NORTH AMERICAN AGRIFOOD MARKET INTEGRATION CONSORTIUM

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North American Agrifood Market Integration: Situation and Perspectives - Executive Summary
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The first in a series of workshops organized by the North American Agrifood Market Integration Consortium designed to foster dialog among policy makers, agrifood industry leaders, and academ-ics on agriculture and food-related market integration issues among NAFTA countries.

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Throughout the 1990s, progressive movement was made toward integration of the agricultural economies of Canada, Mexico, and the United States with the adoption of the North American Free Trade Agreement (NAFTA) and the Uruguay Round Agreement that formed the World Trade Organization (WTO). While there has been a tendency to blame NAFTA for many economic, social, and cultural problems, from an economic perspective the benefits far outweigh the negatives. However, integration of markets and policies in the agricultural sector is lagging behind that of other sectors.

A clear and present danger exists that outbreaks of disease such as Mad Cow Disease (BSE), increased immigration, the U.S. 2002 Farm Bill, limited improvement in the economic status of poor farmers in Mexico, food terrorism and security could become an excuse for the erection of additional barriers to trade. Globalization, free trade, open borders, open markets, outsourcing, imports, food terrorism, food security, and immigration have all become political lightning rods that have stymied and could reverse the positive developments of NAFTA, which are frequently underestimated.

Avoiding these potential consequences will require that an increasing number of policy decisions be made as if NAFTA were one country. This requires an understanding of the process of integration, which the economies and markets of Mexico, Canada, and the United States are experiencing. Reversing this process would be a serious mistake with adverse economic consequences for the NAFTA countries.

We cannot be satisfied where we are; integration under NAFTA must be taken to the next level with the bar for progress being set high (Wolf). Security depends on integration in that the North American economy must be viewed as one (Jones).

Defining Integration

The terms economic, market, and political integration are frequently used but rarely defined. Economic integration occurs when barriers to commercial exchange across countries are removed. Economic integration applies to all forms of commercial exchange: buying and selling goods and services, combining inputs to produce goods and services, capital investments, and employment (including immigration). The barriers to commercial exchange that are most concerning are those that are politically engineered to protect borders such as tariffs, quotas, and commercial administrative standards that are not uniform across the NAFTA countries. However, attention must also be given to the misalignment of macroeconomic policies, which result in distortion of exchange rates. Since human economic activity is synonymous with commercial exchange, falling barriers to exchange define economic integration (Robertson).

1 The content of this Executive Summary was abstracted by the authors from the proceedings of a Market Integration under NAFTA Workshop held in Cancun, Mexico, on May 6-7, 2004. The six base papers commissioned for the Workshop are identified at the end of the Executive Summary and are referenced within it. These base papers are published on the website of the North American Agrifood Market Integration Consortium (NAAMIC) at http://naamic.tamu.edu and subsequently will appear in print by Agriculture and Agri-Food Canada. From time to time, key statements by conference participants are also referenced.
Market integration exists when product flows between countries are on the same terms and conditions as within countries.

Market integration exists when product flows between countries are on the same terms and conditions as within countries. Market integration occurs when two or more formerly separated national or regional markets are combined. It emphasizes the trade and foreign investment components of economic integration. If markets do not integrate through trade, they will integrate through capital investments. Therefore, all that is required for markets to integrate is that there are no significant barriers to entry or costs of exit over and above the economic costs of transferring ownership of the business assets (Harvey).

Policy integration refers to the explicit and proactive development of common policies and laws. Both economic and market integration may be hindered by the lack of policy integration. This is not to say that markets will not integrate without policy integration. Inconsistent or incompatible policies will inevitably generate pressures for change. The greatest deterrent to policy integration is the need to surrender or reduce national sovereignty (Harvey).

Rationale for Integration

Economic integration is important for growth, which ultimately determines each country’s standard of living. Research has shown that countries that trade more internationally have higher incomes (Robertson).

Integration also drives change, which often is resisted. Exposure to foreign markets is associated with higher rates of innovation within firms. Research shows a positive link between firm-level productivity and exposure to foreign markets. Integration with world markets increases access to intermediate inputs and ideas that can enhance productivity. Economic integration also increases actual and potential competition, which can be challenging in both positive and negative ways. Firms experiencing competition from more efficient foreign producers often shrink and lay off workers, while others are able to respond aggressively and increase productivity (Robertson).

