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PROCEEDINGS:

TOWARD THE 1995 FARM BILL AND BEYOND

A Workshop for Dairy Economists and Policy Analysts

Sponsored by

The Extension Education Committee
of the
Cornell Program on Dairy Markets and Policy
National Institute of Livestock and Dairy Policy

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Preface

On September 7 and 8, 1994, the Extension Education Committee of the Cornell Program on Dairy Markets and Policy sponsored a workshop for dairy economists and policy analysts in Minneapolis, Minnesota. This proceedings summarizes the workshop papers and discussions.

The Extension Education Committee consists of dairy marketing economists from several land-grant universities, as listed below. Their purpose is to conduct educational programs and provide informational material relative to dairy policy and dairy markets.

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Special thanks are also due to Larry Hamm (Michigan State University), Albert Ortego (Louisiana State University) and Jerome Hammond (University of Minnesota), who led discussion groups, and David Dyer (L-D Associates) who provided a special commentary.

Wendy Barrett provides support to the committee and prepared this proceedings for publication. Fran Howard edited papers and wrote discussion sumnmaries for this proceedings.

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If you would like additional copies of this publication or further information about the Committee of the Cornell Program on Dairy Markets and Policy, please write:

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TABLE OF CONTENTS

Seven Rules for Successful Negotiations

Adapted by Harold M. Harris, Clemson University

1. Go first. Tell the other party in the negotiations honestly and up front what you hope to accomplish.

2. Go wide. Go beyond the traditional boundaries of the issue.

or

3. Go narrow. Instead of trying to solve the entire problem, solve narrow segments.

4. Go longer. The negotiation process takes time. Be willing to spend that time.

5. Go play. Get to know the person you are negotiating with. Have fun.

6. Go over. Go over to his place—her country.

7. Go simple. Don't complicate every issue and every goal.

INTRODUCTION

Robert Jacobson, Program Chair
Professor Emeritus, The Ohio State University

"Toward the 1995 Farm Bill and Beyond" was the theme of the first Invitational Workshop for Dairy Economists and Policy Analysts. The workshop was held from noon September 7 to noon September 8, 1994, at the Radisson Metrodome in Minneapolis, and was conducted by the Dairy Markets and Policy Extension Education Committee, a group of land-grant university economists. The program consisted of two parts: presentations designed to brief participants on some of the issues and details that will be involved in upcoming policy debates and discussion groups that allowed participants the opportunity to further define and offer solutions to those issues.

Too often in the field of dairy economics we get caught up in different postures of reaction, rather than action. This workshop is a step toward action, an attempt to offer ideas for action rather than arguments in reaction. The discussion part of the program offered an unprecedented opportunity for 60 of the nation's dairy economists and policy analysts to define and develop solutions to some of the more crucial issues facing today's dairy industry. More important, perhaps, is that the outcome of the workshop offers the industry at large the opportunity to develop a plan of action instead of waiting until forced to develop an argument in reaction to upcoming policy changes, some of which undoubtedly will be inevitable over the next decade.

In holding the workshop, we had both process and substance objectives. Our process objective, successfully accomplished, was to receive input from each individual in attendance on the topics presented by conference speakers and on the issues that surfaced in the discussion groups. Put another way, we wanted all of the participants—including the committee members—to benefit from each other's expertise. This proceedings booklet offers those not in attendance that same opportunity: to benefit from the expertise and work of some of the industry's top dairy economists and policy analysts. Participants were chosen carefully and represented all sectors of the industry. A list of workshop participants can be found in the appendix of this booklet.

Our substance objectives were lofty, and perhaps, unreachable. Nonetheless, all were touched upon in the short, one-and-a-half day program. Participants were asked, rhetorically speaking, to remove their uniforms as representatives of particular organizations and operate solely as dairy economists or policy analysts for the duration of the workshop in an attempt to achieve four objectives:

- Examine the implications on the dairy industry of the realignment of milk production and marketing in the U.S.
- Provide ideas to assist the dairy industry in making a best adjustment to the new world trade order.
- Define a dairy title for the 1995 farm bill that is consistent with public policy objectives.
- Identify strategic adjustments in the Federal Milk Marketing Order Program that will help it achieve its objectives of orderly marketing and price stability through the next decade.

All of the substance objectives were discussed during the workshop portion of the program. However, some issues—those viewed as most critical by the participants—took precedence over others. Federal order adjustments, international trade, and more loosely, the U.S. government's role in dairy policy were of top concern to workshop participants.

Both the workshop and this proceedings booklet are an expansion of the committee's usual activities. Since the first meeting of the Dairy Markets and Policy Extension Education Committee on Jan. 6, 1989, output has been mostly in the form of leaflets covering dairy marketing, dairy policy, and federal orders. To date, we have published nearly 50 leaflets that we believe are useful to both the industry in general and to extension services throughout the land-grant system. For those

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who are interested, information on how to obtain the leaflets can be found in the preface of this proceedings.

Overall, the first annual Invitational Workshop for Dairy Economists and Policy Analysts exceeded our expectations. The information contained in this booklet is timely and of a practical nature. Our hope is that the industry will not only gain insight from the effort put forth by all in attendance, but also will use this information as a base from which to develop solid policy recommendations for the next decade.

MAJOR ISSUES FOR THE 1995 FARM BILL

Ronald D. Knutson, Professor
Texas A&M University

The 1995 farm bill could be quite different than previous farm bills, where the emphasis was on fine-tuning past program provisions. The content of the 1995 farm bill will be driven by issues of budget, market-orientation, environment, and politics. Significant political challenges to the whole concept of agricultural subsidies exist, as do proposals with new approaches for dealing with farm issues, including income assurance, green payments, and means testing. In the current budget-cutting, market-oriented environment, dairy interests need to be aware of the need for coalition support. Such coalitions not only involve other farm groups, but also environmental, food assistance, and international interests. Without such coalitions, dairy could be hanging in the political wind by itself.

Budget-Driven Policy

Farm programs have been subject to budget constraint since 1983 when government costs peaked at more than $26 billion. The 1995 farm program spending constraint likely is between $10 billion and $15 billion. The lower figure is close to the minimum $9 billion level of expenditures required to run the type of farm program that exists today. In other words, there is legitimate danger that current U.S. farm policy could unravel in the 1995 farm bill due to budget constraints.

Dairy's budget constraint is not well defined because of the use of producer assessments to cover program costs. Regardless of actual costs, current law requires producers to pay about $150 million annually toward program expenses. At 7 billion pounds of estimated milk equivalent product purchases on a total solids basis, the dairy price support program triggers additional assessments to cover program costs. Dairy Export Incentive Program (DEIP) product sales count within this 7 billion pound limit. Purchases beneath the 7 billion pound limit cost about $800 million annually at current product purchase prices. Some of the dairy products purchased by the Commodity Credit Corp. (CCC), however, are sold back to the industry, then exported under DEIP. As a result, USDA's 5-year dairy price support budget estimates run closer to $350 million annually.

A controlling point in the budget process is that expenditures above the budget constraint must be offset, or revenue neutral. Therefore, any change in dairy policy is subject to "a budget point of order," which raises the question as to what the source of funds will be to pay for increased program costs. The limit on total farm program spending combined with the budget offset mentality is a source of divisiveness among agricultural interest groups, with each vying for a larger share of the pie. While assessments are not popular with producers, they have provided a means of continuing to operate a dairy program. Like it or not, assessments could become even more important in the future.

Market-Driven Policy

The trend toward freer trade affects everyone. While dairy has been protected by Section 22 import quotas, the Uruguay Round Agreement (URA) of the General Agreement on Tariffs and Trade (GATT) eliminates this protective policy tool that underlies the dairy price support program. In its place is a tariff rate quota that gradually will be reduced. Dairy needs to begin figuring out how its programs fit within the URA and how it can compete in a world market for dairy products.

Potential impacts to dairy from freer trade are reflected in the evolving controversy surrounding the North American Free Trade Agreement (NAFTA) and the Canadian-U.S. Trade Agreement (CUSTA). The Mexican dairy industry is beginning to experience the turmoil of adjusting to increased imports of lower cost U.S. fluid milk. And U.S. federal milk marketing order policymakers are beginning to worry about the possibility that milk exported to Mexico at prices less than those mandated for U.S. plants will be reimported into the United States as finished products—or maquiladoras in milk. Likewise, the Canadians are worried about the potential for monumental adjustments in their industry when and if Canadian production control programs are dismantled. Competitive large-scale dairies in Canada are less prevalent than in either the United States or Mexico. Moreover, U.S. dairy producers and processors look to the lucrative Canadian market as an outlet for exports of raw and finished products.

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While the URA has foreboding implications for the potential invasion of foreign competition in U.S. manufactured dairy products markets, it also contains at least four loopholes that dairy interests need to be aware of, study, and potentially utilize:

- Green payments, or subsidies for environmentally sound management practices, are legal. Therefore, cost sharing subsidies to dairy producers for the installation of waste management systems apparently would be legal. Moreover, crop producer income and price support subsidies (target prices, loan rates, and deficiency payments) may be legally green under the URA because arguably they are made to pay for the costs of soil conserving practices. That is, farmers participating in a crop program are required to file and implement a conservation plan that reduces soil erosion. Similarly, dairy might justify its price support program by requiring that producers submit and implement waste/nutrient management plans.

- Income and price support payments are legal if they are decoupled from production. Crop producers have accomplished partial decoupling by placing a crop yield limit on deficiency payments. They also have reduced the percentage of acres on which payments are made. Dairy programs could potentially become decoupled by limiting output per cow or the number of cows to which the price support program applies.

- Price and income supports appear to be legal in the presence of production controls if the minimum market access provisions are met. While these controls are clearly production distorting, this policy is rationalized; if production is properly controlled, the excess is not placed on the world market at subsidized prices. Ironically, therefore, while the Canadian dairy policy may be GATT legal, it may be NAFTA illegal because it represents a huge barrier to trade between the United States and Canada. Canadians argue, however, that GATT legality means NAFTA legality.

- International food aid is GATT legal. Therefore, mandated reductions in DEIP under the URA could be shifted to food aid. That would be more costly per dollar of exports, but could be more long-term effective in expanding markets.

Whether the proposed self-help marketing board concept would fit within the context of these loopholes is an interesting issue. If the board were purely an export operation and producers uniformly shared in the costs of exports through a mechanism, such as a class IV price, it would appear to be legal in that producers are subject to market regimens. If USDA continues to operate the price support program, however, a self-help board could be illegal unless justified as green payments or decoupled. If production controls are included, the chances of GATT legality should be further enhanced to the extent that exports are constrained. But legal opinions or final answers on GATT legality will eventually be determined by the new World Trade Organization (WTO).

Environment-Driven Policy

The GATT legality of green payments has major implications for both environmental policy and dairy policy. Environmentalists perceive that farm programs have negative environmental impacts because they result in more intensive farming and foster larger farms. Large farms are perceived as being less environmentally friendly than smaller farms. Moreover, environmentalists contend that all farm programs should be environmentally driven. The policy options available for achieving environmentally-driven farm programs include: requiring that farmers have conservation/waste management plans if they are going to receive program benefits; retiring environmentally sensitive land, perhaps even environmentally sensitive dairy farms; paying farmers for best management practices, including the installation of waste management systems (green payments), but whether producers should receive payments for already installed waste management systems is uncertain; and regulation without any payments or compensation.

Political Forces

It takes 218 votes in the House of Representatives to get a farm bill enacted into law. At most, only 70 representatives have significant constituent ties to rural America. Therefore, at least 146 additional votes will be required. These votes will be garnered largely through

the formation of coalitions with either environmentally interested or food-assistance interested representatives. It is critical that dairy interests work with these environmental and food assistance groups. Likewise, the position of the Clinton administration on dairy, environmental, food assistance, and trade policy will be important in framing the dimensions of the 1995 farm bill debate.

