growing market opportunity for companies in Western Canada. This growth is illustrated by the substantial development in the flaxseed processing sector within Saskatchewan and the prairies.

Most of the organic flax produced in Canada is exported to either the U.S. or the EU. As a result, maintaining access and acceptance in these markets is critical for domestic organic flax producers. Access to the U.S. is easily obtained through certification to an NOP accredited certification body, while access to the EU is achieved by evaluating organic shipments on a case-by-case basis. Because this option in the EU will only be available until December 31st, 2005, it is important that the Canadian government negotiate an equivalency agreement so that it can be placed on the EU's Third Country List.

It is important to remember that legal access for flax exporters into the EU and U.S. does not guarantee success in these organic markets. Consumers and

⁵ For more information on exporting to the EU refer to the following website: (http://www.organicts.com/organic_info/certification/basics/export.html)

retailers in these countries (particularly in the EU) have shown preferences for domestically produced products, thus making it difficult for exporters to sell. Flax destined for the EU, however, is less likely to be rejected in favour of domestically produced product, as very little organic flax is produced in the EU.

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The marketing study consists of the following papers:

- Number 1: Introduction*
- Number 2: Organic Producer Perceptions of their Marketers*
- Number 3: Organic Producer Perceptions of Organic Regulation in Canada*
- Number 4: Organic Producer Perceptions of Market Information Availability*
- Number 5: Organic Producer Perceptions of the Role of Certification Bodies*
- Number 6: Analysis of Organic Wheat Buyers in Saskatchewan: A Vertical Coordination Approach*
- Number 7: Contracting in Organic Grains*
- Number 8: Priorities and Problems in the Organic Grain Supply Chain*
- Number 9: Organic Regulation in Canada: Opinions and Knowledge of Producers, Marketers and Processors*
- Number 10: Information in the Organic Grain Market*
- Number 11: The Performance and Role of Certification Bodies*
- Number 12: Costs in the Organic Grain Supply Chain*
- Number 13: Organic Grains and the Canadian Wheat Board*
- Number 14: How Retailers Procure Organic Products – Opportunities for Saskatchewan*
- Number 15: Organic Wheat Supply Chain Profile*
- Number 16: Organic Oats Supply Chain Profile*
- Number 17: Organic Flax Supply Chain Profile*
- Number 18: Organic Lentils Supply Chain Profile*
- Number 19: Summary*
- Number 20: SWOT Analysis, Conclusions and Recommendations*