The gains from trade are largest for consumers because consumers are able to buy goods more cheaply through imports. The potential
Regional trade agreements fail when their provisions are incomplete, their implementation lacks resolve by all partners, and many non-tariff barriers exist or are erected.

Figure 1: Regional Trade Agreements in the World by Date of Implementation.

![Graph showing regional trade agreements by date of implementation](image-url)

Source: WTO Secretariat.

The size of the gains to consumers is large. For example, it has been estimated that if markets were integrated and prices were equalized, then developing countries could experience gains of over US$103 billion, and developed countries could experience gains of over US$450 billion (Robertson).

Political actions have stimulated market integration

Lured by the promise of gains from market integration, but frustrated by slow progress in the WTO and its General Agreement on Tariffs and Trade (GATT) predecessor, countries have pursued regional trade agreements. Europe advanced from a customs union to a monetary union with a single currency. In the Americas, several regional trade agreements emerged. Brazil, Argentina, Paraguay, and Uruguay formed MERCOSUR. The United States, Canada, and Mexico successfully negotiated NAFTA. By May 2004, the United States had signed five regional trade agreements, had negotiated four that had not yet been signed, and was negotiating four more (Penn). When combined with similar initiations by Canada and Mexico, a “spaghetti bowl” of trade agreements now exists in the Americas (Robertson).

The goal of these agreements is to foster integration by lowering various politically inspired barriers to commercial exchange. As these barriers fall, holding all other factors constant, prices converge. The agreements also strive to harmonize standards and eliminate other non-tariff barriers. Trade agreements that increase the volume of trade can result in falling transportation costs because the average cost of transportation falls as the volume of trade increases. Therefore, trade agreements could contribute to price convergence over and above the effect of reducing politically inspired barriers to trade (Robertson).

Regional trade agreements fail when their provisions are incomplete, their implementation lacks resolve by all partners, and many non-tariff barriers exist or are erected (Barichello).

Measures of Increased Market Integration

The markets of Canada, the United States, and Mexico are far more
The dramatic growth of agricultural trade within North America during the NAFTA period is one indication of increased market integration within the sector.

Figure 2: Agricultural Trade Within the NAFTA Region has Grown Tremendously During the CUSTA-NAFTA Period.

The dramatic growth of agricultural trade within North America during the NAFTA period is one indication of increased market integration within the sector. Through NAFTA, the three countries have swept away numerous barriers to trade and established clear standards for the treatment of investors, among other accomplishments. As a result, economic linkages among the three countries have increased dramatically—taking the form of trade in goods and services, direct investment, contractual relationships, and price convergence among national markets for identical products (Doan et al.).

The expansion of agricultural trade within North America contrasts sharply with the experience of Canadian and U.S. exports to countries outside NAFTA (Figure 3 change in figure). Mexican agricultural exports to countries outside NAFTA were an exception to this pattern. Such exports more than doubled during the 1990s, but Mexican exports to non-NAFTA countries still constitute a small fraction of that country’s total agricultural trade.

For both the U.S. and Canada as
When barriers to trade were removed under NAFTA, farm prices became more uniform, reflecting more closely transportation and transaction costs.

well as for the U.S. and Mexico, agricultural trade complementarities have increased following the inception of NAFTA. This indicates that all countries are trading more in products that reflect their agricultural comparative advantages. Mexico’s comparative advantage has been revealed to exist in labor intensive fruits, vegetables, and horticultural products, while Canada’s is in cool weather crops such as wheat, barley, oats, canola, flax, and lentils. The United States has increased its agricultural specialization in crops such as corn and soybeans.

When barriers to trade were removed under NAFTA, farm prices became more uniform, reflecting more closely transportation and transaction costs. Traders have an incentive to buy goods in the low-priced market and sell them in the high-priced market until prices in both markets equalize. For example, research indicates that wheat and barley prices converged between the United States and Canada following the implementation of NAFTA and again after the repeal of the Western Grain Transportation Act (WGTA), which was induced by the Uruguay Round Agreement (Doan et al.).

