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Strengthening Supply Management:

Defending Canadian control of our market space and advancing food sovereignty

A discussion paper
by the National Farmers Union

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> “Of all the institutions that farmers have tried using to solve the perennial problem of market power—collective bargaining, cooperatives, “new age co-ops”, single-desk selling, and supply management—none of the others have come anywhere near the effectiveness of supply management in improving farm incomes. This is the key lesson our history teaches us.
>
> That same history gives us our task: to defend and preserve our supply management systems against the forces that would undermine and destroy them. We must exercise eternal vigilance to protect what we have, and at the same time draw inspiration from the example of those who built those systems. That way, we can go on creating ways to strengthen farmer power in the marketplace.”
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> *- Ellard Powers, 2001*

STRENGTHENING SUPPLY MANAGEMENT:

Defending Canadian control of our market space and advancing food sovereignty

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Strengthening Supply Management:
Defending Canadian control of our market space and advancing food sovereignty

Supply management is a unique Canadian institution that provides stability in five perishable food sectors by controlling the amount produced, preventing shortages, and keeping under-priced imports from being dumped into our market. As a result, Canada does not experience wide fluctuations in supply and prices – nor the need for massive government subsidies to farmers -- that are common in other countries. However, this system is under attack in international trade agreement negotiations, including the Canada-European Union Comprehensive Economic and Trade Agreement (CETA) and the Trans-Pacific Partnership (TPP). Global agribusiness corporations see opportunities to increase their profits by forcing the Canadian market to accept underpriced commodities from other jurisdictions, thereby driving down prices paid to our farmers. Within Canada there are critiques of the how the supply management system operates. Barriers to entry by young farmers and lack of opportunities to serve niche markets are frequently stated as concerns.

In November 2014, the Union Paysanne published a discussion paper, *Toward Supply Management 2.0 in Canada*, with its recommendations for change. The National Farmers Union has read the discussion paper with interest, and offers observations, analysis and alternative recommendations to move the conversation forward. We begin by asserting that fine-tuning our current system must start with maintaining the space in which supply management operates -- our Canadian domestic market -- and with a commitment to solidarity with farmers elsewhere who would be exploited by global agribusiness corporations seeking to capture the Canadian market.

International context

As corporate control of agriculture increases, the livelihoods of farmers and farm workers become increasingly precarious. Farmers are subject to the cost-price squeeze, being price-takers for both the inputs they use and for the commodities they sell. Agricultural workers' wages are forced down and jobs become less secure as companies continually seek lowest-cost commodity sources and

History of Supply Management

Supply management was designed in Canada to solve multiple problems. Farmers with perishable products such as milk were at the mercy of processors who knew they could pressure farmers into accepting lower prices because the alternative was a spoiled product worth nothing. If individual farmers each tried to compensate for low prices by producing more, the result was a market glut which further depressed prices. Often the solution was to dump the excess milk, wasting it. Processors could threaten to refuse delivery and lower prices by encouraging competition among producers, allowing the price to be set by the most desperate farmer. Consumers were subject to price volatility, erratic supplies and seasonal shortages. Furthermore, it was difficult to ensure consistent quality when farmers could not rely on a fair return for their efforts and investment.

Supply management is an innovative solution, developed for dairy in Ontario and Quebec in the 1960s when dairy farmers organized and took political action to address the problems that led to both milk shortages and over-production and waste, along with uncertain, volatile incomes. Milk prices fluctuated seasonally and were often below the cost of production -- and at times, processors would turn farmers away. Elsewhere in Canada, fresh milk supply was inconsistent, sometimes with no milk available at all. In 1969, in exchange for a commitment by all dairy farmers to apply production discipline, the governments of Ontario and Quebec implemented supply management regulation for dairy. Other provinces soon followed.

The supply management system in chicken and eggs was initiated in British Columbia in 1961 due to similar problems resulting in unacceptable price volatility. Ontario and Quebec, then Saskatchewan and Nova Scotia followed with similar provincial programs. However, production imported from the US and non-participating provinces undercut prices and weakened these new systems. In 1971 the federal government passed the *Farm Products Marketing Agencies Act* which brought all provinces into the system, and in 1979 import controls were established. Starting in 1973, supply management for turkeys followed in the footsteps of dairy, chicken and eggs.

(For more detailed history, see ***Appendix 1*** below)

food processing plant locations. In fact, temporary migrant workers make up an ever-larger proportion of the agricultural workforce around the world. Meanwhile, corporations that sell farm inputs and buy farm products have become so large and concentrated that only a few control most of the world's trade in farm products. Companies such as Parmalat, Saputo, Cargill, Tyson, and JBS have annual revenues in the billions of dollars. They stand to gain even higher returns if the supply management system is weakened or ended. The work of millions of farmers and farm workers is translated into high incomes and fantastic wealth of the very few – owners, high level managers and shareholders of these corporations.

In Canada, farmers in non-supply-managed sectors who produce commodities such as grain and hogs have seen their market power destroyed by the unilateral actions of provincial and federal governments which destroyed the Canadian Wheat Board, ended the Crow Rate, dismantled the hog marketing boards and weakened the Canadian Grain Commission. These non-supply-management sector farmers are becoming ever more precarious, because increasingly, they face huge corporations alone as individuals. In contrast, farmers in the supply-managed sectors continue to benefit from orderly marketing and a unified approach to the companies that purchase their products.

The supply management system governs production of dairy, broiler chickens, laying hens, turkeys and hatching eggs across Canada. Each commodity is governed by its own elected provincial marketing board according to provincial legislation and regulations. Thus, the diversity among the boards and their autonomy allows for variations in how supply management is implemented within the national framework.

Supply management stands upon three pillars:

1. **production discipline** – whereby the supply of the product is controlled in order to not produce more than the market needs;
2. **cost-of-production pricing** – which ensures that farmers receive a fair income; and
3. **import controls** – which limit farmers' exposure to competition from unfairly priced foreign products.

These pillars ensure that Canadian consumers have a reliable supply of these products while the farmers who produce them obtain adequate income from the marketplace. There is no need for government subsidies as a result.

Through legislation and regulations, supply management has become an institution that delivers farmer power in the marketplace. The assurance of a market and a fair price allows farmers to invest in equipment, training, animal husbandry, genetics and land stewardship for the future while requiring them to produce the right amount of product at the right time while meeting quality standards.

In addition to solving the problems of supply, demand, quality and fair incomes within Canada, the supply management system insulates dairy, eggs and poultry -- a significant portion of Canada's food system -- from the vagaries of currency exchange fluctuations and various political, economic and environmental shocks that affect export-oriented sectors such as beef and pork, and import-dependent food supplies such as fresh fruit and vegetables. By not aggressively pursuing export markets, our dairy, chicken, turkey and egg sectors avoid competing with farmers in other countries who are trying to make a fair living by providing food for consumers in their own domestic markets.

Today's challenges

There is a growing movement of small-scale farmers in Canada seeking to avoid the market power imbalance in commodity production by developing niche markets and focusing on direct sales to local consumers. By eliminating the middlemen, these farmers obtain a larger share of the value of their products. Differentiating

their products and building a loyal customer base provides a degree of economic stability. In some cases they would like to enter, or expand milk, poultry or egg production to add diversity to their mixed farms and better serve their customers, but are unable to do so, or lose money if they do, as a result of minimum quota regulations and/or low quota exemption thresholds in their province. The NFU believes that the supply management system is capable of responding to these farmers' aspirations in a constructive manner that will enhance Canada's food system.

Supply management's three pillars work together to make a strong system. When one pillar is weakened, it affects the others. Today, trade agreements such as CETA and the TPP are hammering away on the import control pillar. If these deals are ratified, companies based in exporting countries will be allowed to undercut Canadian producers by selling increasing amounts of dairy, poultry and eggs in our market. The exporters -- primarily the USA, New Zealand and the European Union -- are selling dairy products well below their own cost of production, throwing farmers into debt and offloading costs onto animals, the environment and vulnerable workers – and often onto taxpayers through government subsidies. If these trade agreements are ratified and the market share of underpriced products is allowed to grow, Canadian producers' prices will be pushed down.

Without the supply management system's legislated authority (and the political will to uphold it) the economic space it occupies will be transformed to serve the interests of multinational corporations. If marketing boards lose their authority to regulate cost of production pricing formulas, processors will be able to force down prices to below the cost of production. Without the legislation that requires processors to locate in each province, smaller plants would close, consolidating both production and processing into a few locations. Without import controls, global corporations can outsource production of ingredients and commodities to lower-wage jurisdictions with weak environmental protection. Corporate gains would then be subsidized by Canadian taxpayers through support payments, by farmers through unsustainable debt loads, by the environment and future generations affected by pollution, and by animals that suffer as a result of being pushed to their physical limits to maximize production.

