

DRAFT
**Options for Improving the Efficiency of Canada's
Certification/Accreditation System**

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Executive Summary

This paper examines the notion of implementing a minimum standard and mandatory system of accreditation for the Canadian organic industry. Under the current voluntary system, organic producers and handlers are not required to obtain organic certification, and certifiers, in turn, are not required to obtain accreditation to Canada's national organic standard. Participation in Canada's national standard is low because certifiers feel that accreditation is too costly and does not provide access into foreign markets. At the same time, the federal government is having difficulty negotiating equivalency agreements with Canada's trading partners because participation in the national standard is low.

The impasse caused by the catch-22 described above has meant that there is no minimum organic standard in place for Canada. This is evident in the existence of numerous regional standards across the nation. The proliferation of multiple standards results in high transaction costs for buyers and sellers of organic products (in both domestic and foreign markets) who must verify organic authenticity by evaluating regional standards on a case-by-case basis.

Implementing a mandatory system of accreditation for the Canadian organic industry could have several benefits for organic buyers and sellers. Mandatory participation in Canada's national standard would bolster the federal government's ability to pursue equivalency agreements with our trading partners, which would reduce transaction costs for buyers and sellers. A minimum standard would make it difficult for sellers of non-organic products to misrepresent their products as organic in an effort to obtain price premiums. Segregation costs could be reduced because it would no longer be necessary to keep products with different certification status separate as they move along the supply chain. Finally, accreditation costs could be reduced because equivalency agreements would make multiple accreditations redundant (assuming that equivalency agreements were reached).

A major impediment to the development and implementation of organic regulations is the industry's inability to reach consensus on how regulation should occur. A regulated organic industry could be achieved through either government regulation or self-regulation. Although the details of each type of system remain unclear, it is possible in a broad sense to evaluate the ability of each to meet the needs of the industry.

Given that the organic industries of many of Canada's trading partners are government regulated, it seems logical that equivalency agreements would be more easily negotiated if Canada were to adopt a similar system (i.e. government regulated). Similarly, a government regulated system would likely be more efficient at resolving international trade disputes and protecting domestic markets, as existing government institutions would be valuable in each of these courses of action. In contrast, self-regulation would allow the organic industry to ensure its full involvement in the regulatory process and would permit a level of autonomy that could not be obtained under government regulation.

1.0 Introduction

1.1 Need for study

Certification and accreditation in the organic industry have evolved out of the need to verify organic authenticity, and to gain access into domestic and foreign markets. As the industry becomes increasingly global in nature, many countries have introduced regulatory enforcement of national standards and have negotiated equivalency agreements with trading partners in an effort to facilitate trade. To remain competitive in the world marketplace, the Canadian organic industry is currently considering introducing industry regulation. As result, there is an urgent need to understand how certification, accreditation, equivalency agreements, and industry regulation can facilitate trade, and to explain how Canada's organic industry functions in this context. It will then be possible to determine if regulation would indeed be beneficial for Canada.

1.2 Study Objectives

The overall objective of this document is to explain how an effective certification/accreditation system functions, to identify any benefits that regulation would bring to the Canadian organic industry, and to provide this information to the Saskatchewan organic industry as an objective, comprehensive body of knowledge such that it can be used in making policy decisions. Specifically, the study has four objectives:

- to provide a detailed understanding of how transaction costs can be reduced through certification, accreditation, equivalency agreements, and industry regulation
- to evaluate Canada's certification/accreditation system in this context
- to identify additional criteria for an effective accreditation/certification system in Canada
- to examine several models of governance structure and determine the ability of each to meet the criteria above

1.3 Document Organization

The document is organized into eight broad sections. Following the introduction (Section 1), Section 2 provides a brief overview of the Canadian organic industry as well as background information about transaction costs, certification, accreditation and equivalency agreements. Third, a description of the Canadian organic industry is provided and various inefficiencies with the certification/accreditation system are identified. The fourth section examines the ability of a regulated national standard to reduce these inefficiencies. Section 5 introduces two models of industry regulation, government regulation and self-regulation, and explains how each might function in the Canadian organic industry. The sixth section identifies additional criteria for an effective regulatory system. Section 7 evaluates the ability of each governance structure to reduce system inefficiencies and to satisfy the identified criteria. The final section provides a summary and conclusions.

2.0 Background

2.1 Overview of the Canadian Organic Industry

Over the past decade, the organic industry in Canada has emerged as an economically viable and environmentally sustainable alternative to conventional farming. During the 1990's, retail sales of organic products had an annual growth rate of approximately 20%, and by 2000, totaled over 1 billion dollars. By 2005, this figure is expected to surpass 2 billion dollars (Agriculture and Agri-food Canada, 2002). Between 1990 and 1995, total organic production is estimated to have increased by 300% (Porter et al, 2001).