Commodity Programs

Before designing a position, dairy interests need to be aware of at least three critical issues facing the 1995 farm bill. Those issues relate to the existence of commodity programs (including the dairy title), the conservation reserve program (CRP), and the potential for payment limits/means testing.

Dairy interests should not take the existence of a dairy title for granted. Some members of Congress would just as soon see no commodity programs—no dairy price support and no marketing orders. These senators and representatives favor a free market that dictates milk prices and the future structure of the dairy industry. This can be accomplished in one of three ways: eliminate all programs; eliminate individual programs; or not appropriate funds to implement programs.

In the 1990 farm bill debate, a floor challenge to particular programs was unsuccessful. However, in a floor debate during the 1993 appropriation process, funds were cut off for the honey, wool, and mohair programs. Although these are minor commodities relative to dairy, the action should be a warning shot that the dairy program is not secure. The dairy, rice, sugar, and peanut programs have all been recommended for elimination by the U.S. General Accounting Office (GAO), the auditing branch of Congress. The cotton program also is being studied by GAO for possible elimination. Actions that could make the dairy program more secure include making it more export competitive, more environmentally friendly, and more GATT compatible.

Farmers, including dairy producers, would be considerably worse off without commodity programs. Eliminating commodity programs would result in lower market prices. How much lower is a matter of speculation that requires more research, but surely the butter price would fall. Initially, this drop would be substantial as CCC stocks are dumped on the market, and in the longer term, prices would be lower because CCC would no longer be buying butter. Granted, butter production would probably decline in response. Nonfat dry milk (NDM) prices could also decline inasmuch as periodic purchases occur. Declines in butter and powder prices would lead to correspondingly lower cheese prices. Increased international competition is an additional consideration. How far prices fall would be a function of what happens to European Union (EU) subsidies. Without a U.S. price support program, the U.S. manufactured product price would equal the world price, adjusted for transportation.

Eliminating the dairy program would also result in more unstable prices. How much more unstable? Substantially more! Granted, the price support program currently is not very effective in stabilizing prices, but prices could be considerably more unstable without intervention by either CCC or milk marketing orders. The price support program offers support to both butter and NDM and federal and state orders stabilize producer pay prices within markets. At a minimum, federal orders set rules for the competitive game. The problem of increased price instability is not limited to dairy. It cuts across feed inputs as well.

Eliminating the dairy program would also result in more financial instability. The greatest competitive pressure is on moderate-size dairy farms that have little or no off-farm income. These farms are not sufficiently efficient and scale competitive to be able to replace outdated infrastructures. Moreover, the operators often lack the marketing skills that could lead to the ability to manage risk. The result would be unprecedented restructuring of the milk industry. The most severe adjustment pressure would be east of a line from Laredo, Texas, to Bismark, N.D., where about 73 percent of the milk is produced.

Less food and trade security would also result from the elimination of farm programs. Shortages have seldom been a problem in the United States, but in the early 1970s, a milk shortage came close to becoming a reality. Government price support and stock policies are major reasons for this high level of food security. In the absence of government programs, stocks can be expected to decline as CCC inventories vanish. While this action encourages the private sector to hold more stocks, it is unlikely that commercial stocks would fully compensate for reduced government stocks. Less food and trade security would increase the incentive for countries importing from the U.S. to strive for self sufficiency. Governments do not dare run short of food because it is a major cause of political instability.

And finally, more environmental degradation would result. The projection that environmental degradation would increase without farm programs is contrary to environmentalists' perception that farm programs contribute to pollution. This perception ignores both the provision in crop programs that requires conservation plans and the positive impact of the Conservation Reserve Program (CRP) on pollution.

A viable alternative impact of dropping the dairy program also needs to be recognized. It involves the resurrection of a series of state programs and/or interstate compacts designed to offset the adversities brought about by eliminating federal programs. States could frequently end up in litigation as they attempt to control milk movements in order to stabilize prices. The incentive is thereby created for interstate compact agreements to pit one region against another. It is because of such interstate conflicts that a federal dairy policy was originally developed in the 1930s. Despite the consequences of dropping farm programs, the opposition continues to chip away one program at a time. This strategy plays into the budget process because more resources become available for other programs.

Conservation Reserve Program

The second critical farm program issue affecting dairy involves the future of the 38 million acres of land currently in CRP. Beginning in 1986, farmers enrolled land in CRP for a 10-year annual government payment (effectively a cash rent). Qualified land was highly erodible and half is located in the Great Plains. If nothing is done, this land begins to be released in 1996. Indications are that the secretary will extend the 1986 contracts for one year—waiting until after Congress decides what to do in the 1995 farm bill.

The issue will not be easy to resolve because the consequences of release affect people differently. Farm prices would decline, with the biggest decline occurring in wheat prices (see table); crop producers would be unhappy. The resulting impact of lower crop prices would be wider margins for livestock producers; dairy producers would be favorably impacted. CCC commodity stocks would rise, increasing storage costs, and therefore, deficiency payments to crop producers would rise. Cost savings associated with reduced rental payments to CRP farmers could be fully offset by higher costs for storage and deficiency payments. If CRP lands are not released, however, commodity stocks could become fairly tight. Environmentalists being most concerned about water quality would like to see less wind-erodible land, primarily in the Great Plains, and more water-sensitive land, primarily east of the line from Laredo to Bismarck. Great Plains farmers and wildlife advocates who desire to see CRP continued would be unhappy if the emphasis were on water quality. The potential for partial reenrollment is being considered. Depending on whether the land eligible for reenrollment is wind- or water-erosion sensitive, commodity prices would be affected differently.

Table 1. Impact of Release of CRP Lands on Crop Prices and Dairy Net Cash Income.

Enterprise	CRP Retained	CRP Eliminated[1/]
	(dollars)	
Wheat price/bu.	3.65	2.90
Corn price/bu.	2.27	2.20
Cotton price/lb.	0.60	0.58
Hay price/ton	81.59	72.69
Dairy net cash income/cwt	0.35	0.44

1/ Assumes approximately 70 percent of the CRP lands would come back into production based on expected net returns.

Source: Ronald D. Knutson et al., *Impacts of Changing Farm Program Expenditures on the Great Plains*, Texas Agricultural Experiment Station, Department of Agricultural Economics, Agricultural and Food Policy Center Working Paper 94-5, September 1994.

Payment Limits/Means Tests

A third critical farm bill issue involves targeting the benefits of farm programs toward those having the greatest need. In crops, this has been attempted by placing limits on the amount of deficiency payments a "person" can receive. However, the number of eligible "persons" has proliferated to the extent that the limit is believed to be ineffective. Limits also have been placed on disaster payments, CRP payments, and Agriculture Conservation Program (ACP) payments.

The ineffectiveness of payment limits has led to increased attention being given to the development of a means test to provide benefits only to those farmers with incomes below a certain level, such as the poverty line. If such a criterion were applied, USDA access to income tax returns would be required. How a means test would

be applied to dairy is unclear. Would only that milk from means-test-qualifying producers receive the benefits of the price support program? If so, the price support program would become less effective—perhaps ineffective. As a result, price supports could be exempt from a means test as they are from payment limits.

Implications for Dairy

The 1995 farm bill provides many opportunities and challenges for dairy. Opportunities exist for dairy to be part of the farm bloc, and thereby, affect the overall course of farm policy. Dairy typically has designed its own farm bill provisions, but this may be the wrong time for dairy to be hanging out alone. Dairy may also have the opportunity to receive benefits from the environmental movement through green payments for installing waste management systems. In the process, progress could be made in rationalizing dairy programs with GATT through viewing price supports and marketing orders as benefits for waste management compliance. Considerable caution is necessary in pursuing any 1995 dairy policy strategy. The industry has become highly divisive over issues such as interstate compacts, production controls, and self-help. Receiving benefits requires that this divisiveness be overcome.

Finally, the dairy industry—more specifically dairy economists—has earned a reputation for making policy proposals based on biased analysis or no analysis at all. The industry is often accused of justifying a position economically after the policy decision has been made. This is bad economics and bad politics. Congressional analytical procedures have become sufficiently sophisticated to weed out proposals based on shoddy analysis. The industry, therefore, damages its chance for success when it sets forth such proposals and their related analyses.

Dairy Policy and Price Regulation in the 1990s

Robert Cropp, Professor,
University of Wisconsin

Dairy policy of the late 1970s and '80s set the stage for the problems facing today's dairy industry. During that time, the dairy industry lost a lot of ground. Lack of unity and regionalism began to develop. At the insistence of the industry, the government held onto a federal dairy policy based upon "parity" much longer than was economically sound. Huge surpluses developed. Holding onto a failing dairy program was a major mistake from which the dairy industry has yet to recover.

By 1981, it became clear that federal expenditures for the dairy program were exorbitant, and the dairy price support program was removed from parity. Producer assessments were established to help fund federal program costs and supply management programs, such as the Milk Diversion Program in 1984–85 and the Dairy Termination Program in 1986–87, were enacted to reduce surpluses. The process of reducing the support price was initiated in 1985, and the support price for 3.67% fat milk has since been reduced from $13.10 to $10.10.

It is doubtful that a support price of $10.10 accomplishes much of anything. Basically, the price support program is a surplus butter program that offers little price protection or price stability. Prices cannot remain at support for any period of time because too few producers can produce milk at that price. When farm-level prices near support, sellouts accelerate and the nation's milk supply tightens. Today's dairy program—although highly regulated—resembles a market-oriented dairy policy.

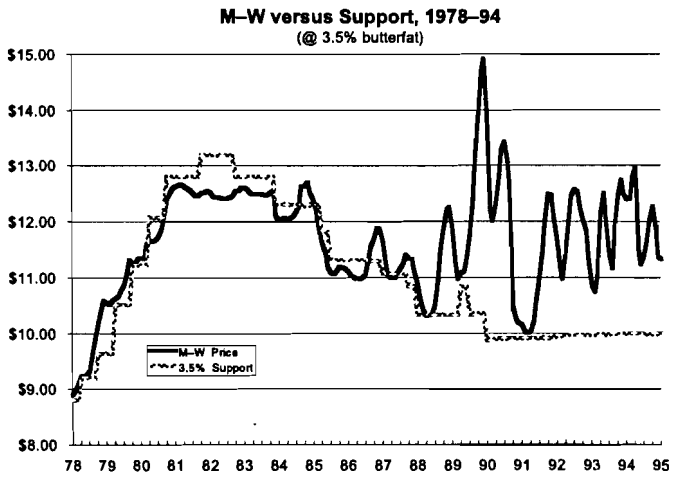
Many of the nation's dairy operations are financially stressed, a situation that has generated grassroots support at the farm level for supply management programs and their accompanying higher milk prices. These financially strapped producers reason that government intervention and higher milk prices will solve their financial problems. Under current dairy policy, however, long-run milk prices are on a flat to downward spiral.

Dairy policy of the 1970s and '80s did little to alleviate the problems of today's small dairy farm. In fact, yesterday's policy has only added to the problems of the small, financially stressed dairy operation. The cost of producing milk and milk prices are somewhat related, with higher production costs following higher milk prices. Producers in the 1970s and '80s were not given incentives to keep costs low. In contrast, facilities being built today can produce milk for less than $10 per hundredweight. In order to receive loans these producers must demonstrate that they can break-even at levels below current milk prices. Despite grassroots support for higher prices, milk prices under existing dairy policy are not on an upward trend.

Arguments For and Against Current Policy

Is existing dairy policy working? A lot of people would answer "yes" to that question. Since 1988, there has basically been no milk surplus. Government costs have steadily decreased. The money being spent on dairy is minimal—$250 million to $300 million is not a lot of money compared with government expenditures for other farm programs. The government also has met its objective: provide the nation with an adequate milk supply. There is no shortage of milk. Consumers are not going without.