Supply management's third pillar, import controls, has been weakened by NAFTA, which created a loophole that allows unlimited, tariff-free importation of milk products that contain over 85% protein such as casein, caseinates and whey products. Rapidly rising imports from the USA (which are below the cost of production as a result of direct and indirect subsidies) are displacing domestic production and thus creating an imbalance in Canada's dairy supply. The disposal of excess milk protein is an added cost for Canadian farmers. In addition, consumers are increasingly concerned about potential health implications of the highly processed milk protein ingredients that are replacing fresh milk products more often.

Some people promote increasing quota-exempt production thresholds so that more small-scale, direct market, mixed farmers can participate in the dairy, poultry and egg markets. The Union Paysanne recommends that quota-exempt thresholds for each commodity be made uniform across all provinces. The NFU recognizes that each province's situation is different, and thus it is appropriate for provincial marketing boards to retain the autonomy to set quota exemptions according to their own history, geography, markets and farming practices, etc.The NFU recommends changing the way supply management's production discipline pillar is implemented as a better solution than imposing standardized quota exemptions. If unregulated off-quota production thresholds are set too high, it will open the door to abuse by unscrupulous sellers and weaken the producer discipline pillar, increasing the risk of damaging price volatility, market gluts or shortages and depressed prices for everyone. We do not want to be the architects of our own demise by inadvertently creating conditions that result in Canadian farmers destabilizing our own market. The blue boxes inserted into this report highlight positive examples of provincial marketing boards' ability to create effective approaches to managing production discipline in the context of changing needs and new challenges.

Cost-of-production prices paid to farmers with quota provide a benchmark for non-quota producers, making it possible for them to obtain higher prices than would be the case in the absence of supply management. Some provincial marketing boards are developing tools to promote the orderly expansion of alternative production systems that increase opportunities for smaller scale producers while avoiding the risk of over-production. Several boards are developing and implementing such programs. For example, British Columbia's egg marketing board has a small lot program that reserves a 10,000 layer allocation for small flock certified organic farmers – each can have up to 399 layers and they must sell via direct marketing. If these farmers want to raise more birds they are given priority in BC's new entrants program. Ontario has a similar program for chickens raised for meat. Five percent of the annual growth of quota is allocated to licensed farmers to raise 300-6,000 meat birds per year for sale into their local markets. Creative approaches such as these are only possible when the provincial boards have the autonomy to try new things without the burden of convincing all their counterparts in other provinces to adopt the same approach.

The political will needed to maintain supply management's economic space requires an effective and well-understood "social contract." As a society, Canada ensures supply management farmers can make a fair living and in return, farmers must make sure we have adequate supply and provide wholesome, healthy food. This social contract could be expanded to ensure that farmers use ecologically sustainable practices and maintain high standards of animal welfare in return for society ensuring that a supportive legal framework is maintained. Highlighting the wider social benefits of the supply management system is a joint responsibility of farmers and the citizens who consume their products.

For discussion purposes, we propose a number of potential scenarios for restructuring production discipline:

Transition to non-market quota allocation - In the mid-1960s, the Ontario Farmers Union (OFU) -- one of the provincial farmers unions that joined together to become the NFU in 1969-- was a leader in the struggle to create a supply management system for dairy. The OFU's vision did not include quota becoming a form of capital that could be bought and sold. When the market-based quota system was established in 1970, the NFU foresaw that buying and selling of quota would lead to its concentration, and for that reason opposed the capitalization of quota and called for non-negotiable quota to be owned and allocated by each province's responsible agency.

When quota is for sale, the largest farmers can more easily get financing to purchase additional units of quota. New entrants have start-up costs on top of paying for quota, making it impossible to successfully bid against established producers who have access to more credit on better terms. The dynamics of finance and competition lead to concentration of ownership. The bidding up of quota value also benefits the financial sector, as lending on the basis of higher quota values means more interest payments going to the banks.

The NFU recommends changing the quota allocation system as a way to lessen concentration and reduce barriers to new entrants. We recognize that a pragmatic approach to this transition is required. Here are some proposed steps:

Improve new entrant programs - Most, if not all, provincial marketing boards have new entrant programs that make quota available for new farmers for free or at reduced prices. These programs can be expanded and/or accelerated.

- Programs that inhibit concentration of quota ownership should be emulated;
- Programs that result in net exits from the industry should be abandoned;
- When new quota is created due to an expanding market it should be distributed free of charge to new entrants, as is done by Alberta Egg Producers;
- Cap the value of quota, as has been done by Dairy Farmers of Ontario; and

- Free and low-cost quota allocations should be large enough to allow a new entrant to set up a viable operation.

Quota policies to maintain farmer numbers - Quota policies need to be evaluated according to their success in keeping farmers in business and deterring consolidation and concentration of production in ever fewer hands.

- Each provincial board has a quota exchange that provides a mechanism for transferring quota from retiring to beginning farmers. All, or most of the quota released when a farmer retires could be offered to new farmers for free or at reduced prices. The purchase of retiring farmers' quota could be funded collectively, either by the sector itself through a check-off, or by government in recognition of the public value of intergenerational transfer.
- New institutions could be designed to enable quota trust financing to promote intergenerational transfer. Retiring farmers would obtain tax advantages by transferring quota to the trust instead of selling it on the quota exchange. Eligible new farmers would apply for use of the trust's quota in return for a commitment to continue producing in the sector for a minimum period. The revenue generated by the trust would also provide an annuity for the retired farmer.
- To make quota available for re-distribution, each province's marketing board for each sector would need to cap per-farm quota, create a quota pool by buying back quota from retiring farmers, and redistribute quota from large farms if any exceeded the cap. New quota from market expansion would be added to the quota pool for new entrants as is now being done by Chicken Farmers of Ontario, for example, instead of distributing it among existing producers.

Launching the Next Generation – Alberta Milk's New Entrant Assistance Program

New Entrant programs have been developed by nearly all of Canada's provincial supply management marketing boards in recognition of the benefits of helping the next generation become established. Typically, new entrant programs grant or loan quota for a period of time to qualified young farmers who are new to the sector. Prospective new entrants must apply for the program; methods and criteria for selection vary according to the marketing boards' priorities for developing their sectors. In 2015, Alberta Milk updated its *New Entrant Assistance Program*, offering more quota for a longer time period. It now lends two units of quota for every unit the new entrant purchases, up to 25 kg/day, or enough to milk 20 to 25 cows. The new entrant can expand by purchasing additional quota, up to a total of 70 kg/day. After the new entrant has farmed for seven years the loaned quota is gradually taken back, with all of it being returned by year ten. Loaned quota cannot be sold or transferred, nor can the new dairy farmer sell underproduction credits. This ensures that the program is used to build capacity. Only Alberta residents who are Canadian citizens or permanent residents over 18 years old and who have never been a dairy farmer or owned a dairy farm are eligible to apply for the program. Applicants provide information about their farming experience, their financial situation, their vision for themselves and their farms, their intentions regarding education and mentorship, as well as their plans for running their farm. After reviewing applications and conducting interviews, Alberta Milk selects one or two new entrants every year based on their need for assistance and the likelihood that the applicants will succeed as dairy farmers in the long term.

Full cost accounting - The cost-of-production pricing formulas are designed to take into account the full range of production scale of the farmers in the sector and to avoid rewarding inefficiency. However, economic efficiency should not be accomplished at the expense of the environment, animal welfare, vulnerable workers, future generations or taxpayers. Mega-farms have emerged in countries such as New Zealand, Australia and the USA, where dairy prices have been forced downward due to overproduction and lack of farmer market power. There are now several corporate dairy farms in Australia running herds ranging from 3,500 to 15,000 cows. The biggest in the USA milks 30,000 – more than all the dairy cows in Saskatchewan. Highly concentrated and capital intensive, they milk tens of thousands of cows and employ vulnerable temporary migrant workers and undocumented immigrants. Poultry production is also done on a much larger scale in countries without supply management. The largest egg farm in the USA, Cal-Maine, has 34.2 million hens; the second-largest, Rose Acres, has 24.2 million hens. The average California broiler chicken farm was over 500,000 birds by 2012.