Currently, there are over 3200 organic farmers and more than 320 processors and handlers of organic foods in Canada. Total organic acreage is estimated to be 1.16 million acres (IFOAM, 2003).

Saskatchewan is the largest producer of organic products in Canada, representing slightly less than half of the total organic acreage in the country (Bradley, 2002). There are approximately 1200 organic producers in the province who grow a variety of cereal and pulse crops including, wheat, durum, oats, flax, lentils, and wild rice. In addition, there are approximately 30 processors of organic products in Saskatchewan. The prevalence of a strong provincial industry means that issues surrounding certification, accreditation, and marketing are of utmost importance to this province.

2.2 Transaction Costs in the Context of the Organic Industry

To understand issues associated with the structure of Canada's certification/accreditation system and how these systems affect the marketing of organic commodities, it is necessary to have an understanding of "transaction costs". The notion of transaction costs was first introduced to economic theory by Coase (1937) and expanded upon by Williamson (1971, 1979) and Klein (1978). Transaction costs can be broadly defined as costs associated with activities carried out in preparation for, and after, an exchange. Some of these costs occur prior to an exchange (termed *ex ante* costs), while some occur after an exchange has taken place (*ex post* costs). *Ex ante* costs include the cost of searching for buyers and sellers, negotiating the terms of trade, and safeguarding the agreement to ensure that all of the terms are enforceable. *Ex post* costs typically include monitoring and enforcement costs, and involve ensuring that terms of an agreement are upheld (i.e. maintaining product quality, truthfulness of labeling, etc.). It is in the interests of both parties involved in an exchange to minimize these costs. For example, if a buyer faced high transaction costs in locating a reliable seller, the price he/she would be willing to pay for that seller's product would be correspondingly lower.

In the context of the organic industry, transaction costs are primarily *ex ante* search costs associated with verifying organic authenticity. Consumers of organic products are willing to pay a premium for products they believe to be "organic". Uncertainty over product quality can reduce buyers' willingness to pay (Akerloff, 1970). The "credence"¹ quality

¹ Credence goods are goods for which it is impossible to authenticate quality through physical inspection or consumption.

of organic products means that organic authenticity cannot be verified easily (or cheaply) through physical inspection or consumption after an exchange is complete. For this reason, individual consumers and large-scale domestic and foreign buyers have incentive to verify organic quality beforehand. In the organic industry, the development of certification and accreditation systems have evolved as a mechanism for achieving this verification.

2.3 Certification

Certification is the process by which a third party (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. As it pertains to transaction costs, the certification process means that, provided a buyer of organic products recognizes and accepts the standards employed by a certifier, he or she does not have to incur costs associated with this verification process. Certification is important both in the case of repeated transactions as products move along the supply chain and multiple transactions between the same buyer and seller, as the cost of verifying the organic quality of individual purchases can be high.

Organic producers derive benefits from certification through the assurance that it will be more difficult for producers of non-organic commodities to intentionally misrepresent commodities as organic, in an effort to obtain a price premium. Once a consumer (or buyer) becomes familiar with certification labels, they may choose to purchase only products that are certified organic, in an effort to reduce their own transaction costs. This provides an incentive for all sellers of organic products to obtain certification. As sellers of non-organic products cannot easily obtain certification, they will be left selling products to consumers who are unaware of the certification process and are unwilling to incur the costs of verifying organic authenticity through other means. This group of consumers can, unfortunately, be quite large. One explanation for this is that individuals may be sceptical of the certification process and therefore unwilling to pay a substantial premium for certified organic products.

Transaction costs associated with verifying organic authenticity result from “information asymmetry”² occurring along the supply chain, the certification process lowers these costs by reducing this asymmetry. The situation becomes more complicated as the complexity of products moving along the supply chain increases. Before many products reach the end consumer, they often undergo a variety of transformations, thus increasing the information required to determine that a product (or its collective ingredients) is indeed organic. Obtaining information about the “organic” status of end products can be very costly, and can diminish the price premium paid for organic products, or in extreme cases, prevent a transaction from occurring. This further illustrates the role of certification as a mechanism for reducing information asymmetry and reducing overall transaction costs.

² Information Asymmetry occurs when parties involved in a transaction do not have equal access to information required to make a rational decision regarding the exchange. E.g. A seller may know that a product is not organically produced, while a buyer does not and may therefore end up paying a price premium when he/she actually should not.