Even the financial condition of dairy farms has improved under current policy. The average debt-to-asset ratio in 1987 was 0.24:1, or for every 24 cents of debt producers had $1 of assets. By 1992, that ratio had



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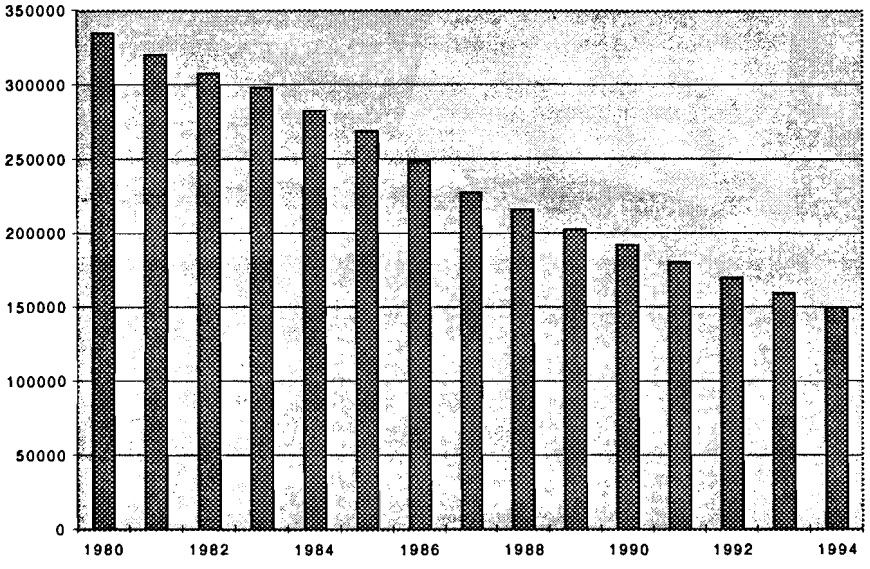
improved to 0.19:1, or 19 cents of debt for every $1 of assets. Clearly, there has not been a deterioration of the financial condition of the nation's dairy farms. The U.S. dairy industry also has become more competitive internationally under existing policy. There is substantial industry support to continue the existing price support program, and many in the industry would argue that "things are pretty good."

Others in the industry, however, would argue that existing policy is not working. Volatile prices, both at the farm and manufacturing level, have created considerable market risk and market price risk. From 1981 to 1993, the difference between the Minnesota-Wisconsin price series' high and low for any particular year ranged between $1.61 per hundredweight (1992) and $3.95 per hundredweight (1989). The M-W price has not even hit support since the support price was reduced to $10.10 for 3.67% milk. Sellouts of U.S. dairy farms also have accelerated.

Number of Operations with Milk Cows



Many of the smaller commercial farms have been unable to show a profit. Since 1982, the number of U.S. dairy farms has been reduced by nearly half (42%). Many in the industry are concerned about the impact that the loss of these 30- and 40-cow dairy farms will have on rural communities. Restructuring of the industry at the farm level is inevitable in traditional dairy states, such as Wisconsin and Minnesota. Opponents of existing policy argue that dairy policy is responsible for the changing structure of the industry. Average number of cows per U.S. herd has increased 35% in the past 12 years, from 39 cows in 1982 to 60 cows in 1993. These opponents reason that the price support program has created regional shifts in milk production, enabling western states to grow and prosper, while traditional dairy regions lose ground.

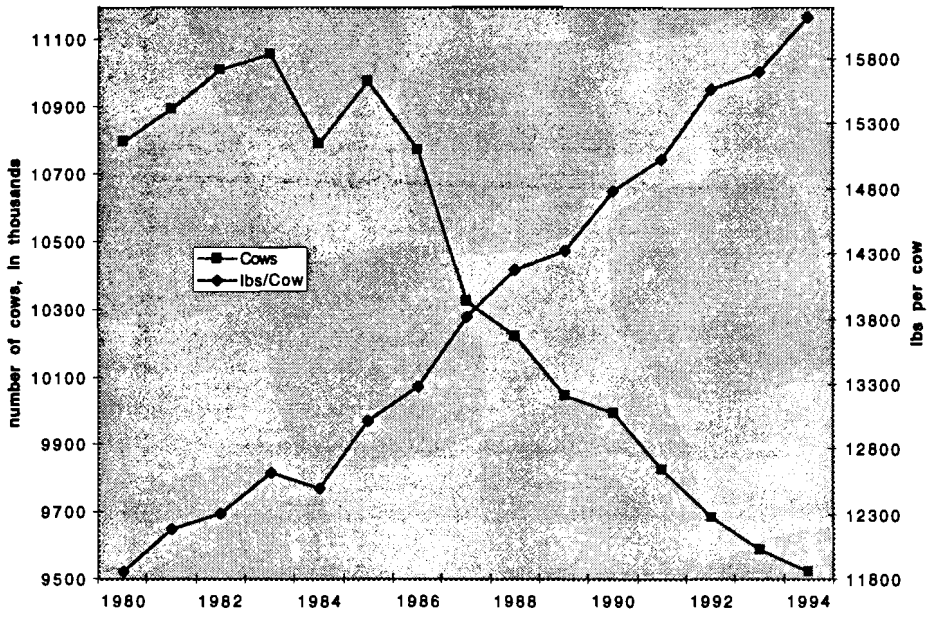
Statistics add weight to their argument. New Mexico has shown phenomenal growth in the past decade. The state increased its milk production by 140% from 1985 to 1993. Although that rate of growth hasn't been replicated, growth in other western states, nonetheless, has been rapid. Texas, for instance, increased total milk production nearly 50% in the same time period, while California, Washington, and Idaho showed growth in the 30% range. Growth has also been fairly rapid in the Southeast, with Florida showing a nearly 20% increase in total production and Georgia slightly less than 20%. Contrast that to what has occurred in the traditional dairy regions of the Midwest and Northeast. Minnesota down more than 10%, Wisconsin down about 7%, New York, Michigan, and Ohio all off 2–4%.

Opponents of existing policy also argue that the milkfat surplus is proof that the dairy program is not working. Moreover, as Upper Midwest plants continue to compete for a shrinking milk supply, excess plant capacity in Minnesota and Wisconsin continues to sustain prices nationwide at levels higher than warranted. Within the next five years, one out of every three dairy producers in Wisconsin is expected to exit the industry. Most will leave because they have reached the age of retirement, not because of financial difficulties. This exodus will only increase competition for milk in the Upper Midwest.

Clearly, the dairy program is not working entirely, and could become even less effective if changes are not made. Despite a rapid decline in the number of dairy farms, milk per cow and total output continues to grow. The production per cow trendline is pretty straight—upward at a 2-3-percent annual clip. Average per cow output in 1985 was only about 13,000 lbs., but by 1993 per cow production broke 15,500 lbs. That's an annual average per cow increase of 320 lbs. While a 2-3% increase in per cow efficiency will almost certainly

continue, it's doubtful that a 2-3% increase in sales each year can be sustained.

U.S. Number of Cows and Pounds of Milk per Cow



Policy Options for 1995

Several limiting factors will determine the policy options available to the dairy industry for the 1995 farm legislation. The federal budget deficit and budget constraints will be key. Any policy change that increases federal expenditures doesn't stand a chance. A lack of uniform consensus in the industry also will limit policy options. Reduced price and income support for other agricultural commodities and international trade policy also will play a role. Any new dairy policy will need to increase international market opportunities, besides being consistent with the General Agreement on Tariffs and Trade, or "GATT legal" in more common terms. The widely-held attitude that the current "market-oriented" policy is working will also limit industry options for developing new policy.

Dairy policy could take one of several paths in 1995. First, and most probable, would be that no changes are made in the current provisions. Second, the dairy price support program could be eliminated. Under this option, recourse or non-recourse loans could be established. Self-help programs are another option. A self-help type of dairy program would establish authority for an industry board to focus on price stability rather than price enhancement, and on market development rather than surplus removal. These programs aim to supplement price support levels, not eliminate them, and would concentrate on authorizing the Dairy Export Incentive Program (DEIP) to its maximum limit. The big question, however, is whether these programs are GATT legal.

Another option, and one that has grassroots support at the farm level, would be to increase the support price under some type of supply management program. These programs can be either voluntary or mandatory. The stakes under voluntary supply management programs are not as high as those under mandatory programs, such as Canadian program. The difference can be summed up simply: under a voluntary program, if you don't participate, you aren't hurt too badly, whereas under mandatory programs, nonparticipants are big losers.

Price Discrimination and Midwest Frustration

Pricing regulations of the Federal Milk Marketing Order Program (FMMO) will definitely be an issue for the Upper Midwest in the upcoming policy debates. The dairy industries in Minnesota and Wisconsin have been frustrated trying to bring about change. Class I differentials are an ongoing concern. The Minnesota-Wisconsin Price Series is less effective now than it was two years ago, and USDA's recommended decision for the M-W replacement does too little too late. The recommendation was an attempt to implement changes that were revenue neutral, but circumstances have changed significantly since the 1992 hearings and it is not possible to maintain revenue neutrality and develop an appropriate replacement for the M-W without simultaneously making adjustments in class I pricing. California and Section 102 of the 1990 farm bill will also remain an issue. Efforts will be made to both enforce and repeal Section 102. And at the processor level in the Midwest, a great deal of concern exists regarding the high cost of manufacturing milk.

In terms of class I pricing, using a single basing point, Eau Claire, Wis., to price fluid milk is outdated.

Compared to Wisconsin producers, producers dairying 500 miles from Eau Claire receive $1 per hundredweight more for milk that ends up in the bottle, while producers 1,000 miles from Eau Claire receive $2 more, and those 1,500 miles away receive $3 more. This is a blatant form of price discrimination, considering that most local markets supply their own fluid needs.

The cost of manufacturing milk is of major concern to Midwest processors. Upper Midwest plants today are paying the high cost of a declining dairy industry. The difference between what plants are actually paying for manufacturing milk and the M-W price—the supposed value of manufacturing milk—is substantial. Using figures for 1992, Wisconsin plants paid an average of 99 cents more than the M-W price for milk used in manufactured products. Likewise, Minnesota plants paid an average of 82 cents more per hundredweight. In Wisconsin, the difference was $1 or more in five out of the 12 months.

California's higher make allowances only exacerbate the problem for Upper Midwest manufacturers. Using figures for 1993, the average 4b price in California (the price paid for milk manufactured into cheese) was $10.94 per hundredweight, or 86 cents lower than the 1993 average M-W price (the minimum price federal order plants are required to pay). Wisconsin plants in 1993, however, paid an average of 69 cents more than the M-W price for grade A milk manufactured into cheese—$1.63 per hundredweight more than California cheese plants paid.

As milk production has expanded faster than class I sales, producer blend prices have declined from a decline in class I utilization. The result is that market forces have helped reduce, or equalize, some of the price discrimination of federal regulations. Pay prices across the nation are coming closer together than ever. Average cash receipts in New York in 1993 at $13 per hundredweight, for instance, were only 11 cents higher than Wisconsin's $12.89. Average cash receipts in Washington at $12.30—were lower than in Wisconsin—despite a class I differential of $1.95 per hundredweight in the Pacific Northwest order.

Are Upper Midwest producers and manufacturers, as a whole, really price disadvantaged? No. The average farm milk price in the Upper Midwest is equal to that in the South, Southwest, and West. Wisconsin and Minnesota plants pay the M-W price plus $1 on 85% of the milk, but pay the lowest class I price in the nation on 15% of the milk. That equates to an average farm price of $13 per hundredweight. Plants in the South, Southwest, and West, meanwhile, pay the M-W price on 50% of the milk, but $2 per hundredweight more for class I milk on the remaining 50%. That also equates to an average farm price of $13 per hundredweight.

Summary

Wisconsin producers have come to realize that their problems are not entirely the fault of dairy policy and that producers in areas such as Texas, New Mexico, and California are here for the long term. In order to remain, or become, competitive, many Wisconsin producers are recognizing that they must begin looking at farm level changes, not to the federal government for help.