Since six of the ten largest food processing firms in the world have U.S. headquarters, it should be no surprise that most FDI in the North American processed food sector is undertaken by U.S. firms. However, several large companies from Canada and Mexico have reinvented themselves as larger, stronger, and more viable firms. For example, McCain Foods has evolved from a small producer of frozen French fries to Canada’s

Foreign direct investment (FDI), defined as the ownership and control of assets in one country by a national of another country, is now the dominant form of international commerce in processed foods. Sales by Canadian and Mexican affiliates of U.S. companies are about two-and-a-half times the level of U.S. processed food exports to those countries (Doan et al.). In 2002, the stock of U.S. direct investment in the Canadian and Mexican food industries equaled US$3.7 billion and US$1.4 billion, respectively. In contrast, the stock of Canadian and Mexican direct investment in the U.S. processed food industry equaled $1.1 billion and $1.2 billion, respectively (Doan et al.).

Figure 3: Agricultural Exports by the NAFTA Countries to the Rest of the World Generally Experienced Modest Growth in the late 1990s.

largest processed food company. In North America, the firm operates 11 processing facilities in Canada, eight in the United States, and one in Mexico. Mexico’s Gruma has emerged as the world’s largest producer of corn flour and tortillas, as well as the largest U.S. producer, due in part to a joint venture with Archer Daniels Midland (ADM). For the last several years, Gruma’s U.S. operations have accounted for about half of its total corporate sales. GIBSA, Mexico’s largest baking company, has purchased several bread-baking enterprises in the western United States. GIBSA is now the third largest baker in the world, with roughly a 5 percent share of the U.S. market for bakery products (Doan, et al.).

The People Left Behind

Market integration does not automatically benefit everyone. People and firms must adjust to the changes imposed by new competition that results from market integration. Some persons are more successful than others at making those adjustments. While many examples in the United States and Canada could be chosen regarding these adjustment problems, none are more profound than those facing poor farmers in Mexico. These farmers generally lack the scale of operation and market expertise necessary for adjusting to the changes imposed by market integration.

The Mexican agricultural sector is characterized by the coexistence of entrepreneurial farmers with peasant producers. The peasant farmers are rural households engaged jointly in the production and consumption of staples, with agriculture representing only part of their income-earning activities. In general, peasant producers have limited land (typically with plots no larger than 2 to 2.5 hectares) and do not have access to irrigation and credit. In addition, due to poor communications and transportation, these producers face high transaction costs in some markets. These characteristics of peasant households imply a supply response for staples that is inelastic with respect to market prices (Taylor et al.).

Despite migration to the cities and to the United States, the incidence of poverty continues to be greater in rural than in urban Mexico. The incidence of extreme rural poverty has been about 30 points higher in rural than in ur-
Programs that hold the greatest potential for helping the rural poor are those that give them access to markets and land property rights.

Contrary to popular belief, trade is essential for sustained development. Trade stimulates change and growth and helps attract longer-term investment essential to development. The key is one of developing market-oriented business management systems designed specifically for small, poor farmers. Such systems must include components that provide opportunities to increase the value of their resources through technical assistance, market access, strong market linkages, reinvestment of their own capital, development of new capital sources, and help them to invest in human capital that is mobile. They must be tailored and adapted to each country’s and farmer group’s situation and needs. Governments can be most effective in helping small, poor farmers to increase their capacity, assure access to commercial credit sources, and provide access to markets. Trade agreements should contain provisions designed to provide small farmers access to markets, particularly niche markets, on a competitive basis. In the end, there is an overriding need to get down in the trenches and work with the individual communities that are adversely affected. (Penn).

Up to 1991, farms in Mexico were either private or ejido owned. Ejido lands were appropriated to small peasant farmers (ejidatarios) but could not be sold or leased out by them. The Land Reform program in Mexico sought to give security to those who own land, to enhance well-defined property rights in land by allowing it to be bought, sold, and rented. Certification of ejido lands to individual ejidatarios is a prerequisite for the development of land markets in Mexico. The process of certification of ejido lands is gradually approaching completion. By 2002, 76 percent of ejido lands had been certified (Taylor et al.). But the rural poverty problem cannot be fully addressed until the solution of this property rights problem is
People and firms must adjust to the changes imposed by new competition that results from market integration.

complemented with market-oriented business strategy and supporting government policies.