2.4 Accreditation

The terms *accreditation* and *certification* are often used synonymously despite the fact that each serves a distinct purpose towards validating the organic characteristics of products. Transaction costs for buyers can be reduced, provided that the buyer recognizes the standards employed by a certifier. In cases where there are many certifiers who employ a variety of standards (the global organic industry), the process of becoming familiar with individual standards can also increase transaction costs substantially. As a mechanism for reducing these costs, the organic industry has introduced the process of accreditation.

Accreditation is the process by which buyers ensure that the standards employed by certifiers are at a minimum acceptable level. Accreditors will therefore mandate and evaluate policies and procedures that producers must adhere to in order to obtain accreditation. 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. Without formal accreditation, buyers would have to spend time establishing the equivalency of standards for individual certifiers, a process that would increase transaction costs considerably (Lohr, 1998).

Accreditors enhance the efficiency of exchange by reducing the transaction costs associated with establishing equivalency between individual certifiers. Thus, they are typically, but not exclusively, national agencies, and are often government-regulated. For the accreditation process to be effective, it must be efficient and reliable, and must provide market access to markets over which the accreditation agency has jurisdiction. The absence of any one of these characteristics will increase transaction costs for both buyers and sellers of organic products. As will be shown later in this study, the accreditation system in Canada is inefficient when evaluated on this basis.

It is important to note that although accreditation is an important step towards establishing equivalency, not all certifiers who are accredited by any one accreditor are necessarily considered equal or equivalent. For example, many certifiers are accredited to the International Federation of Organic Agriculture Movements (IFOAM) and therefore have access to markets that recognize IFOAM accreditation. However, it is possible that individual certifiers may not recognize or accept product certified by other IFOAM accredited certifiers. This may hold true for other accreditation agencies as well.

2.5 Equivalency Agreement

In the context of this paper, an equivalency agreement can be defined as an agreement under which two or more sovereign nations agree that each other's standards are acceptable for the purpose of trade. Not unlike accreditation, an equivalency agreement seeks to reduce the transaction costs associated with verifying that standards employed by certification bodies are at an acceptable level. The primary difference between the two is that an equivalency agreement is between two nations rather than between a certification body and an accreditation agency. For this reason, equivalency agreements are typically

established between nations that have government-administered accreditation agencies with exclusive jurisdiction over their respective domestic markets. Certification bodies operating in each nation are usually required to obtain accreditation from their respective national accreditation agencies (i.e. the industry is regulated). Therefore an equivalency agreement provides access to the other nation's market for all certified organic entities operating in each country.

It should be noted that in addition to nation-to-nation equivalency agreements, it is also common for certifiers to have equivalency agreements whereby individual certifiers recognize each other's standards as being equal. Certifiers have also been known to negotiate bi-lateral or multilateral agreements, in which equivalence is granted provided that additional specific criteria are met. Equivalency should also be distinguished from "harmonization", where two or more nations (or certifiers) adopt a single standard.

Although establishing an equivalency agreement should reduce net transaction costs associated with international trade, nations seeking to establish an agreement incur transaction costs associated with this process. These costs include search costs associated with verifying standard equivalency, negotiation costs associated with establishing terms of the agreement, safeguarding costs associated with agreement protection, and enforcement costs in the event that the agreement is breached. These costs are incurred with the assumption that the reduction in costs associated with verifying standard equivalency for individual certification bodies on a case-by-case basis is greater than the transaction costs of establishing the equivalency agreement itself.

For an equivalency agreement to be completely effective, both nations must have full compliance by all certifiers operating in their respective jurisdictions. If this does not occur, an importing nation's accreditation agency may have to establish the equivalency of standards with non-complying certification bodies on a case-by-case basis creating large transaction costs that deter trade. In such a situation, the incentives to establish an equivalency agreement are greatly reduced (i.e. the larger the proportion of non-complying certification bodies in a country, the weaker the incentives to establish a national equivalency agreement.) Ultimately, an equivalency agreement will be reached only if both nations feel that the agreement will make them better off.

3.0 Canada's Current Organic Certification/Accreditation System:

The previous section of this paper describes how certification, accreditation and equivalency agreements have evolved out of the need to reduce transaction costs for buyers and sellers during an exchange. The present section briefly describes the certification/accreditation system currently in place in Canada, and shows how this system is largely ineffective at reducing transaction costs. In addition, this section will identify several other inefficiencies related to the present system.

3.1 System Structure

At present, Canada's certification/accreditation system is voluntary and unregulated. Organic sellers (including producers) are not required to obtain certification from a

recognized certifier, and certifiers are not required to obtain accreditation with domestic or international accreditation agencies. Canada does have a national organic standard to which accreditation can be obtained through the Standards Council of Canada³, but it is not mandatory. The federal government (Agriculture and Agri-food Canada) has contemplated using Canada's national standard to negotiate equivalency agreements with various trading partners but equivalency has yet to be established with anyone.