The Upper Midwest faces major challenges. The rapid decline in the number of dairy farms and dairy cows will continue, forcing a major restructuring of the region's dairy industry. The result will be no better than a declining or stable milk supply. Excess plant capacity will continue to be a problem, creating artificially high costs to milk plants that have lower federally mandated profit margins than equivalent plants in California. The Upper Midwest is, and will continue to be, adversely impacted by an outdated federal milk pricing system and by California's state pricing system that is exempt from federal order regulations.

The dairy industry must make a concerted and cohesive effort to develop sound dairy policy that removes or reduces some of the inherent inequities in the current pricing system. Just like California and other western states, the Upper Midwest is also here for the long term. The federal order system has not changed with the times, and the Upper Midwest is not going to turn its back to those inequities. If the industry does not deal with its issues, Congress may try to tackle them, but it's highly unlikely Congress will get the job done right.

Dairy Trade Liberalization and Its Impacts

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The dairy industry world-wide appears to be poised on the cusp of change due to policies negotiated under the Uruguay Round of the General Agreement on Tariffs and Trade (GATT). In some respects, the implied changes are radical and could result in substantial long-term impacts on the structure of the world dairy industry and international trade patterns. In other respects, the latest GATT agreement and its potential longer-term effects may be viewed as part of a logical and historic evolution. In this sense, even those who doubt that real change will result from the new GATT agreement must concede that international marketing of dairy products is undergoing change nonetheless.

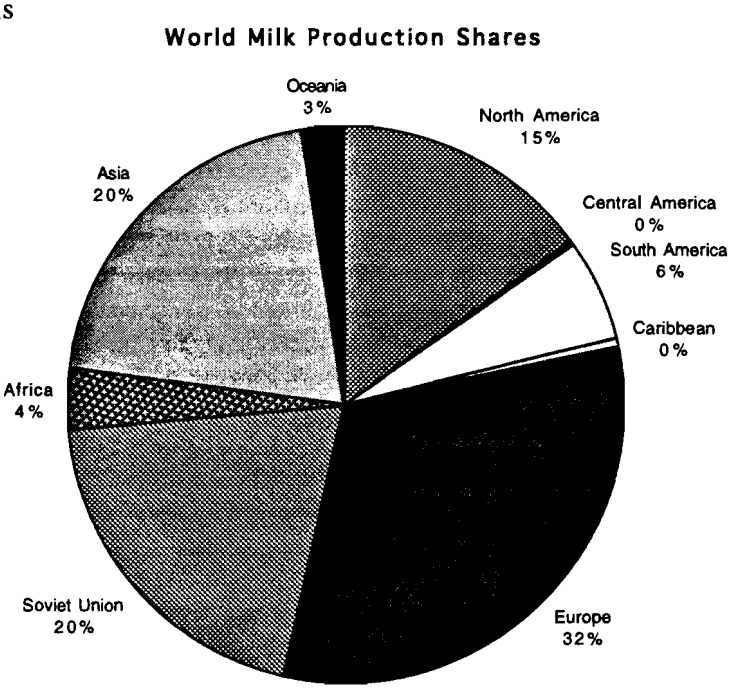
Milk Production in the Americas

American countries—North, Central, and South—represent a bit more than one-fourth of the 455 million tons of cow's milk produced in the world, according to United Nations Food and Agriculture Organization statistics for 1992. This share has been slowly increasing over the past few years, with increases in all major countries except Canada. With its long-standing production quota program, Canada's experience parallels that of the European Union (EU).

The United States produces 57% of total American milk production. Since the dissolution of the Soviet Union, the United States is now the largest single milk producing country in the world, producing about 68 million tons per year. Within the Americas, Brazil ranks second with 15 million tons of milk production, followed by Canada, Mexico, and Argentina, all of which produce about 7 million tons per year. By comparison, Brazilian production is similar to that of the United Kingdom or Pakistan. Canada produces about as much milk as New Zealand, while Mexico and Argentina each produce about as much as Australia. Collectively, all of the milk produced in the Americas is less than that produced by the EU, and much less than Europe as a whole. U.S. milk production is only slightly higher than that of the former Soviet Union.

Production conditions and systems vary widely across countries and often within nations. With its strict production quota system, Canada's dairy industry is relatively homogeneous, with many small-to medium-sized farms clustered around its average herd size of about 45 cows. Typically, the family provides most, if not all, of the labor, but it is common for several families, usually relatives, to share a single farm. Although the United States has many farms similar in structure to those in Canada, it also has a substantial number of very large farms. Farms with 100 or more cows represent nearly half of the milk produced in the U.S., but only about 13% of all dairy farms.

Mexico offers an even wider range of production systems: small, dual-purpose herds on the Gulf Coast and Guatemala border; even smaller, low-input but specialized farms primarily in central Mexico; and large, intensively farmed herds in the north. These large intensive farming systems average about 500 cows per farm and are estimated to account for as much as 55% of the nation's milk production. Dual-purpose farms



This paper is part of a proceedings of a workshop for dairy economists and policy analysts entitled "Toward the 1995 Farm Bill and Beyond," held in Minneapolis, Minnesota, September 7 and 8, 1994—a project of Cornell University's Program on Dairy Markets and Policy.

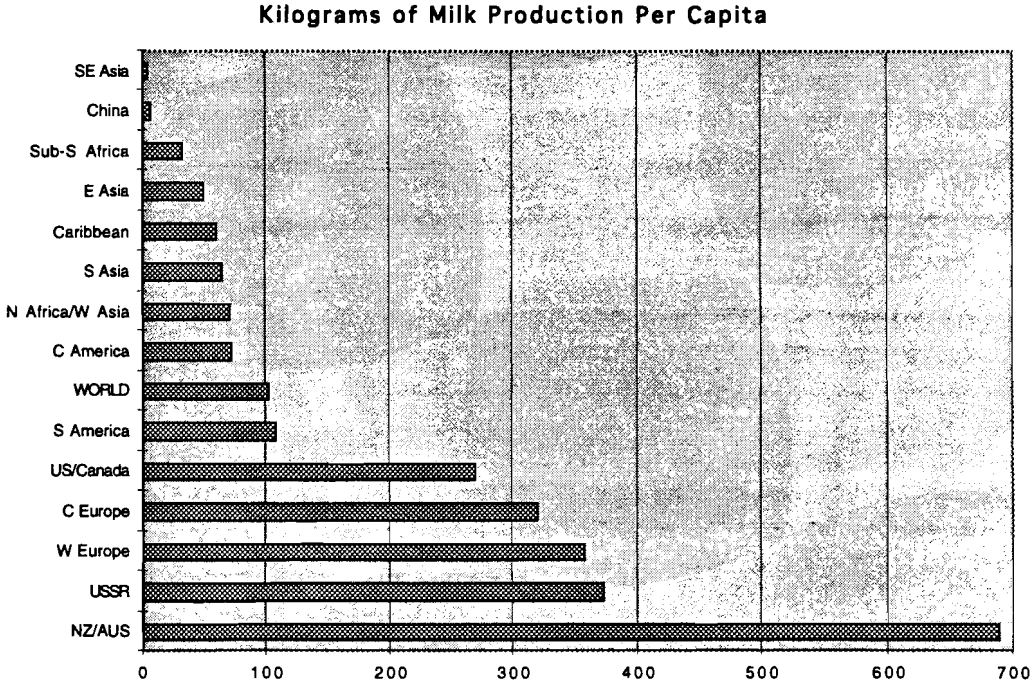
have an average of 25-30 cows and account for about 30% of the total milk supply, while low-input farms typically have 10-15 cows and represent about 15% of the milk.

South and Central America's dairy sectors span the range of temperate, sub-tropical, and tropical climate zones and milk production systems vary accordingly. Within the tropical zones, farms at higher elevations use the more specialized dairy breeds and manage their herds more intensively than is typical of lower elevations. Thus, countries such as Brazil, Colombia, and Venezuela have rather substantial milk production, as do the more temperate areas in Argentina and Uruguay. Costs of milk production vary widely among these production systems and across agronomic regions.

South and Central American producers face challenges. For high-yielding, high-input farms, major areas of concern are skilled hired labor, both availability and wage rates, animal wastes and related environmental concerns, and scarcity and price of water and the attendant costs of producing high-quality feeds. Producers with lower-yielding production systems, often associated with low unit costs of production, are faced with the challenge of obtaining higher levels of family income. On a broader scale, land use, in particular deforestation, has been of particular concern in tropical areas that have sought to intensify farming. A key issue facing many Latin American countries is finding ways to prevent environmental degradation while providing increases in quality foods and employment opportunities.

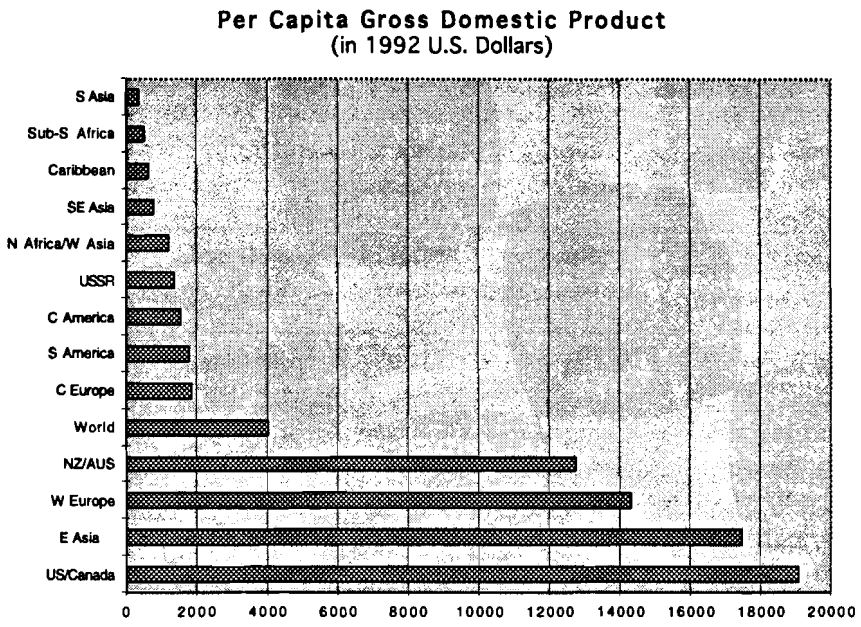
Dairy Product Consumption

According to a recent report on world dairy markets by the GATT Secretariat, average per capita consumption of milk and dairy products in 1992 was estimated at an average of 200 kgs. for developed countries and 36 kgs. for developing countries. In some cases, per capita consumption was estimated to be as low as 2.5 kgs. American countries span a wide share of this range, with Canada and the U.S. at the higher end and Caribbean and other tropical countries toward the lower end. While not as high as per capita consumption in Europe, American consumption patterns are generally well above those typical of most Asian and African nations. While U.S. per capita consumption is about 260 kgs., levels near 100 kgs. per capita are common in Latin American countries.



Along with current per capita consumption, longer-term market forecasts must consider population and economic growth. Per capita dairy product consumption is strongly related to per capita income, and wide ranges in per capita income within countries are easily masked by country averages. According to the GATT Secretariat report, "Usually dairy products do not appear in the food consumption pattern until a certain standard of living has been reached. Compared to cereals, vegetables and meat, dairy products are a luxury." The authors found that in all but three of the Asian countries included in the study, Japan, Singapore, and Saudi Arabia, "standard of living is less than average, which means that for the majority of the population dairy products are not featured largely in the diet."

Nevertheless, they say, "even poor countries like the Philippines, Indonesia and Egypt have inhabitants who live well above the average standard of living." For example, they point out, of Indonesia's 180 million people, high-income level consumers may account for more than the entire population of Singapore, 3 million people.



China is an even better example. About 10% of China's 1.2 billion people live in its more prosperous, coastal urban areas. While per capita dairy product consumption in these wealthier areas is low, it is still nearly twice the national average and expected to quadruple by 2000.