Dealing with BSE and other Biological Impacts

The greatest risk to a trading industry is the inability to trade. Bovine spongiform encephalopathy (BSE) provides a dramatic example of the importance of risk management systems and how animal health, plant health, and food safety events can disrupt industries and markets within and outside of the NAFTA region. However, BSE is only one of a long list of similar risks including Foot and Mouth Disease, Avian Influenza, microbial contamination, and bio-terrorism. They highlight the challenges for governments and industries in managing risk in integrated markets and in responding in the event of failure. Well-coordinated regulatory systems across trading partners are essential for control of such threats to public health and safety (Caswell and Sparling).

BSE is one of a group of transmissible spongiform encephalopathies (TSEs) that affects the central nervous system. BSE affects this system in cattle and thus is an animal health risk. BSE has been considered to pose a human health risk since 1996 when a newly recognized form of Creutzfeldt-Jacob Disease (CJD), called variant CJD (vCJD), was diagnosed. It is thought to be linked to consumption of meat products from BSE-infected cattle. Many experts believe that cattle become infected by the feeding of BSE-infected ruminant (cattle, sheep, goats, deer, elk, and bison) protein products to cattle. The disease is eventually fatal to cattle.

BSE first emerged in the United Kingdom in the 1980s. At the peak of its BSE emergency of the 1990s, the United Kingdom reported over 37,000 BSE cases in 1992. To date, BSE cases have been confirmed in over 20 countries, including most of the European Union (EU), Japan, Canada, and the United States. The number of reported cases in countries other than the United Kingdom has been much lower, ranging from peaks of 333 cases in Ireland in 2002, 274 cases in France in 2001, and 159 cases in Portugal in 1999, down to a peak of 4 cases in Japan in 2003. No cases have
The greatest risk to a trading industry is the inability to trade.

been reported in Mexico, which could be the result of lower levels of inspection and testing (Caswell and Sparling).

Confirmation of the Canadian and U.S. BSE cases resulted in both countries effectively losing their BSE-free status. The trade impacts of these cases are determined by decisions made by trading partners on what, if any, import restrictions to impose in response to the cases. The huge trade impacts from confirming a BSE case come not from the loss of BSE-free status per se but from the import restrictions that have been routinely imposed upon the loss of such status (Caswell and Sparling).

There are essentially two routes to accomplish border reopenings. The first would involve demonstrating that the country meets the criteria to be classified as minimal BSE risk and encouraging importing countries to follow international trade guidelines, which are not very restrictive, for a country with minimal BSE risk. This would also involve countries practicing what they preach, that is applying the same standards to others who want to import into their countries (Caswell and Sparling).

The second option is to negotiate border reopenings on an ad hoc basis. This is the route being taken at least in the short term, as governments are reluctant to lift trade restrictions pending demonstration of compliance with OIE and their own criteria. For example, the U.S. is very anxious to resume exports to lucrative markets in Japan and South Korea. After its own BSE outbreak, Japan instituted requirements that every cow be tested for BSE at slaughter and is to date indicating that it will reopen its border to U.S. beef when the same requirement is instituted for exports to Japan. The U.S. argues that this level of testing is not warranted by the likelihood of risk, particularly for young animals used for beef products. It is unclear how this type of standoff can be resolved, but discussions continue (Caswell and Sparling).

The management of BSE-related risk requires a broad set of measures ranging from regulation of feed practices to movement of live animals, surveillance, slaughter, distribution of beef products, rendering, and even handling of plate waste. Given that BSE is a newly emerged risk, these systems have been under development in a
There is a need for more risk analysis and less politics.

swiftly changing environment. A failure in the systems, defined to date in the trading environment as finding one BSE case, triggers the complete closing of export markets for live animals and beef products. Closing markets is not mandated by international standards but is the result of risk management decisions made by importing countries.