Currently there are approximately 40 different certification bodies in Canada, each of which has its own standard to which producers and handlers of organic products are certified. Many of these certification bodies operate on a regional level, while several are national and international in scale. Participants in organic markets typically become certified by the certification body, operating in their region, that they feel provides the greatest net benefits. Perceived advantages that one certification body may have over another include lower annual fees, greater flexibility in terms of what constitutes "organic farming", and greater access to foreign markets.

In terms of accreditation, there are a variety of options available to certification bodies in Canada. In addition to the national standard, there are provincial standards in place in both Quebec and British Columbia (BC) through which certification bodies can seek accreditation. Accreditation to Quebec's standard is mandatory for all organic entities operating in Quebec, while BC's standard is voluntary. There are also international accreditation agencies operating in Canada and abroad through which accreditation can be obtained. Some Canadian certifiers have acquired accreditation to multiple agencies across North America, Europe, Asia and Central America (e.g. IFOAM, Japan Agricultural Standards, etc.), while others have no accreditation status at all. Certification to a body that has no formal accreditation means that sellers wanting to participate in a market outside Canada must have their standards evaluated by buyers on a case-by-case basis, as most countries participating in international markets have mandatory standards (e.g. the United States, Japan, and the EU).

At present, only two certifiers have accreditation under Canada's national standard: Pro-Cert Organics and the Organic Producers Association of Manitoba (OPAM). Many certification bodies have opted out of the national standard because they feel that costs are too prohibitive and that national accreditation currently does not increase their market access. As an alternative, many Canadian certifiers have obtained accreditation under the recently introduced US National Organic Program (NOP), as it is far cheaper and is perceived to provide access to several of Canada's major export markets, most notably the US itself.

3.2 Problems with Canada's Certification/Accreditation System

Despite the availability of certification and accreditation, and the existence of a national standard, it is evident that Canada's system does not operate in an efficient manner. The current structure of the system creates a variety of problems including high transaction costs for buyers and sellers in both domestic and foreign markets, high segregation costs,

³ The SCC is Canada's national standards association and provides accreditation for a wide range of voluntary standards in Canada.

and high accreditation fees for sellers. Each of these problems is discussed in detail below.

3.2.1 High Transaction Costs for Buyers

The lack of participation in Canada's National Organic Standard permitted by the voluntary structure of Canada's accreditation system has meant that both domestic and foreign buyers incur transaction costs associated with verifying organic authenticity. Transaction costs incurred by each of these groups are described below.

3.2.1.1 Domestic Buyers

Sellers of authentic organic products in domestic markets have an incentive to obtain certification because buyers can reduce their own transaction costs by purchasing only certified products. In conjunction with this, the accreditation process allows buyers to verify that standards of individual certifiers are at a minimum acceptable level. However, because accreditation to Canada's national standard is not mandatory and does not provide market access, many certifiers bypass it⁴. This results in a situation where there are no minimum standards, and buyers cannot be certain that certified products are truly organic without evaluating standards on a case-by case basis. Since this is often prohibitively difficult, expensive, or time-consuming, a significant portion of the potential market may therefore be lost. The difficulty of this process is compounded by the large number of certifiers (both domestic and international) active in Canada.

The problem described above has the potential to become more severe as Canada's trading partners continue to develop and refine their own systems of standardization. The EU has had mandatory organic standards in place, since 1991, while the US introduced organic industry regulation in October 2002. Organic sellers who are unable, or choose not, to meet the standards of foreign countries still have the option of marketing their products in Canada as "organic". This is possible because many buyers, particularly at the consumer level, are unfamiliar with, or are confused by, the certification/accreditation process and are unable to verify organic authenticity through other means. As long as these consumers have difficulty authenticating organic products, there is potential for Canada to become a "dumping ground" for products that cannot meet foreign standards. A situation like this would increase competition faced by domestic producers trying to market products locally, diminish consumer confidence in the availability of high quality products (thus eroding price premiums), and in the long-run, seriously damage the domestic organic industry in Canada.