Dairy products have a relatively high income elasticity of demand (consumption highly sensitive to changes in income), but important distinctions exist between basic commodities and value-added products. Dairy product consumption growth in developing countries will occur mostly from an increase in demand for basic commodities, but higher income consumers within these countries likely will increase consumption of value-added dairy foods. These pockets of consumers may be viewed as marketing opportunities by world-wide suppliers of value-added products.

Prospects for World Trade

Population and economic growth along with a shift in consumption patterns will help define world trade prospects. Southeast Asia, as well as the Middle East and the more wealthy countries in Africa and South America, will become a competing ground for countries of the EU, New Zealand, Australia and perhaps the U.S, according to the GATT Secretariat report. "As standard of living in the importing countries rises, the exporting countries will increasingly concentrate on whole milk powder and cheese at the expense of butter and skimmed milk powder," the researchers conclude. In addition to growth in import demand due to a shift in food consumption patterns, most dairy importing countries will experience growth in import demand induced by both economic and population growth. "This growth is calculated to be over 30% in the 13 most important non-Western dairy importing countries," they add.

Food aid may also play a role. Many countries in sub-Saharan Africa and South Asia face continuing food shortages, which could worsen in time. Economic growth will be inadequate for these nations and reductions in export subsidies world-wide will make matters even more difficult. Hence, one might ask: What role will food aid play in international markets? And how will food aid be distinguished from export subsidies?

Uruguay Round Policies

The two basic policy features of GATT are increased market access to importing countries and reduced export subsidies (quantity and value) of exporting countries. Increased market access suggests increased demand, but reduced export subsidies implies sales at a higher price to the buyer and/or a lower price for the seller. Countries that have been relying on European subsidies to buy dairy products account for a substantial share of world trade. An increase in the price they face will lead to a reduction in imports and encourage the usage of non-dairy, substitute foods and food ingredients. Increased market access in developed countries, where domestic prices would still be well above world market prices, could result in greater imports, even in countries not currently considered major importers.

As much, or more, attention should be paid to the potential impact on domestic prices in supplying countries. Higher world market prices mean higher domestic

prices for countries such as New Zealand, but increased market access will pull prices down in Canada, the United States, and Europe, where internal prices would still be well in excess of world prices, assuming domestic policy allows such an impact to occur.

World markets and prices are likely to be more volatile as dairy trade becomes more liberalized. Partially this will be the result of uncertainty about how to operate in a liberalized and intrinsically less predictable market place due to international deregulation. Regional weather patterns may influence supply or demand in a particular country, but such local impacts are more meaningful for the individual nation than for the world at large.

Even more important than the affects of specific dairy market alterations are changes in the larger agricultural sector and macroeconomy. As noted earlier, dairy product consumption has been, and likely will continue to be impacted by general economic growth and income distribution patterns in developing countries. At the producer level, input costs and income opportunities within and outside of agriculture may have important implications. For example, GATT may result in lower domestic farm milk prices for both the United States and the EU, but feed prices may change little here, while decreasing abroad. Therefore, the value of milk relative to the cost of feed will certainly decrease in the United States, while possibly increasing in the EU. Likewise, dairy may become less profitable in Canada, but relative to other agricultural alternatives, which could worsen even more, dairy may look more favorable.

Potential Implications

Reactions to and concerns regarding the impending GATT agreement vary widely within and across American countries. For the most part, Canadians are very nervous. In general, GATT has been the issue of primary concern in Canada's dairy industry for the past several years. Canadians recognize that their dairy sector is highly vulnerable to any serious opening of their market because of their strict quota system and high price structure. Their biggest fear is the United States Indeed, Canada may be the U.S.'s best market opportunity in a free trade environment. During the height of its surplus problems, the United States had surplus production in excess of the entire output of Canada. That production capacity could quickly be geared to displace as much of Canada's dairy sector as the country would allow—fluid milk products as well as manufactured. Canada is a wealthy country with high per capita consumption of dairy products. To the extent that Canada opens the door, however, it could be viewed as a major opportunity for other competitive suppliers as well. Longer term, Canada has ample opportunities to restructure and become more cost competitive, but this will require a painful adjustment process, primarily at the farm level.

Under the administration of President Salinas, Mexico rapidly adopted broad market reforms to deregulate and open its economy. The Mexican agenda goes way beyond agriculture. Unlike Canada, prices in most regions of Mexico are not much different from those in the United States. Mexico is a more populous nation than Canada, but also much poorer. Export opportunities will be limited by the number of higher-income families and economic growth within the other sectors of the population. Opportunities for Mexico to expand its dairy industry exist, but the country is likely to remain a net importer of milk products for the foreseeable future. Similar to the Canadians, most Mexican dairy producers and processors fear U.S. competition for their domestic market. Unlike in Canada, though, economic growth in Mexico may boost the demand for dairy products (and other goods) sufficiently, allowing both Mexican and U.S. agriculture and food processors to benefit. By the same token, the Mexican dairy industry will need to make investments in capital and labor to become more competitive.

South American countries are more difficult to analyze. Net exporting countries like Argentina and Uruguay likely will focus on opportunities in other South American countries, most notably Brazil, which has been a net importer of dairy products despite being one of the largest milk producing countries in the world. Caribbean and Central American countries may offer good, albeit small, market opportunities if and when their economies improve and per capita incomes rise. Although potential exists, prior experience suggests that South American countries are unlikely to restructure their dairy sectors to become major competitors in world markets, despite adequate agronomic resource bases. Similarly, although potential exists, it will be difficult for countries of eastern Europe and the former Soviet Union to restructure their agricultural sectors so as to become major food exporters any time soon.

The United States is rather schizophrenic regarding GATT. It can't decide whether to look at the world

through the eyes of the single largest milk producing country or through those of the single largest dairy product consuming nation. Because the United States is a huge producer of milk products and a country blessed with natural resources and good agronomic conditions for milk production, many believe it can be very competitive in a world market where export subsidies are eliminated and markets are open. On the other hand, the United States is a huge and highly attractive market, and its dairy sector, arguably, has been less innovative than Europe's in product and process development; therefore, others believe the United States will be no better off than Canada under a liberalized trade scenario. Even the optimists think that the United States gave up far more than it gained in dairy negotiations, particularly with respect to continuing European subsidies.

So, who is right? The optimists likely are closer, but at the same time, are probably a bit too optimistic. The best opportunities for the United States are nearby—Canada, Mexico, and the rest of Latin America. Even though complete trade liberalization and elimination of domestic programs would allow the United States to penetrate even European markets, total deregulation is not yet on the horizon. Asian markets are just beginning to be explored by the United States, but New Zealand and Australia have an important locational advantage to those markets and obvious incentives to exploit that advantage. Even Europeans have an edge on the United States in Asian markets because the United States lacks experience and sophistication in world marketing of dairy products, suggesting that U.S. exporters have much to learn before they become major world competitors. One likely possibility for U.S. companies would be joint ventures with European and/or New Zealand exporters.

With respect to other major suppliers, the reigning view in this country is to concede superiority in cost of production to New Zealand, but remember New Zealand produces considerably less milk than California. Most also believe there is limited ability to expand milk production in New Zealand and Australia. New Zealand's potential in this regard may be seriously underestimated; the potential for New Zealand to convert more of its resources to dairying and/or switch to more intensive production systems has been unchallenged to date. With significant increase in world market prices—and therefore in New Zealand's domestic prices—no doubt, New Zealand will explore its options and potential.

The major issue with respect to Europe is the continuation of export subsidies. Although European concessions on subsidies are large in magnitude, they are relatively much smaller than U.S. concessions. Given Europe's dominating position as a world exporter, as long as it maintains a large amount of subsidized product and a significant level of subsidy, many believe the United States will be unable to compete. The Dairy Export Incentive Program (DEIP) has enabled the United States to penetrate markets previously held by Europeans, but DEIP will become meaningless before European subsidies are gone.

Under these circumstances one can conclude that over the next 10 years, as EU export subsidies are reduced, world market prices will slowly increase and per capita trade may well decline. New Zealand and Australia will capture whatever markets Europe can't buy and slowly increase their share of world trade and milk production. Declining internal supports and prices will continue to shrink the European and Canadian dairy sectors, but domestic consumption may increase in those nations if their domestic prices are allowed to more closely reflect world trade levels.

The U.S. will import and export more, but both will continue to be a small fraction of the total U.S. market. U.S. consumers will enjoy somewhat lower prices, boosting dairy product consumption slightly. U.S. producers also will see somewhat lower prices, which will hasten the exit of the less cost competitive farms and further the restructuring of the United States dairy sector toward larger and more specialized operations. U.S., Canadian, and European production sectors will have strong incentives to restructure as a result of downward price pressure at the farm level. Potential payoffs are perhaps greatest in Canada and Europe, but U.S. manufacturers are far better positioned to respond rapidly to those changes.

Factors Defining and Shaping Dairy Markets and Farms in the Next 10 Years

Mark Stephenson, Cornell University

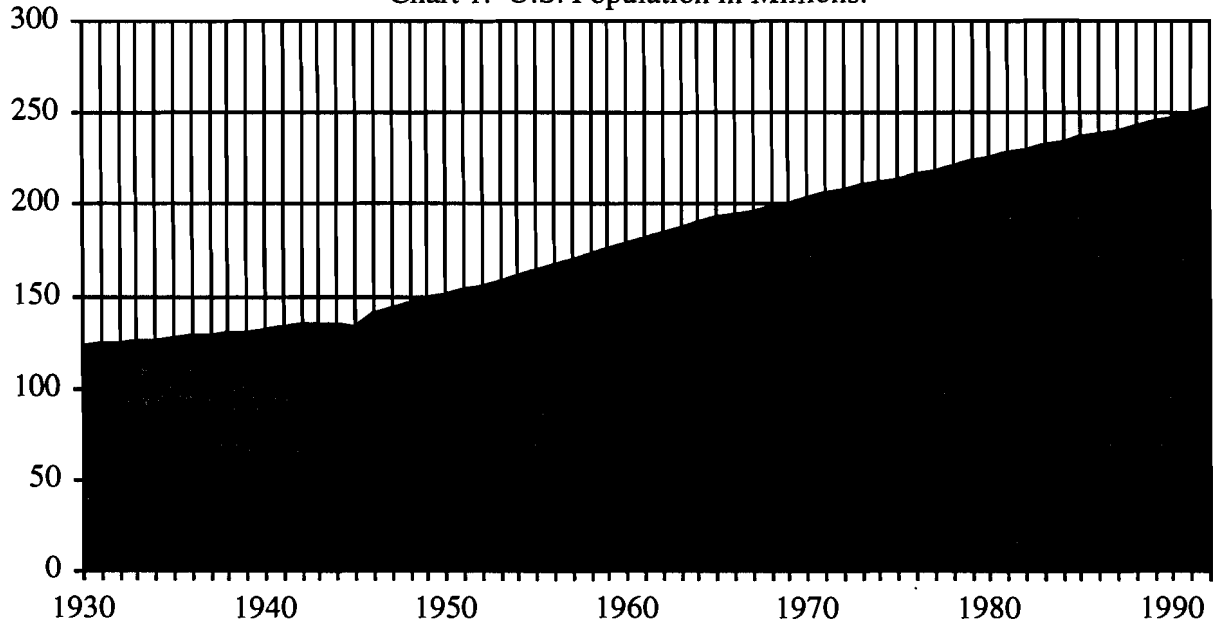
Low-cost milk production areas are considered to have more export opportunities than higher cost areas. These are the countries, regions, or sub–regions within a country that hold a particular "comparative advantage," but differences in factor productivity, such as available technologies, or climate and soil types favorable to milk production, also play a role in comparative advantage. Certainly, when comparing regions within the United States, factors available for producing milk differ. The dairy industry focuses much of its attention on issues of "competitive advantage," which concentrates on quantity-type goals, such as maintaining market share through policy efforts. However, a number of factors that impact milk production fall under comparative advantage, including shifts in demand, historical production decisions, and regional resource endowments, such as land, soil type, and infrastructure. Technologies available to produce milk and transportation costs also fall under the comparative advantage structure and are examined in this paper.