The stability of this integrated sector in North America and sales to non-NAFTA countries hinge on the development of an integrated regulatory system across the NAFTA countries. There is a need for more risk analysis and less politics (Wagner). Regulations must be accepted by industry and enforced by governments if they are to be effective. Importers must have confidence that the system of safeguards is in place and effectively protecting them. The BSE cases in Canada and the U.S. highlighted the fact that the level of traceability for animals and beef products in the system is inadequate. Currently, testing for BSE is insufficient to detect BSE at an acceptable level of sensitivity. Surveillance systems require testing regimes and technologies, monitoring of those systems, traceability systems, and strategies for responding to outbreaks. Avoiding BSE outbreaks and minimizing their impact requires a rigorous, complete systems approach to industry quality and tracking (Caswell and Sparling).

Policy Makers’ Commitment to Market Integration

Increased market integration usually rests in part on facilitating compliance of trading partners with each other’s regulations. Governments can do this in three ways:

- Policy Coordination: gradually reducing differences in policy, frequently based on voluntary adherence to international codes of practice.
- Equivalence Agreements: agreeing to accept the regulatory program of the trading partner as achieving the same standard (i.e., being equivalent), although the regulatory program used to achieve the standard may differ. This is a strong form of mutual recognition.
- Harmonization: adopting identical standards and enforcement mechanisms.
Policy makers in North America need to consider the effects that their decisions will have on other NAFTA countries and not just their own.

In practice, all three routes to regulatory compatibility have proven rocky. Equivalence agreements are notoriously difficult to arrive at because they often involve exhaustive and exhausting reviews of each other’s frequently changing policies. Harmonization requires agreement on regulatory goals and mechanisms that are usually not forthcoming among independent countries. Countries are loath to turn over any of their risk management and regulatory decision making to outsiders (Caswell and Sparling).

Policy makers in each NAFTA country were asked to state their level of commitment to market integration under NAFTA. All of the respondents confirmed that their countries have benefited from NAFTA and were committed to further market integration. Particularly strong emphasis was placed on the need to harmonize standards, inspection procedures, regulations, and business practices to increase market access and avoid trade interruptions. As integration deepens, the costs of trade disruptions increase. Informal mechanisms are being developed to enhance communication and reduce conflicts, but much still remains to be accomplished.

Conclusions and Recommendation

Economic and market integration are essential to realizing the full benefits of NAFTA in terms of raising the standards of living and economic growth in each NAFTA country. To realize the full benefits, additional steps must be taken to remove barriers to trade beginning with the harmonization of regulations and their enforcement, then proceeding to the development of common policy positions to be taken in multilateral trade negotiations.

Policy makers in North America need to consider the effects that their decisions will have on other NAFTA countries and not just their own. This requires that there be explicit provision for the analyses of such inter-country effects. Not only do mechanisms need to be developed for the alignment of farm policies, but monetary, fiscal, and exchange rate policies must also be coordinated across countries so as not to distort prices and trade flows of one country at the expense of the others.

There must be an expansion of
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market-oriented policies and programs that help farmers who are having difficulty competing to adjust. While this is particularly important in the case of Mexico, adjustment strategies are also required in the United States and Canada to avoid groups being left behind by the process of integration. With the right tools, farmers in any country can be competitive in serving the niches for which they are best suited. In the end, there is an overriding need to work with the individual communities that are adversely affected.

Expanded technical assistance is required to develop the system whereby all can benefit from expanded trade (Penn).

The greatest risk to a trading industry is the inability to trade. As integration deepens, the costs of trade disruptions increase. This creates a need for more risk analysis and less politics. Safeguards must be developed to assure that trade in particular products is not cut off. Assertive steps must be taken to harmonize standards and inspection procedures. Policy integration, including the development of a unified position with regard to countries outside NAFTA, is the most effective means of achieving this end.

Finally, systems must be developed to arrive at common positions on strategic issues within NAFTA. While informal mechanisms are being developed to enhance communication and reduce conflicts, formal systems need to be institutionalized at the policy maker level.
**Commissioned Base Papers**
- Harvey, David R. *European Perspective on Market Integration.*
- Robertson, Raymond. *Defining North American Economic Integration.*

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