3.2.1.2 Foreign Buyers

Despite the fact that most importing countries require accreditation that verifies the minimum standards of individual certifiers, the absence of equivalency agreements with our trading partners means that foreign buyers also face increased transaction costs when dealing with Canadian entities. The effectiveness of an equivalency agreement hinges on

⁴ Accreditation to Canada's national standard can be considered a catch-22. It does not provide market access because so few certifiers are accredited to it that Canada's trading partners have no incentive to negotiate equivalency agreements with us. At the same time, the absence of equivalency agreements prevents Canadian certifiers from participating in the standard.

the compliance of certifiers to the standards of the national agency responsible for developing the agreement. Since there are only two certification bodies currently accredited to Canada's national standard, an equivalency agreement with a trading partner will only reduce transaction costs for that partner if it purchases from sellers certified to one of those two certifiers. If the trading partner wants to purchase from entities associated with other certifiers, it will be forced to evaluate individual standards and granting accreditation on a case-by-case basis. In this situation, it is questionable whether the transaction costs saved through the equivalency agreement are less than the costs of developing the agreement itself.

3.2.2 High Transaction Costs for Sellers

The previous sections described how buyers rather than sellers of Canadian organic products incur transaction costs associated with verifying organic quality, as it is ultimately the buyer who ends up consuming the good. In reality, however, sellers will also incur some of these costs because, all things being equal, foreign buyers will partake in an exchange only if they are able to reduce transaction costs to below the level that they will incur in an equivalent alternative exchange. The fact that the Canadian system already causes high transaction costs for buyers means that sellers must absorb a higher proportion of these costs than would sellers in countries where an efficient system is already in place. Sellers do not have the option of bypassing these costs, as this would further increase transaction costs for buyers, who would then be inclined to purchase organic products elsewhere. An efficient accreditation system would reduce transaction costs for both buyers and sellers, and would ultimately allow sellers to focus resources on finding better markets for their products, as opposed to merely finding markets in which they can participate.

3.2.3 High Accreditation Costs

In addition to increased transaction costs for buyers and sellers, the absence of equivalency agreements between Canada and her trading partners will lead to increased accreditation costs for domestic certifiers and, in turn, their clients (producers, processors, etc.). Without equivalency, certifiers acquire market access for sellers by obtaining accreditation to individual agencies typically operating in separate countries. As part of this process, certifiers pay initial and annual accreditation fees. Ultimately, these costs are passed down to the certifiers' clients. A certifier's clients may sell products in a variety of countries, therefore, there is a need to obtain and maintain multiple accreditations. The total costs of these fees for many certifiers can be quite large. If equivalency agreements could be reached with Canada's trading partners, certification bodies could obtain market access through having a single accreditation to a Canadian national standard. This would greatly reduce the costs incurred by Canadian certifiers and their clients.

3.2.4 High Segregation Costs

One of the primary costs resulting from inefficiencies in Canada's present accreditation system results from the need to keep organic products separate as they move along the supply chain. Under the current system, commodities certified by different certification bodies must be kept separate along the supply chain because the standards enforced by

each certifier may be different. In some cases, the standards of one certifier may be deemed acceptable to individuals along the supply chain, while those of another certifier may not. Unacceptable standards prevent commodities being marketed as organic to certain buyers, meaning a loss of any organic premium. Therefore, there is incentive to ensure that identity preservation costs within the system are reduced. The Canadian organic industry is heavily export dependent and most commodities are transported long distances; hence, segregation and identity preservation costs can be quite high.

4.0 Benefits of A Regulated National Standard

As a result of the inefficiencies described above, the Federal government has come under pressure to regulate certification and accreditation in the Canadian organic industry. Regulation of the organic industry implies making certification a requirement for all entities producing, handling or selling organic products in Canada. It would require that all certification bodies operating in Canada acquire accreditation to the national standard. The national standard would effectively become the minimum acceptable benchmark to which all participants in the Canadian organic industry would have to adhere. Certifiers would still be free to add their own additional requirements for product differentiation strategies but there would be a minimum definition of what it means to be organic. It is believed by many that these changes would reduce transaction costs for buyers and sellers, lower segregation costs, and protect the domestic market from the infiltration of low quality and non-organic products mislabeled as organic. This section of the paper describes how industry regulation can potentially meet each of these objectives.

4.1 Decrease Transaction Costs

It is evident from the discussion above that a reduction in transaction costs could be facilitated through improving the efficiency of certification and accreditation, and through the development of equivalency agreements. Existing inefficiencies for domestic and foreign buyers result largely from the non-participation in the Canadian national standard by certification bodies. With regulation, participation would be mandatory, and transaction costs would be reduced because buyers could be certain that all products are produced and handled according to a common set of procedures. Understanding these procedures would involve being familiar with only one set of standards, as opposed to many.

Provided that equivalency agreements are established with foreign accreditation agencies, the transaction costs associated with the accreditation process will be lowered as well. Accreditation of all certifiers in Canada to a common national standard means consideration of one standard rather than many. Lower transaction costs for buyers would benefit sellers as well, as it is clear that they share costs in this process too. Even without formal equivalency agreements, it is clear that transaction costs would be lower than they are currently.