Population Growth and Movement Through Time

Population growth is probably the single largest factor that changes demand patterns. Advertising, dietary changes, the economy, and a number of other factors influence demand, but the largest single element is population, including growth, shifts across demographic categories, and movement. Total population growth in the United States has been steady for decades, but growth has not been regionally uniform. Looking at population growth from 1930 through 1992 is informative. Prior to WWII, population growth was stable. During the War, when a share of the U. S. population moved overseas, the domestic population actually declined. When the veterans returned home, the babyboom generation was begun, causing a large increase in U.S. population, and the total growth hasn't slowed since. As Chart 1 shows, U.S. population growth since 1950 has shown a remarkably stable increase.

Population growth has not been occurring uniformly, however. Comparing 1930 and 1940 census

Chart 1. U.S. Population in Millions.



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data, just prior to World War II, New York, Texas, and California were the states that had the highest rate of population increase. In general, all of the states east of the Mississippi River were growing at a fairly rapid pace, while population in the Midwest was stable. Comparing 1980 and 1990 census data, of the three states showing the most population growth in the '30s—New York, California, and Texas—only California and Texas continued to show strong growth. A fair amount of increase in the '80s occurred in the Southeast and throughout the West. Population growth generally occurred along the coasts, while the heartland experienced slow growth to actual declines. The Northeast continues to be a densely populated region, as does the Southeast, Southwest, and West Coast, indicating a widely disbursed U.S. population. Chart 2 indicates recent regional growth patterns across the country.

Population movement over time can be measured by calculating the weighted centroid of population, (the geographically central point of density). Large movements of population are required to move the centroid any measurable distance. In 1930, the population centroid was near Decatur, Ill. By 1950, the centroid had shifted about 65 miles, almost directly west. Post World War II, however, a fairly dramatic shift occurred. Apparently, once home the veterans decided not to raise their families in the North; between 1950 and 1960, the centroid moved about 45 miles almost directly south. For a 10-year period, that is a fairly dramatic shift. In 1960, the population once again began moving west and slightly south. By 1990, the weighted centroid for U.S. population had moved nearly across the entire state of Missouri and is now located near Jefferson City. Population has been steadily moving to the west and south.

Historical Production Decisions Through Time

Population, and thereby local demand, is probably one of the largest factors of comparative advantage, but historical production decisions also have occurred in the context of regional shifts in production. For example, in the early 1800s, the population was mostly centered along the East Coast and, not surprisingly, so was milk production. The nation's dairy farms were located heavily along the Eastern Seaboard near Boston, New York, and Washington, D.C. As the population grew and demand for milk became stronger, milk production began moving west. The railroad enabled the industry to move dairy products longer distances. Butter, the most highly desired milk component at the time, could move long distances, and even fluid milk moved more than 400 miles to the markets.

By the turn of the century, population along with milk production facilities had spread across the nation and the Upper Midwest had become a fairly substantial milk producing area. The Upper Midwest could pro-

Chart 2. Annual Percent Change in Population, 1980–1994.

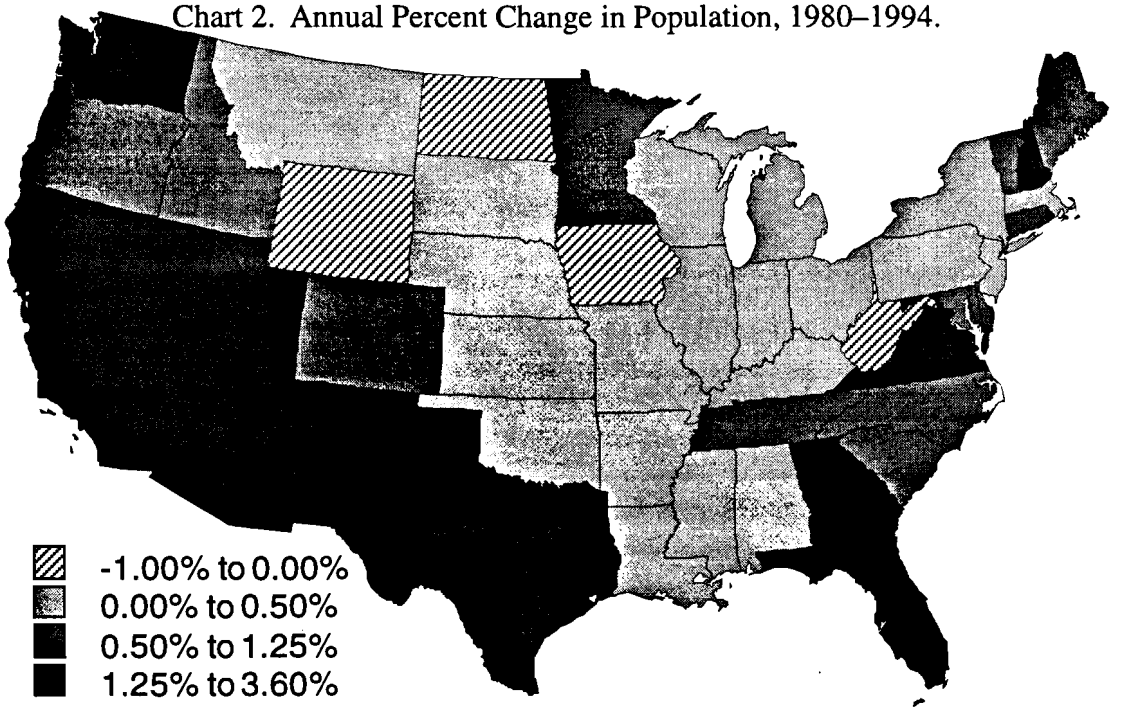
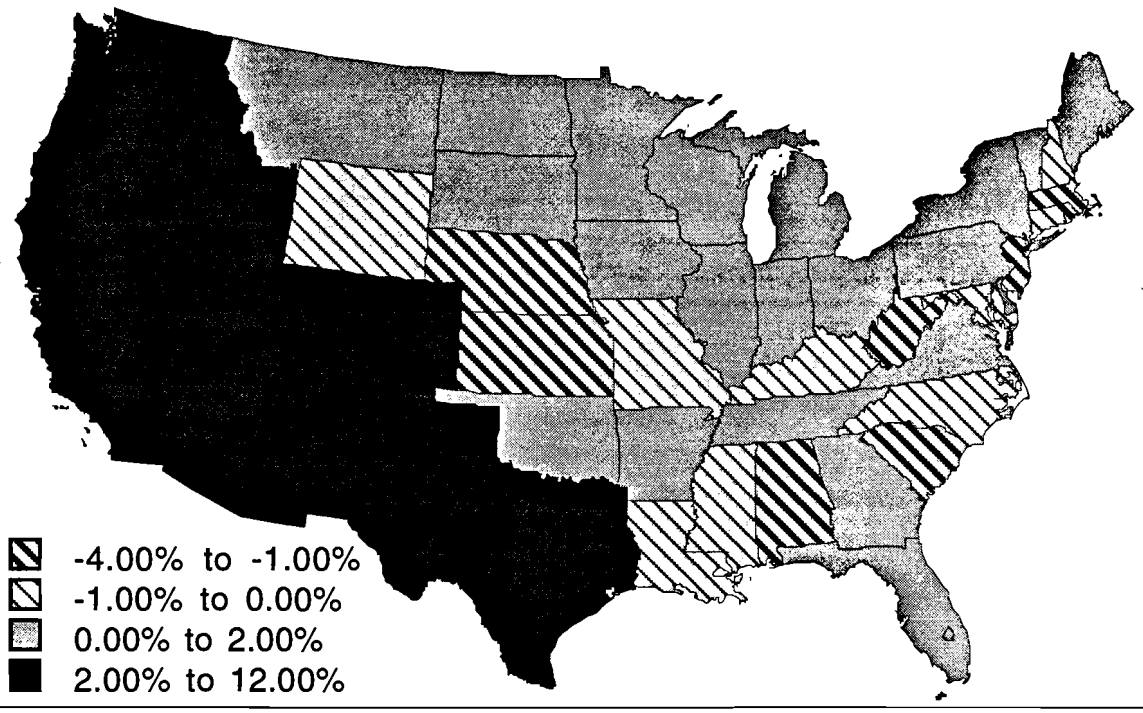


Chart 3. Annual Percent Change in Milk Production, 1980–1994.

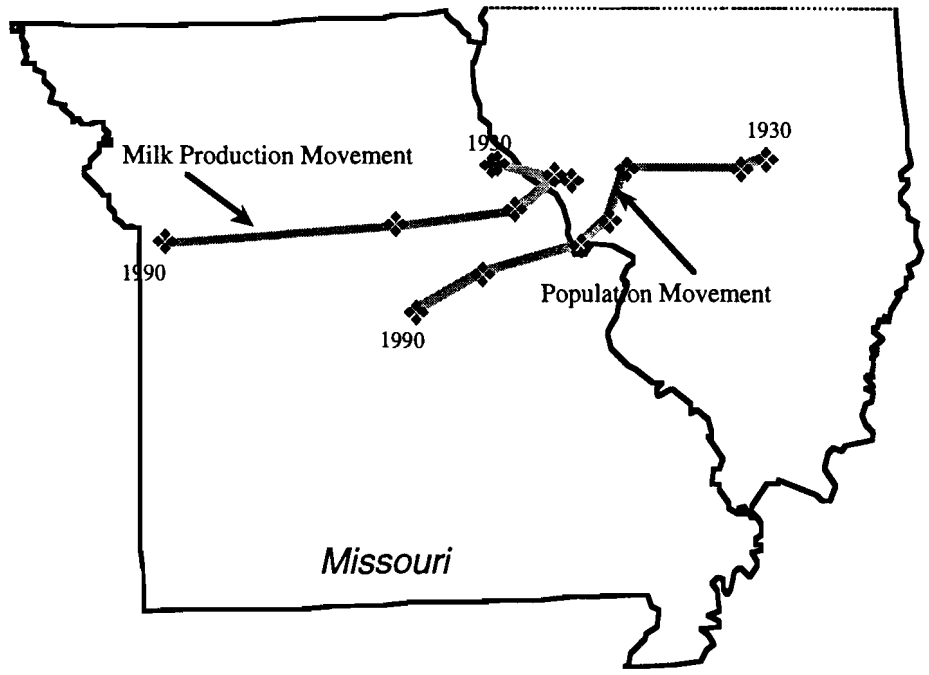


duce milk at a relatively low cost, and new transportation technologies allowed the region to ship dairy products east where the population was concentrated. Another, and equally important, reason why the Upper Midwest was becoming an important dairy region is that dairy farming is perhaps the highest and best use of much of Upper Midwest's resources. Upper Midwest soils and climate cannot compete with Iowa or Indiana for corn and soybeans, but the region's land base is better suited to dairy production than the drier climate of the Great Plains.

Even though the Upper Midwest was rapidly becoming a large dairy area in the early 1900s, Wisconsin was not the center of production at that time. Dairy moved into Wisconsin quite rapidly. At the turn of the century, New York was still the largest milk producing state and Iowa was No. 2. Wisconsin— just trailing its southwestern neighbor at No. 3—was the nation's largest wheat growing state by a large margin. Wisconsin wheat growers, however, grew wheat upon wheat upon wheat, which left the crop and soils susceptible to disease. W.D. Hoard, a journalist at the time, stood on his soap box exhorting the people to "give something back to the land." Hoard was successful, and dairy producers moved out of Iowa and other states in droves to relocate in Wisconsin. State-of-the-art, carbon-copy facilities were built throughout the state.