Manitoba Turkey Producers – Preventing the Capitalization of Quota

Manitoba Turkey Producers' priority is to have as many family farms in turkey production as possible. When their marketing board was established in 1968 they decided to control the price of quota. They set the level based on prevailing quota prices in other provinces, which was $3.00/kg, and the controlled price is increased annually according to the previous year's consumer price index. Quota can only be bought and sold on the Board's quota exchange – private deals are not allowed. When a farm is sold, it is appraised and must be sold for its asset value alone -- quota value cannot be hidden in the selling price. This guarantees that all quota is moved transparently via the exchange. When a farmer retires, his or her quota is offered to all producers on the exchange. Manitoba Turkey Producers believes that retiring farmers have benefited through the income they earned by participating in the supply management system, and thus do not need to finance their retirement by selling off capitalized quota.

When the supply management system for turkeys was set up, there were approximately 120 farmers involved in Manitoba, and the province was producing about 6% of Canada's supply. All existing farmers were provided with quota at that time. Since then, Manitoba has maintained the same share of Canada's national turkey quota, and now has 58 farmers, which, at 57%, is a higher rate of farmer retention than the national average (48%) for all farmers.

Canada has avoided this degree of scale and concentration of production so far -- here, dairy farms average 77 cows; chicken farms average approximately 20,000 birds; the average flock size for Canadian egg farms is 23,000; and turkey farms average about 3,250 birds. Of course, the majority of farms are below the sector averages. However, a focus on price alone could lead us in the same direction as USA. Quota allocation policies and cost of production pricing formulas can be designed to promote the continuing viability of smaller scale producers while still producing wholesome food, decent returns to labour, healthy ecosystems and viable local economies. Full-cost accounting processes that measure the "triple bottom line" (social, economic and ecological accounts) need to be integrated into cost of production pricing formulas.

Sectors should review minimum quota limits and provide access to smaller amounts of quota in conjunction with access to alternative processing, marketing and/or transportation options. With alternative processing arrangements a floor price could be maintained by using a buy-back system. For dairy, smaller quotas could be offered for raw milk via direct sales per the NFU's *Protocol for Legal Sale of Fresh Unpasteurized Milk within the Supply Management System*. Health Canada, and in some cases provincial regulations, would first need to permit the sale of unpasteurized milk for human consumption.

Excerpt from the NFU's Protocol for Legal Sale of Fresh Unpasteurized Milk within the Supply Management System *There is a need for a legal means of selling fresh unpasteurized milk for human consumption in Canada due to the rising consumer demand for it, the interest among farmers to serve a niche market, and the emergence of an underground, unregulated market for "raw milk". A growing unregulated raw milk market creates hazards for individual consumers and farmers who risk selling raw milk. Currently Health Canada prohibits the sale of unpasteurized milk in Canada. Canada's dairy supply management system is in compliance with Health Canada and thus does not provide for the sale of unpasteurized milk.*

We believe it is possible to develop a licensed and inspected system which would minimize health risks to consumers and provide a system of marketing fresh unpasteurized milk for human consumption that operates within Canada's supply management system. We are proposing that such sales would be restricted to direct farm-gate sales in order to minimize handling costs and risks, and to ensure that there is maximum transparency as well as relationship of responsibility between the farmer and consumer.

We propose a phased approach to achieving this goal. First, Health Canada would need to become willing to consider change to the law regarding the sale of fresh milk for human consumption, and be prepared to work with farmers and consumers to develop appropriate regulations. Second, one or more provincial dairy boards would need to be willing to carry out a pilot project to evaluate proposed fresh unpasteurized milk production and sales regulations. Finally, the licensing and inspection protocol would be implemented across Canada. (See ***Appendix 2*** *for the full protocol)*

Expand opportunities for local direct marketing - Consumer interest in, and small farmers' opportunities for direct marketing are increasing. Farmers Markets and Community Shared Agriculture are some of the structures that support this approach. In most provinces, farmers' ability to participate in direct marketing of supply-managed products is constrained by low quota-exempt thresholds and/or high minimum quota requirements. This gap is being addressed by some marketing boards, such as Chicken Farmers of Ontario and BC Egg Producers. These programs and processes are models that can be adopted or adapted based on documented experience, according to the situation of each particular commodity and each province's market conditions.

Licences for specific amounts of production using alternative methods offer a middle ground between minimum quota and quota-exemptions. These mechanisms maintain production discipline and provide the predictability of farmers' income and buyers' supply that would be required to support alternative local institutions for food processing, storage and distribution. Floor pricing ensures that the cost-of-production pricing pillar is respected. Off-quota exemptions should be reviewed and revised in each province and sector where this has not already been done, in the context of revised quota allocation policies that seek to maintain and increase the farmer numbers and diversity of production systems. A multi-stakeholder advisory body could make recommendations to marketing boards regarding quota exemption thresholds, minimum-quota exemptions and intermediate programs involving registered or licensed production. Stakeholders could include small-scale producers, purchasers (restaurants, CSA members), and specialty processors (artisanal cheese-makers).

Accelerating Specialty Egg Production in BC

In 2004, British Columbia conducted an overarching study of its supply managed sectors to promote expansion of specialty production, and increase the opportunity for new producers to enter. Following this *Specialty Review*, BC Egg, the provincial egg marketing board, established a new class of quota and set up a *Small Lot Program* to licence small-scale production over the quota exemption threshold (99 laying hens). Certified organic farmers (and free run/free range producers if they have 3rd party certification of their production system) with up to 399 layers can apply for registration as Small Lot Producers. Successful applicants do not have to purchase quota; instead they pay an administration fee. Their license allows them non-voting participation in the BC Egg's activities.

Up to 10,000 layers in total were allocated to the Small Lot Program. The program is fully subscribed with 50 farmers participating. The Small Lot Program also functions as an "on-ramp" for larger-scale production, as BC Egg agreed to select at least one Small Lot Program participant as one of its two annual New Entrant Program farmers. BC Egg is also considering adding more Small Lot licences to serve the growing market for specialty eggs.

Between 2007 and 2014, specialty eggs increased from just under 10% to just over 15% of BC's egg production. Specialty eggs obtain a price premium, allowing their contribution to total BC egg farm receipts to reach nearly 21% in 2014. BC Egg's new quota exchange policies made possible this increase in specialty eggs' market share. New and temporary quota has been allocated to specialty eggs, and a percentage of quota sold on the exchange is recaptured for redistribution to specialty producers.

Integration with processors - The supply management system is highly integrated with processors. Supply-managed commodities are perishable – their value quickly disappears in the absence of timely processing. Dairy products are processed and packaged as milk, yogurt, cheese, etc. for distribution to retail outlets. Milk ingredients are processed and sold wholesale for use as ingredients by other food manufacturers. Likewise, eggs need to be cleaned, graded and packaged for retail and wholesale distribution. Chickens and turkeys must be slaughtered and eviscerated then cut, wrapped and chilled. Today, we have processors for each supply-managed commodity operating in each province. Maintaining processors in every province is essential for continued production of commodities in each province (see Figure 1 and Figure 2).

The tariff wall -- a high tax on imports of supply-managed commodities above certain thresholds negotiated at the World Trade Organization -- is important to ensure processors are able to function at a smaller scale and with higher input costs than foreign competitors whose profitability is derived from sourcing milk, eggs and poultry below the cost of production. This is particularly important for provinces with smaller populations, such as Prince Edward Island and Saskatchewan. Allowable imports under the WTO need to be redefined to close loopholes and prevent unfair competition (from protein-based milk ingredients, for example) for domestic processors and so Canadian farmers can supply the ingredients to produce the full range of their sector's products.

Maintaining and/or increasing the number of farmers and their distribution across Canada will go hand in hand with ensuring there are processors to serve them. You could say that production and processing is a "chicken and egg" problem, so the expansion of "alternative" or "niche" production will require similar expansion of the processing facilities that serve them. This is already being done in some provinces. For example, Chicken Farmers of Ontario has initiated special programs to develop capacity for kosher and organic processing.