It is possible that full participation in Canada's national standard would have a positive effect on the negotiation of equivalency agreements. As described earlier, many nations

are reluctant to establish agreements with Canada because, from the perspective of an importer, the reduction in transaction costs associated with the agreement are less than the costs of establishing the agreement itself. With full participation of Canadian certifiers, equivalency means that all organic products produced in Canada are considered acceptable by the accreditation agency in the nation with which equivalency is established. Transaction costs associated with verifying this on a case-by-case basis would be eliminated. From the perspective of other exporting nations, benefits of equivalency will also increase, as it would become necessary to meet Canadian standards to sell in Canada.

4.2 Protect Domestic Markets

If consumers are not well versed in certification and accreditation procedures, accreditation to a mandatory national standard is one way to protect domestic markets for both buyers and sellers. Confusion associated with having an overabundance of standards in operation throughout Canada, along with an inability to confirm the validity of each standard, has the potential to create a market of low quality organic products. As previously described, in its worst form this market deprives consumers the ability to purchase and consume authentic “organic” products and creates competition for producers who incur higher production costs than producers of unauthentic organic products. Accreditation to a mandatory national standard would mean that all products sold in Canada would have to be produced and handled according to guidelines contained within this standard. This would reduce the ability to market products that are not certified organic, or are certified to standards that are inconsistent with the national standard. In addition, it would eliminate the further proliferation of regional standards, thus reducing confusion among consumers about the true definition of organic.

4.3 Lower Segregation Costs

A common definition of the word “organic”, created by full participation in a national organic standard, could reduce high transportation and handling costs that are prevalent in current supply chains. As regional standards are viewed differently in the eyes of both domestic and foreign buyers, the current system is plagued by segregation costs associated with keeping products separate. Assuming that our national standard is endorsed in export markets, all organic products in Canada could be produced and moved along the supply chain following the same protocol, thus eliminating the need for segregation to occur. Product handlers would then be able to capture economies of scale, further reducing the costs of transportation and storage.

5.0 Models of Governance for Industry Regulation

Establishing the need to implement a regulated national organic standard as a mechanism for reducing transaction costs, protecting domestic markets, and reducing transportation and handling costs along the supply chain is merely part of the analysis required to make the system itself a reality. One must also determine the governance structure best suited for regulating the industry, while taking into account the needs of various industry stakeholders. Dialogue pertaining to regulation of the organic industry has typically considered two general governance structures or models: government regulation and

industry regulation (self-regulation). Evaluating the effectiveness of these options involves describing how each model might function, identifying additional criteria for an effective regulatory system, and then evaluating the ability of each model of governance to fulfill all identified criteria.

5.1 Government Regulation

Based on dialogue occurring within the Canadian organic industry, a system of government regulation would likely differ very little from the current system, with the exception that the national standard would become mandatory rather than voluntary. Under this system, the Standards Council of Canada (SCC) would maintain its function as the national accreditation agency and would have jurisdiction over all Canadian markets. Because organic products are typically (but not exclusively) consumed as human food, enforcement of the national standard would fall under the jurisdiction of the Canadian Food Inspection Agency (CFIA). It would therefore be the CFIA's responsibility to take action against certification bodies refusing to obtain accreditation, as well as against industry participants behaving in a fraudulent manner. As the federal representative of Canadian agriculture, Agriculture and Agri-Food Canada would be responsible for negotiating equivalency agreements with Canada's trading partners in an effort to further reduce transaction costs. Certification bodies would continue with their function as inspectors of organic farms, handlers, and processors, granting certification status provided that requirements of the national standard were met.

5.2 Industry Regulation

Under a system of self-regulation, in addition to making Canada's national standard mandatory, a number of changes would have to take place before the regulatory system could be implemented. The Standards Council of Canada currently administers the voluntary national standard. Therefore, it would be necessary to establish an industry group to take over this function. Ideally, the industry group would be made up of people representing all facets of the organic industry, and would have the expertise required to carry out the accreditation process. It is unclear whether the industry accreditor would be able undertake the role of enforcing the standard, or if this duty would remain under the jurisdiction of the Canadian Food Inspection Agency. Similarly, obligations pertaining to the role of negotiating equivalency agreements would have to be determined. Assuming that a primary motivation for self-regulation is to maintain industry autonomy, it is likely that a self-regulated industry would want to undertake these functions. As is the case with government regulation, it is likely that the role of certification bodies would be maintained.