In the early 1930s when Wisconsin's dairy industry was on the rise, a pivotal technology was also being developed. In the 1920s and 30s, the 40-quart milk can had just been adopted as a standard. Prior to that, milk had been hauled in a variety of containers to processing plants. The first bulk handling of milk was occurring in California at the same time canned milk was becoming the new standard elsewhere. Perhaps, many of the structural changes that we are witnessing today, have occurred because of that single technology—the bulk tank, which required a large capital investment. Producers in the Upper Midwest having just invested in new facilities, were now faced with additional expenses for bulk tank units. To justify this large expenditure, farmers needed to add cows to facilities that were designed around a smaller scale of operation. Meanwhile, the new dairy farms in California could be built at a scale designed to accommodate bulk tank shipment of milk. The rapid population growth in the West gave California producers the incentive they needed not only to invest in the bulk tank, but also in new and different facilities. By this time, California was a large milk-producing state, but the Upper Midwest was still far dominant.

Chart 4. Centroid Movements of Population and Milk Production, 1930–1990.



Production Shifts Through Time

As with population, it's possible to calculate and plot the centroid of production and demonstrate how production has shifted through time. Between 1930 and 1940, the production centroid was fairly stable and situated about 35 miles southwest of Hannibal, Missouri. Between 1940 and 1950, however, the production centroid actually moved about 50 miles east into Illinois. The movement east had a lot to do with the rough times agriculture had experienced in the previous decade, or during the Dust Bowl years, when even western dairies headed back east. During the 1950s, production did an about face and began moving west once again. Production took another turn in the '60s and began moving southwest. The centroid in 1970 was located just north of St. Louis. In the past two decades, however, the production centroid has traveled almost directly west across the entire state of Missouri to the suburbs of Kansas City—a large movement for a 20-year time period.

Looking at the movement of both centroids, population and production, plotted side by side shows remarkable similarities. The relationship between the two is quite appealing. Since 1950, the two centroids have paralleled each other fairly well, with production following population within 10 years. In general, the dairy industry is following the shift in population. So, what does that mean for the next 10 years? The magnitude of population movement has slowed, but also shifted. Currently, the movement is more to the south and not so rapidly west. Therefore, the expectation for the next decade is milk production will still move west and south, but not as rapidly as it has in the past two decades. This may be an indication that California's dairy industry is becoming mature.

Assuming uniform consumption of milk or dairy products across the country, one can also determine which states have more milk than they need on a per capita basis and which are shy of milk. In the 1930s, the entire West, Southwest, Great Plains, Southeast, and much of the Northeast were milk deficit. Even New York, a very large milk-producing state at the time, was milk deficit. The Upper Midwest had a large residual surplus of milk, between 200 million and 900 million pounds of annual surplus in Wisconsin alone. Many of the western states had moved from deficit to surplus by 1992, but not to the degree of surplus that still exists in the Upper Midwest (more than 20 billion pounds per year in Wisconsin). Even though California has surpassed Wisconsin in total production, California is not a large net exporter of dairy products. Likewise, Minnesota may have lost substantial market share over the past few decades, but the state is still a major exporter of dairy products. Chart 5 shows that New York and

Chart 5. Milk Surplus/Deficit States, 1992.

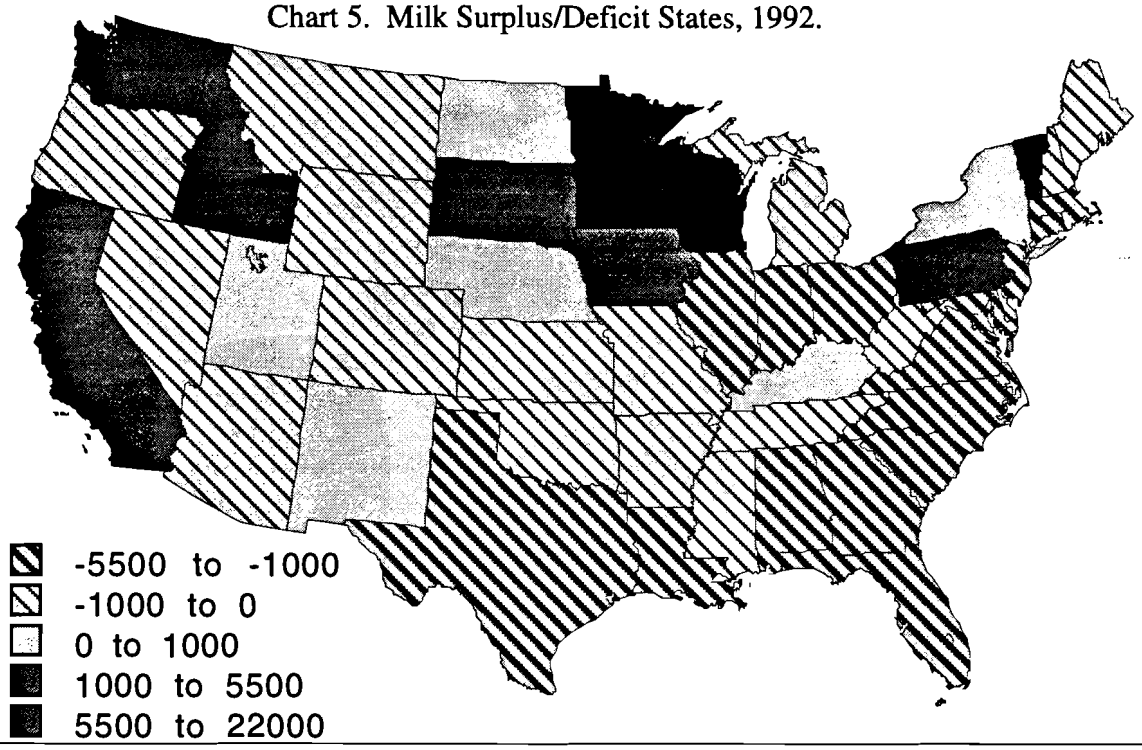
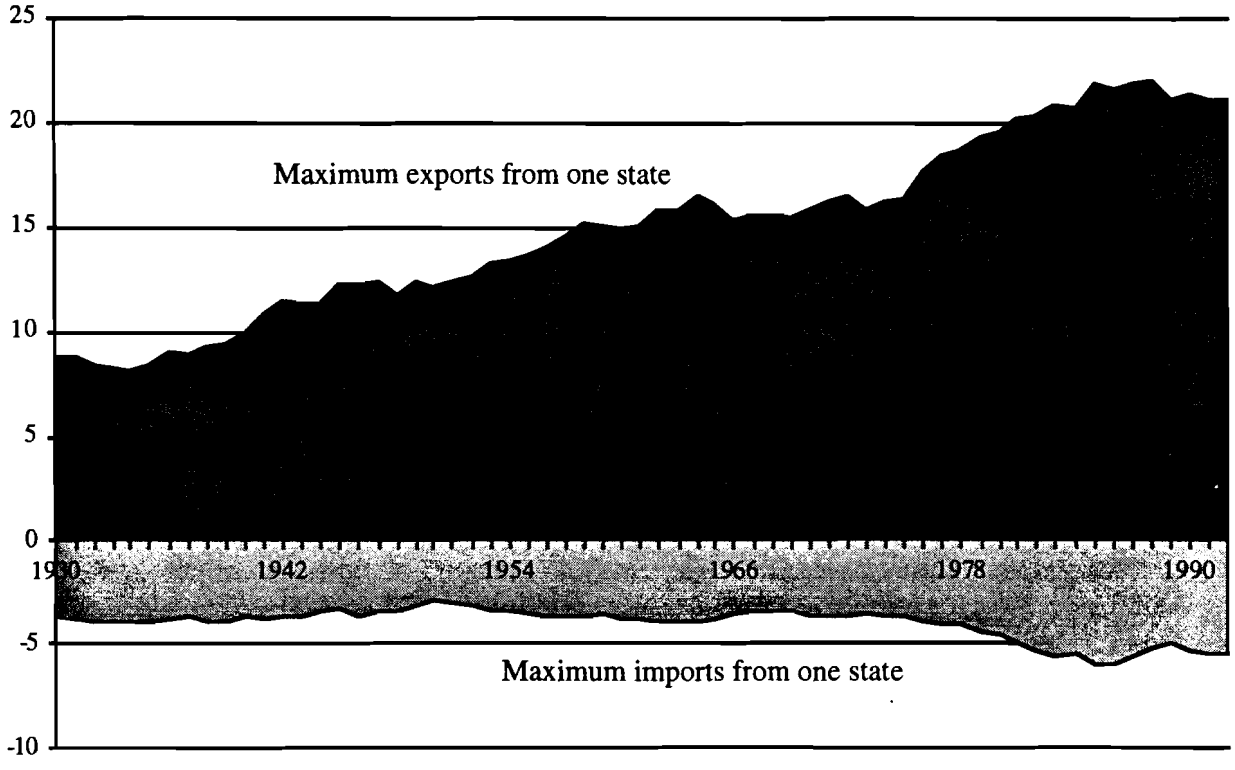


Chart 6. Maximum Volume of Imports/Exports from One State, Billions of Pounds.



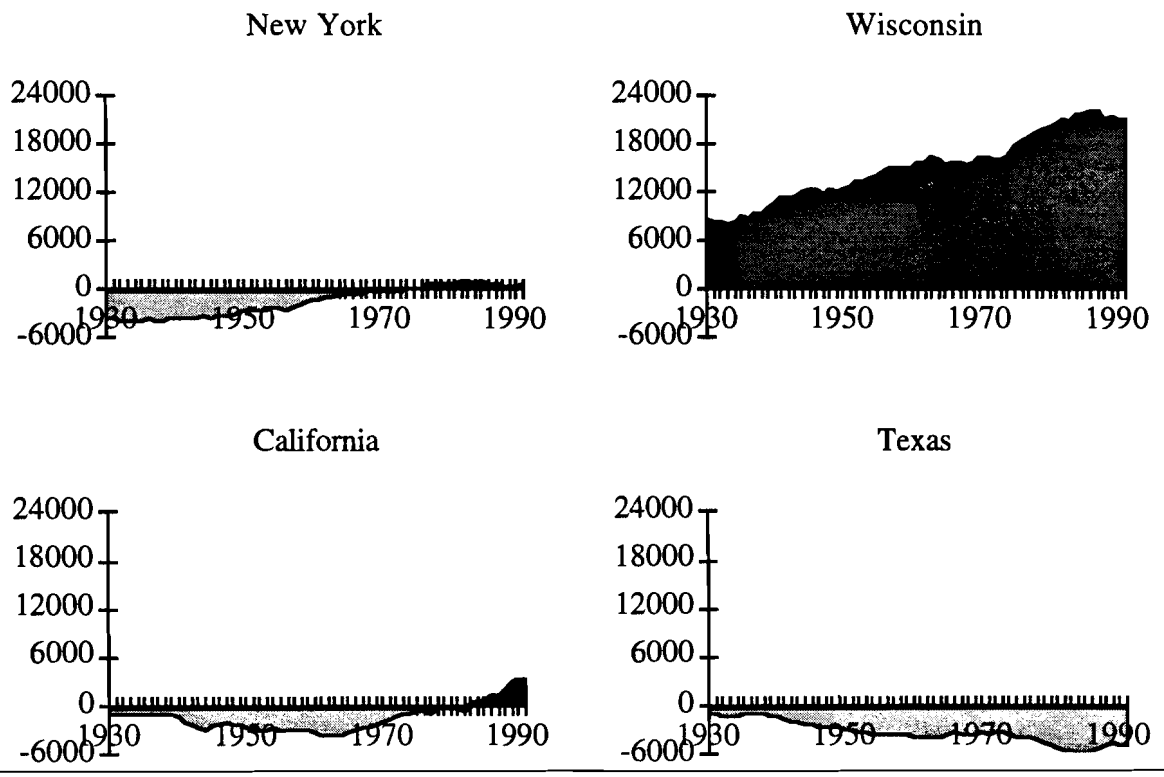
Pennsylvania have become modest exporters of dairy products, while the South, including Texas, remains a large importer of milk and dairy products.