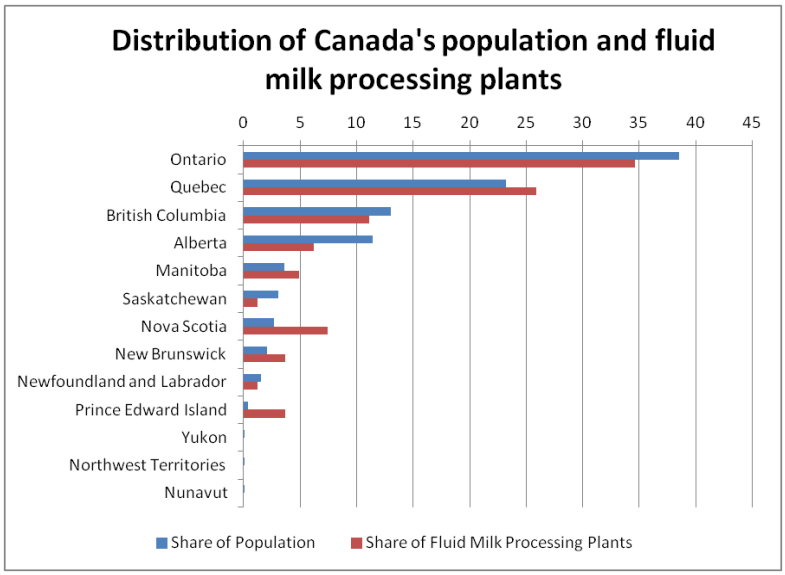

Figure 1: Number of dairy processing plants compared with population for each province. Sources: Statistics Canada, Industry Canada

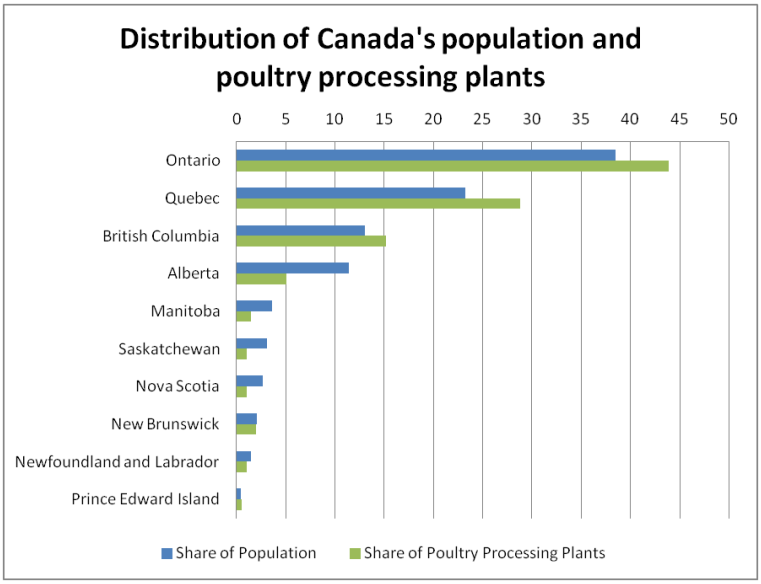

Figure 2: Number of poultry processing plants compared with population for each province. Sources: Statistics Canada, Industry Canada

Growing Enterprise Diversity – Ontario Chicken Farmers

At the Chicken Farmers of Ontario (CFO) 2014 Annual Meeting, members directed their Board to develop new approaches to allocating the growing chicken market in Ontario. The organization then consulted with farmers, the public and the supply management system's provincial regulatory body. The process highlighted the demand for small-scale production above the 300 bird limit, the need to better serve niche and local markets, particularly in Northern Ontario, and the desire to support new entrant farmers and processors.

In 2015, the CFO launched a suite of programs to fill the gap between quota exempt small-scale own-use production (300 birds) and minimum quota production for standard commercial processing (14,000 units, or 182,000 kg/year). The new programs provide options for farms with different scales of production to serve different markets; a processor program provides support for appropriate processing capacity to support these options.

The *Artisanal Chicken Program* offers a small-scale commercial opportunity for sales into local farmers' markets, restaurants and other local outlets. Each farmer can raise 300 to 6,000 meat birds per year under a production licence from CFO. Participants are selected through an application process. 5% of annual growth of total quota will be allocated to this program. A further 5% of annual growth will be allocated to the *Local Niche Markets Program* to support farms that seek to serve larger, well-defined niche local and regional markets. Successful applicants to this program will obtain 1,000 to 10,000 quota units to raise 6,000 to 60,000 chickens per year.

In conjunction with new programs for smaller commercial producers, the CFO is encouraging new processors by allocating 50,000 to 100,000 kg of production per new processor each year. Once accepted as a new entrant processor the company has two years to get its new plant up and running. The CFO will use the *New Entrant Chicken Processors Program* to strategically target processing to support areas of market expansion. In 2015/16, the priority is to bring in new certified organic processors.

The CFO also expanded its *New Entrant Producer Program* for those wishing to begin conventional chicken farming for the mainstream market, set up a program for specialty breeds to serve certain ethnic markets, and is working to develop Kosher processing facilities in Ontario. Quota-exempt production has been re-branded as the *Family Food Program* to indentify this option as primarily for subsistence and direct farm-gate sales rather than commercial purposes. *For more information about these programs see http://www.ontariochicken.ca/Programs/Overview.aspx*

Dairy Farmers of Ontario's *Project Farmgate* pilot project created a framework for on-farm processing for several dairy farms, allowing them to sell milk and/or cheese from their own herds to local consumers. The farmers' investment was backed by DFO's commitment to purchase surplus milk while the farms were ramping up processing and developing a customer base. DFO also helped these farmers navigate the regulatory requirements for their processing plants, apply for economic development funding and do media outreach to build their markets. This type of project could be replicated in other parts of Canada to encourage diversity of production systems and consumer access to local, niche-market and artisanal products.

In 2012, the NFU developed a *Protocol for Legal Sale of Fresh Unpasteurized Milk within the Supply Management System* that, if implemented, would allow for direct marketing by small-scale dairy farms to serve a niche market with little processing infrastructure.

Marketing boards need to recognize the value of diverse production systems and work with farmers to develop methods of serving their market segments. Different ways of farming should not be considered a threat to conventional farmers, but as a source of innovation and resilience for the sector, with potential to increase demand and thus expand markets for each product.

Appropriate food safety regulations

The supply management system is integrated into the food safety system and animal health regulations. To promote more diversity and access to production for smaller-scale producers these regulations need to be designed to fit their systems. Biosafety rules designed for confined feeding operations are not appropriate for open air, free-range, mixed farming with multiple species. Practices that promote healthy animals (as opposed to barriers to exclude pathogens) need to be recognized as legitimate and be approved for non-confined production. Appropriate regulations that support small-scale processing need to be developed and adopted hand in hand with promotion of on-farm processing for direct-market sales.

Smaller scale, niche market production is more seasonal than the larger-scale production systems that have developed to serve mass markets. Seasonal variations in output would not add undue risk of waste or over-supply as long as they are appropriately integrated into the larger market. Traditional peak management practices such as cheese-making and meat-curing are methods of transforming short-term abundance of perishables into a predictable food supply throughout the year. To support production system diversity, there should be incentives to promote the establishment of local, smaller-scale processing in conjunction with clusters of producers that can reliably supply them. Complementary seasonal industries could provide employment to workers when food processing needs lessen.

Supply management and food sovereignty

Food Sovereignty was put forward by *La Via Campesina* (LVC) in the course of its resistance to free trade regimes in the early 1990s. The LVC's 2007 Forum on Food Sovereignty in Nyeleni, Mali developed the concept further, articulating six pillars that are its foundation: it focuses on food for people; builds knowledge and skills;

Supply Management and the 6 Pillars of Food Sovereignty:

Food for people

- Its priority is to match production levels to the amounts Canadians consume to avoid both shortages and waste.
- Market stability prevents price volatility, removing these sectors from short-term speculative trading on futures markets.

Builds knowledge and skills

- Boards provide information, training and support to their farmers.
- New entrant programs offer support for young farmers.
- Boards conduct and/or fund research in accordance with member farmers' priorities.

Works with nature

- Cost-of-production pricing and guaranteed access to market allow small and medium-sized operations to remain the norm, thereby avoiding the environmental problems associated mega-farms.
- Dairy farmers opposed the introduction of the genetically modified bovine growth hormone (rBST or rBGH) and prevented it being approved for use in Canadian milk production.
- Certified organic production is an option for producers, however, some lack processing and marketing infrastructure that would provide organic premium returns to farmers.

Values food providers

- Products are sold to processors at a price that covers the cost of production, allowing farmers and any employees they might hire, to make a decent living.
- Compared with other Canadian farm sectors, fewer families in supply-managed sectors need off-farm jobs.