6.0 Additional Criteria for an Effective System

In addition to reducing transaction costs, protecting domestic markets, and reducing transportation and handling costs, there are several other criteria that must be satisfied for regulation of the organic industry to be successful. In 2001, a group of industry stakeholders (e.g. certifiers, producers, processors, marketers, etc.) from Saskatchewan developed eleven principles that it felt should be incorporated into any national system of accreditation. These principles (the Moose Jaw Principles) are listed below:

1. A unified industry model must be used.
2. The process must be industry driven and established as soon as possible.
3. A national council with fair representation of all stakeholders must be established.
4. The process must be written in legislation over time (i.e. made legal).
5. The system must be affordable and competitively priced.
6. It must be accessible to all stakeholders.
7. Short term public funding will be required for establishment of the system.
8. A national system for equivalency must be recognized worldwide.
9. Any system must apply to the entire organic system, from farmer to retailer.
10. There must be a Canadian industry label.
11. Better communication must be established among all stakeholders.

A mandatory national standard through legislation requires full participation by the entire industry in Canada, items 1, 4, 9, and to some degree 10 on this list are easily satisfied. With regard to item 10, it would be necessary to establish a label that exclusively recognizes accreditation to Canada's national standard. Using the remaining principles as a guideline, it is possible to establish several other criteria that should be considered when determining the appropriate governance structure for regulation. These criteria are briefly discussed below.

6.1 Minimize Start-up Costs and Accreditation Fees

The Moose Jaw Principles emphasize that a system of accreditation must be affordable, accessible, and is likely to require short term public funding for its development. Under the current SCC system, initial accreditation fees for certifiers start at \$15,000 and increase in proportion to the effort required to process the application (Bradley, 2002). In addition to this initial fee, to maintain accreditation, certifiers are required to have annual audits, which cost a minimum of \$9,000 per year. Certifiers have suggested, however, that these costs end up being much higher. As participation in the system will be mandatory, all certification bodies, regardless of size, will be required to obtain accreditation. In the event that these costs remain unchanged, it is unlikely that smaller certifiers will be able to participate in the system. For this reason, it is important that the notion of lowering accreditation fees be investigated.

6.2 Industry Input and Autonomy

Three of the Moose Jaw Principles (2, 3, 11) emphasize the organic industry's desire to maintain a certain level of independence from the government, as it pertains to regulation. This desire originates with the industry wanting to have a direct input into the Canadian national standard and the way that a regulated system of accreditation functions in Canada. To ensure that the needs of all stakeholders in the industry are considered, it is necessary to make sure that all stakeholders are involved in the development process. In addition, it is necessary to consider whether or not industry autonomy can be maintained in a government regulated system, once the system is up and running.

6.3 Trade Dispute Settlement

As the organic industry becomes increasingly global in nature, it becomes apparent that any national system of accreditation must have a mechanism for resolving trade disputes. This is especially true for export-based industries like Canada's. In recent months, there have been several instances where Canadian organic shipments have been held up in the port of an export destination. In most cases, these disputes have been resolved by a thorough examination of the accreditation status of the certifier representing the exporter. However, in the event that these disputes cannot be resolved through this procedure, it is essential that our Canadian accreditation system be set up such that an alternative resolution can be achieved.

7.0 Assessment of the Ability of Each Model to Meet Criteria

In total, six criteria have been identified as key issues for consideration in the successful implementation of a regulated organic industry in Canada: reducing transaction costs, reducing segregation costs, protecting domestic markets, making accreditation affordable, allowing for trade dispute settlement, and maintaining industry input/autonomy. This section of the paper discusses the ability of government and industry regulation (self-regulation) to satisfy each of these criteria. Segregation costs are not discussed in this context, as it appears these costs will be reduced to the same extent under either type of governance structure.

7.1 Transaction Costs

The primary difference in transaction costs between government and self-regulated systems lies in the extent to which each permits the negotiation of equivalency agreements with Canada's major trading partners. Although any system that invokes the full participation of certifiers will provide some incentive for this process to occur, it appears that a government-regulated system has two distinct advantages. The primary advantage lies in the fact that equivalency agreements are typically negotiated between nations. Therefore, regardless of who regulates the organic industry, government involvement will be required in this process. The second advantage stems from the credibility provided by having a government-regulated system. The majority of Canada's trading partners have government-regulated organic industries with government entities granting accreditation and equivalency status. Many of these countries have expressed concerns with both the voluntary nature and the lack of government involvement in Canada's system. Although none have declared an outright refusal to negotiate agreements with Canada, it is clear that government involvement in the regulatory process would be viewed as a positive development.