Localizes the food system

- Production is primarily for consumption within Canada, and for many supply-managed foods, within regions of Canada.
- The volume and type of imports is limited, ensuring most Canadians are eating dairy, eggs and poultry produced in Canada.
- Processing is done within each province, providing additional local employment and reducing GHG emissions and transportation costs to serve retail outlets.

Puts control locally

- Boards made up of elected farmers have a large degree of control over each sector's regulatory matters.
- The system was created by elected federal and provincial governments working together with farmers.
- Marketing boards for each commodity are provincially incorporated and thus govern according to the priorities of farmers in each province.

works with nature; values food providers; localizes food systems; and puts control locally.[1] In many ways, supply management is consistent with these pillars.

The NFU believes our supply management system has the potential to respond to changing farmer and consumer desires for increased diversity. We hope that each sector's provincial marketing boards, along with interested farmers and consumers will consider the ideas and recommendations put forward in this discussion paper so that we can engage in positive action to move Canada towards food sovereignty.

RECOMMENDATIONS:

The National Farmers Union strongly supports Canada's supply management system as an important institution of food sovereignty. The power to improve its ability to face internal and external challenges is largely in the hands of the provincial marketing boards and their national associations. Therefore, we urge them to consider the following recommendations:

1. Uphold and defend the three pillars of supply management: production discipline, cost of production pricing and import controls.
2. Move forward with policies that advance the decapitalization of quota in the interests of the supply-managed sectors' next generation of farmers.
3. Implement policies to allocate new quota due to growing markets, as well as quota released by retiring farmers, to new entrants and alternative production systems in order to promote renewal, resilience and response to consumer desires for diversity.
4. Consider creating a role within the governance structures of provincial marketing boards for registered and/or licensed non-quota direct-marketing producers and/or multi-stakeholder public interest advisory bodies.
5. Open discussions with federal and provincial health authorities regarding sale of unpasteurized milk for human consumption as a first step towards assessing opportunities for innovation in response to the market segment seeking raw milk.
6. Develop a "triple bottom line" approach to cost of production pricing formulae to ensure environmental and social costs are not externalized.

[1] *Nyéléni 2007 - Forum for Food Sovereignty Synthesis Report*, 31 March 2007. http://www.nyeleni.org/IMG/pdf/31Mar2007NyeleniSynthesisReport-en.pdf

Appendix: The Rise of Supply Management by Ellard Powers, 2001

The Rise of Supply Management

Presentation for a panel on The Past, Present and Future of Co-ops and Orderly Marketing
National Farmers Union, 32nd National Convention
Regina, Saskatchewan, Nov. 26-29, 2001
by Ellard Powers, Beachburg, Ontario - NFU Region 3

Setting the Scene

In Canadian agriculture today, perhaps the biggest difference between farmers is whether what they produce is supply managed or not. In supply-managed sectors—dairy, poultry and eggs—farmers can expect to work hard and make a reasonable living. In other sectors, they cannot even count on getting back their cost of production.

There is a whole generation of younger farmers out there in supply-managed sectors who never experienced farming without supply management and the relative security that it provides. Lack of knowledge can lead to complacency. Things can start to be taken for granted, and supply management is no exception.

But there are serious threats to our supply management systems looming on the horizon today. Trade agreements and the massive pressures of globalization are hemming us in, while our own internal criticisms of specific problems within the system get confused with—and used as—attempts to abolish the system itself.

This is where our history comes in. We need to remind ourselves of what conditions were like before supply management, and examine how farmers organized to build a system to change an intolerable situation. With this knowledge, we can understand better what we stand to lose if we allow that system to be undermined.

The Dairy Example

To illustrate the history of supply management in Canada, I will focus on the dairy sector in Ontario and Quebec where it began, and where most dairy production was and still is located.

In the early 1960s, there were 125,000 milk and cream producers in Canada, 70,000 of them in Ontario. Today, Ontario has fewer than 6,500—less than one-tenth of the number from forty years ago. At that time, the province was dotted with local dairies and some 284 cheese factories. The picture was similar in Quebec. Canada exported 68 million pounds of cheese in 1961, mostly to the U.K., down from more than 100 million pounds a year up until the end of the war, but still much more than in the years that followed. So in terms of volume and numbers of producers, the dairy sector was strong, but farmers' incomes were extremely low and there was much dissatisfaction.

Prices were low, testing and weighing were unreliable, and farmers did not feel they were getting a fair return. This was in spite of the fact that they had several long-established organizations to represent them. In Ontario, there was the Ontario Whole Milk Producers League, set up in 1932, the Cheese Marketing Board, in 1934, the Cream Producers Marketing Board, in 1946, and the Concentrated Milk Producers Marketing Board, in 1954. Farmers had also established co-ops, and in Quebec especially they flourished, handling most of the milk produced in that province.

But the effectiveness of these groups in defending the interests of their farmer members was limited. The problems persisted. Prices for manufacturing milk remained at $2.51/cwt from 1957 to 1963. Butterfat testing

and weighing were done at each of the many individual plants, and results varied so widely, so that many manufacturing milk producers shipped to more than one plant so as to be able to check results against each other.

With fluid milk, even farmers with contracts would sometimes have their milk returned from the dairy the next day if the dairy didn't need it.

Producer dissatisfaction was widespread, including among directors within the marketing organizations themselves, as well as in the Ontario Farmers Union and the Ontario Federation of Agriculture. Farmers felt there had to be a better way. But there was disagreement about what that better way should be. In the OFU, for example, some members wanted marketing boards, while some wanted to go the collective bargaining route, like the National Farm Organization in the US. I will come back to that argument later on.

In 1963, the then provincial Minister of Agriculture, Bill Stewart, responded to this widespread dissatisfaction by appointing the Ontario Milk Industry Inquiry Committee, headed by Prof. S.G. Hennessy. In January, 1965, the Hennessy Report was issued, recommending the establishment of a provincial marketing board. The OFU and the Federation both officially supported the Hennessy Report, but the pressure on the government to implement it actually came more from individuals within the organizations than from the organizations themselves.

As a result of this process, the Ontario Milk Marketing Board was set up in 1965. The Board established single-desk selling, set minimum prices for fluid and manufacturing milk, pooled transportation costs between producers by district, and put in place a program which eventually led to a single pool for all milk in the province. During the same period, Quebec also set up a fluid milk marketing board and a manufacturing milk marketing board.

In 1966, the federal government passed the Canadian Dairy Commission Act. The CDC came into existence for the 1967 dairy year, taking responsibility for establishing a support price for butter, skim milk powder, and cheddar cheese. They were also responsible for the export of surplus cheese, skim milk powder, and butter. This effectively set the price of manufactured milk to producers across the country. The Dairy Commission also introduced a direct subsidy to the producer on all manufactured milk and cream for domestic use (that subsidy is being phased out and will be gone by 2002). That subsidy was paid on a total of 100 million cwt, the total of the Subsidy Eligibility Quota. This was a move towards supply management, since any farmer's production over quota did not get the subsidy.

1970 was the year supply management in dairy was actually established, with the introduction of the market share quota system as a way of administering the supply management concept. Right from the start there was a price for quota. The NFU argued against that, and today maintains its policy in favour of non-negotiable milk quotas. But there seemed to be no workable alternative plan for a no-dollar quota, then or now.

The implementing body for the new supply management system was the Canadian Milk Supply Management Committee, made up of the Canadian Dairy Commission, as Chair, the Ontario and Quebec milk marketing boards, and the milk commissions of the other provinces. The milk commissions are government supervisory bodies which administer the supply management program in their province, with or without a marketing board.

In order for supply management to work, there was obviously a need to control the total supply on a national basis, so that milk could not be brought in from other provinces at a lower price and to make tariff protection possible. The CDC took the lead role in making this national system happen. Over the next few years all the provinces except Newfoundland joined the supply management regime (Newfoundland finally joined this year).

It was not an easy task for such a broad group of people to work together to develop, refine and implement a completely new, very complex and often controversial system which had such a crucial impact on producers and consumers across the country. Amazingly, the Canadian Milk Supply Management Committee made all its decisions by consensus. As Chair of the CDC from 1973 to 1976, I chaired that Committee, the CMSMC, as well.

One of the problems we faced in those early years was insufficient production. Between 1972 and 1974, milk production was not filling all our domestic needs, so the CDC gave each producer a 7% increase in quota. In the 1975-76 dairy year, however, good weather combined with other factors to create a substantial surplus. The Commission withdrew the 7% quota increase in the late fall of 1975, but the provincial agencies and marketing boards could not agree to reduce their provincial quota allocations and the surplus continued to grow.

In the spring of 1976, the federal government instructed the CMSMC to reduce the total market share quota by 18%. All hell broke loose. Dairy farmers organized protest meetings and a march to Parliament Hill, and the bureaucrats and politicians hunkered down out of sight in Ottawa, except for Eugene Whelan and I. I was with Eugene Whelan in Ottawa when the farmers threw milk at us.

This was the first and only major failure of supply management to control supply. Lack of experience, and refusal by the marketing boards of Ontario and Quebec to cut farmers' quota earlier in the fall created the surplus. Of course the feds got all the blame.

The Broader Picture

Back in the 1960s, parallel to what was happening with dairy, producers of other commodities were experiencing similar marketing problems and likewise looking towards collective solutions. In poultry, eggs and hogs, there was parallel movement towards orderly marketing. In hogs, the prairie provinces set up single-desk marketing structures, recently dismantled by the provincial governments under pressure from packing companies. In Ontario the Pork Board still has the legal authority to implement single-desk selling, but no longer uses it.

Through the 1970s, producers of eggs, broiler chickens, turkeys, and hatchery eggs and chicks all developed supply management systems. Details differ, but all these commodities, along with dairy, now have national-level bodies implementing supply management. For the most part, there have been few major changes since that time in the way these systems work. In all the sectors that have adopted it, supply management continues to provide an adequate living for most producers.

Interestingly, there is one commodity that has been supply managed right from the start: tobacco. Even though there is no national tobacco agency, Ontario's tobacco crop has always have quotas, based on acreage and tonnage. Of course, the market-related problems in the tobacco sector have less to do with the marketing system than with broader external factors.

In dairy, one of the most difficult problems with the supply management system as it exists now is the high price of quota. In the "closed shop" situation that supply management demands, the only way to enter the sector is to acquire quota. Since the price of quota has risen so high—far beyond initial expectations—this restricts the entry of new producers and encourages consolidation. As I mentioned, the NFU foresaw this problem and has always promoted a non-negotiable quota owned by the responsible government agency in each province. Various other mechanisms have been tried in attempts to address this issue, including setting aside a percentage of all quota being sold to allocate it to new and/or small producers. But the problem remains.

Another perennial problem back in the early days was it was extremely hard for farmers to take the time required to be on one of the marketing boards or the CDC. Just being a member of the Ontario Milk Marketing Board took 125 days of my time out of a year. Nowadays, marketing boards and farm organizations like the NFU continue to face the same problem—more so, in fact, given fewer farmers and even greater financial and time pressures on farm families. It is a major challenge to sustain that kind of commitment in the face of decreased government and public support for creative farm policy work or alternative collective visions of agriculture.

Conclusion – The Lessons of History

The structures of supply management have changed little in the past twenty-five years, but other factors have changed dramatically. For one thing, the numbers of producers in all sectors have plummeted. Corporate control and consolidation have increased, and the pressures have intensified for globalization, "free" trade, and complete free rein for the "free market". The existing NAFTA and WTO trade agreements already effectively prohibit Canadians from expanding supply management to cover other commodities, and these and future agreements menace even the established arrangements we now have in place.

Milk export contracts fall outside the supply management system and represent another worry. If the export market dwindles or disappears, those producers will want quota to cover their milk production. Many people see this as one more wedge being driven into the structure of supply management and threatening its solidity.

Back in the '60s when farmers were debating alternatives for a "better way", collective bargaining advocates pointed out that authority delegated by government can also be taken away by government. Unfortunately, we have seen this happen, notably in the case of the single-desk selling structures for hogs in the Prairie provinces. The threat to all these systems is even greater now under the trade agreements. Once a government-supported marketing arrangement is dismantled, those agreements essentially forbid us to reinstate it.

The collective bargaining option does not depend on government support to the same extent. However, it has its own limitations. In the U.S., where the National Farmers Organization has been using collective bargaining for forty years, they have succeeded in influencing prices, but only to a relatively small degree, and only in places where they have enough farmers and livestock involved to make an impact.

One fact remains clear. Of all the institutions that farmers have tried using to solve the perennial problem of market power—collective bargaining, cooperatives, "new age co-ops", single-desk selling, and supply management—none of the others have come anywhere near the effectiveness of supply management in improving farm incomes. This is the key lesson our history teaches us.

That same history gives us our task: to defend and preserve our supply management systems against the forces that would undermine and destroy them. We must exercise eternal vigilance to protect what we have, and at the same time draw inspiration from the example of those who built those systems. That way, we can go on creating ways to strengthen farmer power in the marketplace.

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Appendix 2:

Protocol for Legal Sale of Fresh Unpasteurized Milk within the Supply Management System,
National Farmers Union, December 2012

The National Farmers Union (NFU) is a direct-membership, non-partisan national farm organization. Founded in 1969, and with roots going back more than a century, the NFU represents thousands of farm families from coast to coast. Through its grassroots democratic process, the NFU works toward the development of economic and social policies that will maintain family farms as the primary food-producers in Canada.

The NFU believes that agriculture should be economically, socially, and environmentally sustainable and that food production should lead to enriched soils, a more beautiful countryside, jobs for non-farmers, thriving rural communities and biodiverse natural ecosystems. The NFU is a leader in articulating the interests of Canada's family farmers, in analyzing the farm income crisis, and in proposing affordable, balanced, and innovative solutions that benefit all citizens. The NFU uses the lens of "Food Sovereignty" to understand Canada's food system, which at its core means that citizens must have the power to make policy decisions regarding food, land, and agricultural production methods in the interests of their community while ensuring fairness for both eaters and producers of food.

In recent years, interest regarding raw milk, or more precisely, fresh unpasteurized milk for human consumption has been increasing among both consumers and farmers. Health Canada mandates pasteurization of all fresh milk for human consumption. The Canadian Dairy Commission and the provincial dairy boards operate Canada's supply management system in accordance with Health Canada's rules.

The NFU considers Canada's supply management system to be an important institution that puts food sovereignty into action in Canada. Supply management ensures that Canadian consumers can get the milk and dairy products they require and that these are produced in Canada; that dairy farmers receive a price that covers their cost of production; and that Canada's market is not destabilized by unregulated imports of dairy products. Supply management in dairy is an institution that has made it possible for many small, diversified mixed family farms to remain viable during the continuing farm income crisis in Canada. The NFU believes that it is possible to develop an option that meets consumer demand by permitting direct sales of fresh unpasteurized milk for human consumption within, and in conjunction with, supply management, and that this would be a contribution to Canada's food sovereignty.

The National Farmers Union recently passed one resolution and tabled a second one for further study on raw milk. To fulfil these two resolutions the NFU Board has instructed an ad hoc committee to prepare a draft protocol for sale of fresh unpasteurized milk within the supply management system. This report sets out a draft protocol as developed by the committee, along with relevant context for the Board's consideration.

NFU Resolutions:

-- Due to increasing demand for sale supplies of raw milk, the NFU will work with governments and dairy supply management boards to implement protocols - within the context of supply management- to facilitate the sale of raw milk to those Canadians wishing to purchase it. (Passed November 2006)
--The NFU will work to persuade the federal government to regulate and legalize the sale and marketing of fresh, unpasteurized dairy products from designated and separately licensed milk producers within the supply management system. (Tabled November 2011)
-- it is moved that an ad hoc committee of the Board be struck for the purpose of developing and reviewing protocols to supply raw milk within supply management to those Canadians wishing to purchase it. (Passed November 2011)

There is a need for a legal means of selling fresh unpasteurized milk for human consumption in Canada due to the rising consumer demand for it, the interest among farmers to serve a niche market, and the emergence of an underground, unregulated market for "raw milk". A growing unregulated raw milk market creates hazards for individual consumers and farmers who risk selling raw milk. Currently Health Canada prohibits the sale of unpasteurized milk in Canada. Canada's dairy supply management system is in compliance with Health Canada and thus does not provide for the sale of unpasteurized milk.

We believe it is possible to develop a licensed and inspected system which would minimize health risks to consumers and provide a system of marketing fresh unpasteurized milk for human consumption that operates within Canada's supply management system. We are proposing that such sales would be restricted to direct farm-gate sales in order to minimize handling costs and risks, and to ensure that there is maximum transparency as well as relationship of responsibility between the farmer and consumer.