As the European Union is one of the primary markets for Canadian organic products, the negotiation of equivalency agreements with the EU is of the utmost importance. Beginning in January of 2006, only nations having third country status (achieved through an equivalency agreement) with the European Union will be permitted to sell organic products in Europe. Unless equivalency is reached before this date, Canadian sellers that have been relying on international accreditation status to gain access to Europe will be left trying to find other markets for their products.

7.2 Protect Domestic Markets

Provided a national standard is mandatory and clearly defines the concept of “organic”, both government and industry systems can effectively protect domestic markets. If there is a difference, it may lie in the ability of each to enforce the standard. Although either type of system could potentially⁵ allow for the legal prosecution of cheaters, it is possible that a government agency may have better access to financial aid (tax dollars) and may be more familiar in dealing with such matters. The Canadian Food Inspection Agency (CFIA) assumes the role of enforcing a variety of food-related standards, and therefore faces a considerably smaller learning curve than an equivalent industry group. It should be emphasized, however, that the CFIA could provide enforcement under either type of system.

7.3 Minimize Start-up Costs and Accreditation Fees

The requirement that any national system of accreditation be accessible, and hence affordable, to all industry participants, combined with the availability of government infrastructure already in place, suggests that government regulation of the organic industry could be the more affordable alternative. The current system differs from a government-regulated system primarily in the voluntary nature of the national standard. Apart from the legal process of making the standard mandatory, the changes required to implement a government-run system appear to be minimal. By comparison, depending on the degree of autonomy desired by the industry, it is possible that self-regulation would require a variety of changes, including the development of an agency or agencies responsible for accreditation, the negotiation of equivalency agreements, and the enforcement of national standards. When considering the need to reduce accreditation fees incurred under the current system, it is likely that the costs associated with these additional changes would be high. Only through minimizing the costs of developing the regulatory system itself, will it still be possible to reduce accreditation costs.

7.4 Trade Dispute Settlement

The World Trade Organization (WTO) is a primary adjudicator of trade disputes, and because Canada is extremely active as an exporter of organic products, government regulation has a distinct advantage over self-regulation in this regard. As is the case with negotiating equivalency agreements, dispute resolution through the WTO occurs on a nation-to-nation basis and therefore requires government participation. In the event that a dispute involving Canada and a trading partner could not be resolved internally, it could be difficult for an industry under self-regulation to make a case to the WTO. It is conceivable that the WTO, as a government-created entity, would prefer to deal with a government-regulated industry.

With regard to the WTO, a typical trade dispute might involve denial of organic shipments into a foreign market by the importing country. This recently occurred with a container of organic fenugreek being shipped from Canada to Holland, and another shipment of organic products bound for the United Kingdom. In these cases, there was

⁵ As it is presently unclear who would be responsible for enforcement in a self-regulated system, it is difficult to accurately assess the systems ability to prosecute cheaters.

confusion about the accreditation status, as the certifier of the products was accredited to the US National Organic Program (NOP) in addition to other international accreditation agencies. The importing nation's accreditation agency denied access simply because they had not established equivalency with the NOP, despite the fact that the Canadian certifier had also obtained direct accreditation from a European agency. These disputes were resolved without having to use the WTO, but still highlight the need have status under the WTO in some cases (Pratt, 2002).

7.5 Industry Input and Autonomy

Although industry consultation is a requirement, and will be pursued regardless of the governance model chosen, it appears that industry autonomy would be best achieved through minimizing government involvement under a system of self-regulation. Under self-regulation, the organic industry could ensure that it is directly involved in standard development, and would not have to worry about reaching consensus with the government. The key issue is determining whether this benefit outweighs the additional costs incurred under such a system. Credibility with our trading partners and the WTO could be diminished under self-regulation, and it is likely that the regulatory system would face additional start-up costs. These disadvantages must therefore be weighed against the benefits of self-regulation.

8.0 Summary and Concluding Remarks

As a means of remaining competitive in the expanding global organic industry, several changes can be made to the Canadian certification/accreditation system that would reduce transaction costs associated with domestic and foreign trade, and improve the efficiency of transportation and handling along the supply chain. A mandatory national standard, created for the purpose of industry regulation, would protect domestic markets, decrease transaction costs associated with certification and accreditation, facilitate equivalency agreements, and decrease segregation costs.

These improvements can be accomplished to varying degrees through either government or self-regulation. A system of government regulation would be advantageous for the negotiation of equivalency agreements, for trade dispute resolution, for the minimization of start-up costs, and for the enforcement of standards in domestic markets. Self-regulation, on the other hand, would allow for greater industry autonomy. Regardless of the model of governance chosen, it is necessary for the organic industry in Saskatchewan to discuss and reach consensus on the issues identified in this paper, and to play an active role in the process that leads to industry regulation.

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