We propose a phased approach to achieving this goal. First, Health Canada would need to become willing to consider change to the law regarding the sale of fresh milk for human consumption, and be prepared to work with farmers and consumers to develop appropriate regulations. Second, one or more provincial dairy boards would need to be willing to carry out a pilot project to evaluate proposed fresh unpasteurized milk production and sales regulations. Finally, the licensing and inspection protocol would be implemented across Canada.

Health Canada Rules

Health Canada prohibits sale of unpasteurized milk to consumers. Canada's Food and Drug Act Regulation B.08.002.2 prohibits sale of unpasteurized milk except when used for cheese and when sold to a processor that will pasteurize it during its food manufacturing process. Cheese made from unpasteurized milk is subject to several conditions including labelling, storage, record-keeping, and maximum bacterial counts for *E coli* and *Staphylococcus aureus*.

Pasteurization of milk is an international norm, due to the fact that milk can carry serious disease-causing pathogens, and because milk is typically consumed fresh without first being cooked. Milk is a recommended food for children, pregnant women and nursing mothers, who are also considered to be high-risk groups for illnesses caused by bacteria that may be found in unpasteurized milk. Other high-risk groups are older adults and people with a weakened immune system.

Mandatory pasteurization is a response to public health concerns, particularly the potential for milk-borne transmission of tuberculosis and brucellosis as well as Enterotoxigenic *Staphylococcus aureus*, *Salmonella* species*, Campylobacter jejuni, Escherichia coli (E. coli 0157:H7,* Enterohemorrhagic *E. coli* – EHEC*,* Enterotoxigenic *E. coli* – ETEC*), Mycobacterium bovis, Listeria monocytogenes, Yersinia enterocolitica*, *Coxiella burnetii).* These bacteria can cause severe illness ranging from fever, vomiting and diarrhea to life-threatening kidney failure, miscarriage and even death. By mandating pasteurization, Health Canada aims to prevent illness, emotional stress, and other costs and losses due to milk-borne illness.

Consumer and Farmer Demand

Consumers who promote the legal sale of fresh unpasteurized milk would like to be able to have the option to buy unpasteurized milk. They cite legal products that are known to be harmful to health, such as cigarettes and alcohol, and they question the prohibition against fresh unpasteurized milk for human consumption. They feel there are important health benefits to be gained by drinking fresh unpasteurized milk. Many also wish to develop a personal relationship with the individual farmer who provides their milk in order to have a greater degree of knowledge about the product, and thus have greater control over their own diet and health. By having the option of purchasing milk directly from local family farms, including farmers who work within the supply management system, these consumers can support the valuable traditional culture and knowledge kept

alive by people who practice small scale mixed farming.

Some farmers see the market for fresh unpasteurized milk for human consumption as an opportunity to produce a differentiated product and thus obtain a premium price as a result of their personal farm management decisions. Some see it as an effective business risk management strategy for smaller farms. Regular customers would buy the relatively high value product throughout the year, and milk is less vulnerable to weather and market volatility than many other farm products.

"Black Market" Raw Milk

Today, consumers who want to buy fresh unpasteurized milk are health conscious and may often be willing to pay more for it than for grocery store milk. There are some farmers who are willing to supply this demand in spite of potential liability issues. Because it is not legal to sell fresh unpasteurized milk for human consumption there are no authorized testing facilities or standards that would provide both the buyer and the seller with the information necessary to assess the product. From time to time there are documented incidents of food-borne illness due to microbial contamination of raw milk, and these are more common in jurisdictions where the sale of raw milk is legal. While relatively infrequent, these illnesses if untreated can be quite severe, and in some cases debilitating or life-threatening.

The Product

The Codex Alimentarius defines "Raw milk" as Milk which has not been heated beyond 40ºC or undergone any treatment that has an equivalent effect.

The primary purpose of pasteurization (heating) of milk is to destroy pathogenic micro-organisms. However the heating process also has other effects on milk. Milk contains non-pathogenic bacteria, which would also be killed by pasteurization. There may be an impact of pasteurization on enzymes, and vitamins, however the short period of time that milk is heated minimizes these effects. Milk's calcium, protein, and other minerals are unaffected by pasteurization.

The digestibility of milk may be affected by pasteurization. Naturally occurring enzymes in fresh unpasteurized milk may assist in digesting milk sugars and thus reduce lactose intolerance. The existence of live harmless bacteria in fresh unpasteurized milk may provide a "probiotic" protection against infection by pathogens, as the friendly bacteria would occupy the ecological niche in the gut and prevent the disease-causing microorganism from growing. Proponents of fresh unpasteurized milk report that it provides protection against asthma and allergies, ear infections, auto-immune conditions, diabetes, and that it contributes to improved gastro-intestinal health.

Pasteurization does not destroy chemical contaminants or drug residues. Canada's dairy regulations prohibit the use of the genetically engineered bovine growth hormone, rBGH. Antibiotic and other veterinary drug residues in milk are also prohibited, and each bulk load is tested before pickup and rejected if there is a positive result. In an unregulated raw milk environment there may actually be a greater risk of such residues occurring in the milk, due to lack of consistent testing. However, many buyers of fresh unpasteurized milk seek out like-minded farmers to supply them with milk from cows that are grass-fed, or are raised according to the certified organic standard, which prohibits the use of synthetic pesticides and drugs.

The Market

The market for fresh unpasteurized milk in jurisdictions where it is legal is estimated to be from .01% to 1 % of total milk sales. In England and Wales the Animal Health Dairy has estimated unpasteurized milk to be of the order of 0.01% of total cows' milk consumption.

In Canada, dairy farmers sell just over 7.75 million kiloliters of fluid milk per year (Statistics Canada – Catalogue no. 23-014-X), so we could estimate a potential Canadian niche market for fresh unpasteurized milk at from about 20,000 to 215,000 liters per day. These consumers may currently be obtaining their milk from underground sources or not using milk products at all.

The licensing requirements we propose would ensure that fresh unpasteurized milk would be sold at a higher price than regular grocery-store milk. The requirement to purchase directly from the farmer would make fresh unpasteurized milk less convenient as well. These factors would select for consumers who specifically demand the product, and would reduce the probability that people would purchase it by accident.

The regulatory requirements

The *Codex Alimentarius* Commission, established by FAO and WHO in 1963, develops harmonized international food standards, guidelines and codes of practice to protect the health of the consumers and ensure fair trade practices for international trade in food. The Commission also promotes coordination of all food standards work undertaken by international governmental and non-governmental organizations. It is instructive to see the internationally agreed upon framework regarding milk in order, puttin our proposed protocol into broader context.

Codex Alimentarius notes the following food safety considerations regarding milk in general:

- *All foods have the potential to cause food borne illness, and milk and milk products are no exception.*
- *Dairy animals may carry human pathogens. Such pathogens present in milk may increase the risk of causing food- borne illness.*
- *The milking procedure, subsequent pooling and the storage of milk carry the risks of further contamination from man or the environment or growth of inherent pathogens.*
- *Further, the composition of many milk products makes them good media for the outgrowth of pathogenic micro-organisms.*
- *Potential also exists for the contamination of milk with residues of veterinary drugs, pesticides and other chemical contaminants.*

Codex Alimentarius notes the following food safety considerations regarding raw milk:

- *The hygienic conditions used at the primary production are one of the most important public health control measures, as a high level of hygiene of the milk is essential in order to obtain milk with a sufficiently low initial microbial load in order to enable the manufacturing of raw milk products that are safe and suitable for human consumption.*
- *In such situations, additional control measures may be necessary. Compliance with these additional hygienic provisions is important, and is considered mandatory in certain circumstances throughout the milk production process, up to the manufacture of the particular raw milk product.*
- *In addition, increased emphasis in certain aspects of the production of milk for raw milk products (animal health, animal feeding, milk hygiene monitoring) are specified and are critical to the production of milk that is safe and suitable for the intended purpose*
- *As is the case with the rest of this code, this section also does not mandate or specify the use of any one set of controls to be used, but leaves it up to those responsible for assuring the safety of the finished product to choose the most appropriate set of control measures for the particular situation.*

Proposed Protocol

Our proposed protocol for the legal sale in Canada of fresh unpasteurized milk for human consumption would ensure compliance with the health and food safety issues identified by the *Codex Alimentarius* above by requiring it be sold only by licensed producers directly to consumers. The protocol would include standards for herd health, milk microbial content, chilling and storage; an inspection regime that would certify herd health,

hygienic premises and procedures, labelling, customer and farmer education, signage and record-keeping; a testing regime that would test for herd health, drug residues, microbial levels for enteric bacteria and pathogens. The licensing would be embedded in the dairy supply management system, and costs would be shared by Health Canada and participating farmers/consumers via the aggregate licensing fees. The protocol would also have an enforcement process which would ensure compliance with all aspects of license requirements. We propose that the provincial dairy marketing boards would provide inspection services through a dedicated section of their Canadian Quality Milk on-farm food safety programs.

Introducing change

Permitting the legal sale in Canada of fresh unpasteurized milk for human consumption is a big change, and would require the support of both Health Canada and the dairy producers.

In order to ensure producers have adequate understanding of the food safety issues and the ability to implement the required measures on their farms, we recommend that the Canada Quality Milk (CWM) program develop an additional module that would be recommended to prepare farmers to serve the fresh unpasteurized milk market.

The demand for fresh unpasteurized milk may be met by existing dairy farmers, new entrants into the dairy system and by small holders who have less than the minimum number of cows required for quota. Recent initiatives provide models that could be adapted for marketing fresh unpasteurized milk. For example, in Ontario and BC a dairy farmer may obtain a license to sell on-farm pasteurized milk directly to consumers in his or her farm store. Several provinces provide incentives for organic milk producers within supply management through measures such as preferential access to new entrant programs, and separate pooling, pricing and marketing of organic milk. The CQM offers training in certified organic dairy production. In the poultry sector, BC and Nova Scotia have non-quota licensing for free-range chicken and turkey production, providing for regulatory oversight and monitoring of supply within a supply-managed sector.

Next steps:

Our committee proposes the following steps be taken to bring about the legal sale in Canada of fresh unpasteurized milk for human consumption:

a) Seek support of Health Canada for legalizing the sale of fresh unpasteurized milk for human consumption along with appropriate regulations to govern such sales.
b) Seek support of one or more Dairy Boards for a pilot project to test the proposed regulations.
c) Set up meetings between NFU, a provincial dairy board and Health Canada to negotiate an agreement to proceed with a pilot project
    a. It is suggested that the pilot project participants formally include a group of interested consumers who would in aggregate pledge to buy the quantity of milk produced and who are supportive of both supply management and fresh unpasteurized milk for human consumption.
d) Seek support of the Canadian Quality Milk program to develop a module for producers who will sell fresh unpasteurized milk for human consumption.
e) Monitor for problems and revise the proposed regulation as necessary.
f) Roll out to additional jurisdictions

Draft Protocol for Regulating Sale of Fresh Unpasteurized Milk for Human Consumption

Licensing Requirements:

a. Eligibility
   i. Dairy quota holders with facilities that provide for separation between and accountability for milk sold in bulk and milk sold directly to fresh milk customers (for example, a second, dedicated tank or a metered vending machine).
   ii. New entrant quota holders that have completed CQM training in production for the fresh unpasteurized milk market
   iii. Small holders with production below the minimum quota threshold who have completed CQM training in production for the fresh unpasteurized milk market
b. Production for Fresh Unpasteurized Milk sales limited to a modest amount, based on individual circumstances.
c. Cost of licensing be shared between Health Canada and fees collected from license holders
d. Liability is assumed jointly by the farmer and the consumer via an annually signed waiver, with copies retained by both parties.
e. License would be immediately cancelled for non-compliance with marketing rules
f. License could be suspended for failure to comply with production rules, and cancelled if non-compliance persisted

Marketing Rules:

a. Only valid licence-holders may legally sell fresh unpasteurized milk for human consumption
b. Maximum daily sales determined on a case by case basis.
c. Direct farm-gate sales only – no retail or third party sales permitted
d. License fees must be paid annually by all farmers selling fresh unpasteurized milk for human consumption.
e. Clear and documented separation between milk destined for bulk sales and milk for fresh unpasteurized milk sales.

Signage and Labeling Requirements:

a. Premises have clear and visible signage that states that the milk for sale is unpasteurized
b. Each container, whether supplied by the farmer or customer, be labeled to indicate
   i. Milk is not pasteurized
   ii. Unpasteurized milk may contain organisms harmful to health
   iii. Mentions high risk groups: pregnant women, young children, elderly people and anybody with a compromised immune system
c. Resale is prohibited
d. Each customer is provided annually with an information sheet about milk-borne illnesses that may be present in unpasteurized milk and the recommended action to be taken if symptoms of any of these diseases occur, with emphasis on the seriousness and urgency of medical attention if a child experiences bloody diarrhoea.

Food Safety Standards:

a. Herd health
   i. Tuberculosis free, tested annually – or herd tested upon initial license application, new cows tested when introduced to herd. TB-free status must be maintained.
   ii. Brucellosis free, tested annually or herd tested upon initial license application, new cows tested when introduced to herd. Brucellosis-free status must be maintained.
b. Microbiology of milk
   i. Somatic cell count (SCC) – 200,000/mL or less.,
   ii. Plate counts - 15,000/mL or less, and
   iii. Coliform counts - less than 50,000 colony-forming units (cfu) per mL
   iv. Zero tolerance of pathogenic bacteria levels for
      1. Salmonella
      2. Listeria
      3. E. coli. 0157:H7,

4. Campylobacter

c. Antibiotic residue
    i. Zero tolerance
    ii. Minimum withdrawal periods apply following treatment of sick cows, no routine feeding of antibiotics allowed
d. Other veterinary drug residues
    i. Zero tolerance
    ii. Minimum withdrawal periods apply following treatment of sick cows
e. Milk storage
    i. to 4 degrees Celsius or lower within one hour of milking and maintained at or below 4 degrees until customer purchase

Record-keeping Requirements:

a. Documentation of measures taken to prevent and control animal diseases with an impact on public health
b. Identification and movement of animals
c. Regular control of udder health
d. Use of veterinary drugs and pest control chemicals
e. Nature and source of feed
f. Milk storage temperatures
g. Use of agricultural chemicals
h. Equipment cleaning
i. Quantity produced per day
j. Quantity sold per day
k. How unsold milk was disposed of or otherwise used
l. Copies of signed and dated liability waiver for each customer

Testing Regime:

a. Testing of new animals and regular testing for all animals for Tuberculosis and Brucellosis. All animals that test positive for either disease must be removed from the herd immediately.
b. Random spot testing for drug residues
c. If results not obtained on the spot, samples must be properly refrigerated for transport and promptly tested. Time of sampling must be recorded.
d. Testing done by independent 3rd party
e. Monthly testing for
    i. Salmonella (zero tolerance)
    ii. Listeria, (zero tolerance)
    iii. E. coli 0157:H7, (zero tolerance)
    iv. Campylobacter (zero tolerance)
    v. somatic cell count (SCC) – 200,000/mL or less
    vi. plate counts - 15,000/mL or less, and
    vii. coliform counts - less than 50,000 colony-forming units (cfu) per mL
f. Test results retained in farmer's records as well as in public health database.

Inspection Process:

a. Twice per year, unannounced, by a trained inspector who would be qualified for inspection of fresh unpasteurized milk licenses.
b. Inspection would be for
    i. cleanliness of premises and all relevant equipment
    ii. hygienic procedures around milking and care of all relevant equipment
    iii. herd health
    iv. accuracy and completeness of record keeping
    v. method of disposal of unsold/unsaleable milk
c. Inspection results posted on publicly available website
d. Interference with inspection would result in loss of license

Enforcement Measures:

a. Inspectors will aim to prevent problems through open and transparent communication to bring about acceptable product results.
b. Deficiencies addressed through time-limited procedures, re-inspection, progressive penalties for repeated non-compliance and suspension of license until problem is rectified.
c. Sale by third parties is strictly prohibited, and hefty fines would apply to violators.

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- *Health Canada Tip Sheet for Raw Milk* www.hc-sc.gc.ca/fn-an/securit/kitchen-cuisine/raw-milk-lait-cru-eng.php
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- *Food and Drugs Act – Regulations* See B.08.002.2, B.08.030 and B.08.042 through B.08.048 laws-lois.justice.gc.ca/eng/regulations/C.R.C.,_c._870/index.html
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- *Code Of Hygienic Practice For Milk And Milk Products* CAC/RCP 57-2004, Codex Alimentarius www.codexalimentarius.org
- *Annex I, Guidelines For The Primary Production Of Milk - Code Of Hygienic Practice For Milk And Milk Products* CAC/RCP 57-2004, Codex Alimentarius www.codexalimentarius.org
- Canadian Quality Milk program http://www.dairyfarmers.ca/what-we-do/programs/canadian-quality-milk