For the most part, the degree of surplus or deficit in any particular state has been magnified over time. Milk-deficit states have increased their deficit, while milk-surplus states have only added to their surplus. That magnification of surplus and deficit through time is likely the result of specialization caused by comparative advantages that have been realized. In other words, states that aren't efficient milk-producing states are importing more milk and dairy products, while states that are efficient in producing milk are exporting even more. New York is an interesting case in point. It wasn't until the mid-1970s after New York had gone through a major restructuring that the state went from being net deficit in milk to a modest exporter of dairy products. Wisconsin, a good size exporter in 1930, had become a very large exporter by 1992. Even Wisconsin's recent loss in total milk production is not an enormous volume when compared to the state's peak production year. Looking at California, the western state was milk deficit well into the 1980s and currently produces about 3 billion pounds of surplus milk per year—not even enough milk to supply the deficit in Texas.

Summary

Population movement accounts for much of the regional shifts in milk production that have occurred over the past several decades. Production shifts are probably not the result of policy distortions. Quicker adoption of new technologies and relatively new facilities in the West and Southwest make those regions more competitive in some sense than the traditional milk-producing region of the Upper Midwest. This is a structural issue, not a policy issue. As the facilities in the Upper Midwest become obsolete, they will be rebuilt. Compared to the West, the Upper Midwest has certain comparative advantages, such as climate and soils. The Upper Midwest, undoubtedly, will remain a large milk-producing region, and will continue to produce the bulk of the nation's residual milk over the next decade. At the same time, western production is not an aberration. The West will continue to increase market share.

Chart 7. Milk Surplus/Deficit, Selected States–Millions of Pounds.



How will changes in population over the next 20 years impact regional milk production? The Bureau of Census predicts that the western population movement will slow or actually halt and that by 2020 more of the population will have moved to the Southeast. The Bureau's projections may revolve around the theory that as the babyboomers age, they will retire to the warmer climate of the Southeast. If that proves true, are the implications for the dairy industry similar to those that occurred earlier? Probably not. U.S. population growth is expected to be steady, with no dramatic increases or decreases. However, the only demographic category expected to show growth in the next two decades is the 65-years-of-age-and-older category, as the babyboomers age. The remaining age groups, including the work horse of the economy (those 25-to 65-years-of-age) and the younger population (the real milk consumers), are declining at a fairly dramatic rate. The growth is in the aged population.

CHANGES, CHOICES, AND CHALLENGES

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The picture that will evolve from the basic political, economic, technological, and social changes underway in the dairy industry today is one of an industry in transition, wherein change is one of the few constants. Political support, grows weaker each year, and some situations are beyond the scope of legislative fixes. Federal responsibility for dairy program costs will recede, with producers picking up direct and associated program costs, or programs will simply disappear. Public support for agricultural programs of any kind is declining.

Consolidation within the industry will continue, causing some of the most painful changes. In the future, there will be fewer dairy operations, thus, fewer small-herd producers. Processors will have fewer suppliers in close proximity to their facilities, and will face more competition for milk supplies in many areas of the nation. Lower prices for raw milk will prompt efficiencies and produce financial failures across the industry, while at the same time opening new markets and producing unanticipated profits for survivors.

General social and economic trends will force rapid and complex changes. For example, price and income changes have affected household spending for dairy products, while social and demographic shifts continue to alter the composition of product demand. Conflicting dietary and nutritional claims have confused consumers and weakened demand for dairy products. These changes are taking place worldwide.

On America's dairy farms, milk production technologies continue to push milk output to new records. And the terms of trade in world markets will soon begin to reflect more than the largesse of national treasuries. While it may be some time in coming, efficient producers, wherever located, will be competing for market share. Due to changes in government policies, consumer demand, and the globalization of markets, the orientation of the U.S. dairy industry will also continue to shift: away from traditional products that consumers identify with high-fat content toward new low-fat foods, presented differently, and away from a near exclusive domestic-marketing orientation toward world market development.

Sorting Out the Changes for the '95 Bill

Some factors are givens: those that are impossible to alter and those that are inevitable. Any proposed program changes that would add significantly to federal outlays, for instance, would be dead on arrival. Trends toward more consolidation of production and processing units are inevitable changes as are the changes that consolidation will bring to rural communities and changes stemming from urban encroachment. Other issues are unlikely to be affected much by federal farm legislation. Consumer concerns about the amount of fat in their diets would be one example. State and local regulations, particularly those related to environmental considerations, might be another.

Issues that can be addressed by changes in federal dairy legislation and regulation are the future of the federal price support program and what, if any, role trade legislation will play in revising the dairy program. Most policy observers hold expectations that the rules of the game for the dairy program will change, either modestly or radically. The disagreements about policy are usually about the degree of change, not the probability of its occurrence.

Budget considerations are always key. Some policy observers hold the idea that we will see a fundamentally different economic policy for milk producers, milk processors, and dairy food manufacturers. They argue that the minimum pricing provisions cannot withstand the weight of political criticism that will result from growing federal outlays if milk output continues to outpace demand. The dairy program, however, is unlikely to be singled out for criticism on the basis of cost. The cost of price support removals has stabilized at about $250 million. That amounts to about $1 per person per year and accounts for 2–4% of federal outlays for all commodities, depending on what is included in the total.

While cost is not the only criterion for attacks upon and abolition of a federal program, there does not

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appear to be a growing concern about the federal outlays for the dairy program. Considering the likely advocate for restructuring on the basis of cost alone, namely the Office of Management and Budget, it is very unlikely that the Clinton Administration will be looking for radical changes in farm programs next year. Radical change comes at a high political price. Without some surprises in November, it is doubtful that the Administration will gird for a battle in '95 that it does not have to fight.

Why We Have Price Support Programs

Price support programs were established to protect the nation from potential disasters in rural communities that came from wide swings in commodity prices in the 1930s. They were advertised to the urban constituency as necessary to maintain "a continuous and stable supply of agricultural commodities adequate to meet consumer demand at prices fair to both producers and consumers," according to a 1936 amendment to the Soil Conservation and Domestic Allotment Act.

The first goal of farm programs, and one that has endured until today, is to stabilize wide swings in price that can occur between harvest and the end of the next growing season, or in the case of milk, between the spring flush and demand peaks that occur in fall and at holidays. Price stabilization mechanisms essentially establish a minimum price for each product. For grains, cotton, oilseeds, and other crops, price support loans are the primary tool used to stabilize price swings. For dairy, the price stabilization tool is the purchase of dairy products by the Commodity Credit Corporation (CCC). Just as loan activity isolates a portion of a crop from the market during harvest, purchases remove excess products of milk during periods when milk production is greater than necessary to serve fluid and hard product markets.

The underlying concept of price stabilization was, and has been, that a producer who is forced to sell a commodity when supplies are most plentiful is at a distinct financial disadvantage. Policy is rooted in the notion that all dairy farms are pretty much alike and variations from the norm can be troublesome. In particular, small, undercapitalized farmers are thought to be at a disadvantage, compared to large, wealthy operators.

Latent to many government price support operations has been the idea that stability is not enough. Sometimes, advocates for farmers have hauled out the notion that "fair prices" lead to "a living wage." That is, the old mathematical identity of price times quantity equals income was sometimes used to justify higher prices on the grounds that higher prices are necessary to generate a higher income for hard working people who deserve a raise.

Over time, the inefficiency of dealing with income problems through various price fixing, or minimum pricing schemes, led to very serious market distortions. In the crop programs, minimum pricing led to enormous expansion of overseas production of wheat, soybeans, tobacco, and cotton. In dairy, legislated changes in price support, coupled with strident advances in productivity, led to oceans of surplus milk in the early 1980s.

Price support programs have been costly. Farm price support expenditures during the 1980s amounted to well over $100 billion. Dairy price support activity accounted for perhaps one-tenth of the cost during that period. Price support programs have not achieved their social objectives. They have not stabilized rural communities. Efficient producers have amassed substantial wealth under the programs and simply purchased land and facilities at a faster rate than might have otherwise occurred. More than one observer concludes that dependence on farm program payments has led to a sophisticated income transfer program for relatively high income producers. Even Congress is questioning the wisdom of the nearly open-ended features of farm programs. As Rep. Richard Durbin, D-Ill., Chair of the House Appropriations subcommittee for agriculture and rural development, pointed out, USDA farm programs currently are sending "a lot of money to producers who don't need it." In short, isolation from market costs and returns have sent inherently bad signals to producers. Dairy producers have been caught up in the vortex of artificial milk and feed price relationships that these programs have created.

What does the price support program provide? It provides stability for an industry, not an individual farm. The distinction between industry benefits and individual farm benefits can be lost on small operators who are in financial difficulty. Unfortunately, federal policy is a poor substitute for market outcomes when measured in efficiency terms. Time and time again, the market has proven that it can perform resource allocation tasks more effectively than decisions made by fiat.

So why is there such resistance to exposing agriculture to market forces? Necessary resource adjustment is often discussed as an inevitable and relentless

part of a dynamic free enterprise system, but the theoretical conditions under which markets rationally allocate resources are currently not present to back up that political argument. More directly, the tough part of resource adjustment is the names, faces, schools, and churches that comprise the resources that are adjusted.

The recent costs of the federal dairy price support program have declined dramatically from the 1980s to slightly more than $250 million annually. From a federal budget perspective, the cost of the dairy program is less of an issue today than at any time in past two decades. In the past few years, the dairy program cost one-tenth of what it did in the mid-1980s and comprises only 4–5% of the total outlays for all agricultural price support activity. The dairy program cost is equivalent to $1 per year per person, or less than 10 cents per month.

What do American consumers receive for this $1 annual investment? An assurance that milk is available in the stores, on the shelves, nearly everywhere, year around. The cost of the dairy price support program, borne by the taxpayer, is returned to the consumer in terms of supply security. Because of that stability, the dairy food processing industry has had ample supply to work with in developing new products. These products are available because the price support program offsets some of the risk associated with production, marketing, and distribution. If overproduction takes place, the federal government is the buyer of last resort.

What's wrong with a program that provides that abundance at a relatively low cost? Plenty. First, the price support program has sapped the marketing initiative from the dairy industry. And second, the program simply doesn't work anymore. Both of these flaws can be fatal over time. The hidden costs of the program are significant and have grown to the point where they may be dangerously threatening to the nation's dairy industry. The price support program has insulated the dairy industry from pressures that, while painful to deal with in the short term, must be dealt with.

For many years the difficulty for U.S. food policy has been abundance, not scarcity. How to hide the overabundance from the market has been a policy challenge for decades—in fact, for most of the 20th Century. While the American dairy industry was able to "dump" its products on the federal government, our future competitors abroad were developing an extensive and sophisticated marketing network around the world to take advantage of the slightest prospect for market development. They are using that network today to establish trading relationships that, while based on subsidies, will carry them for a long time to come.

The future of the price support program is linked to what happens in the period after ratification of the Uruguay Round Agreement (URA). Its future will be determined in the context of the general shift in agricultural policy related to implementation of the General Agreement on Tariffs and Trade (GATT) and federal budget realities. A central issue for 1995 will be how to modify the price support program to promote export market sales of dairy products. As was the case in 1985, the 1995 legislation will directly and explicitly link trade promotion and the price support program. In 1985, the Dairy Export Incentive Program (DEIP) was almost an afterthought, an add-on. In 1995, dairy export activity will be a central theme.

Trade Legislation and Revision of the Dairy Program

To grow and prosper, the U.S. dairy industry must become a strong competitor in world markets. That's a tough undertaking. Demand for dairy products is heavily dependent on income. In that context, the poorer nations of the world offer only a limited market for commercial sales, while high-income nations are largely self-sufficient in dairy products. Markets for dairy products can be developed where incomes permit imports. Aggressive marketing will expose these populations to new tastes. Almost all the remaining markets will be battlegrounds for market share.

In this battle, the United States is way behind. Absent an aggressive, concerted effort to play catch up, the United States will stay behind for some time. Indeed, the URA helps the European Union (EU) maintain its lead by legitimizing its high expenditures for export subsidies. In 1995, the EU will be able to apply subsidies, in aggregate, to approximately 15% of its domestic milk production. By 2000, the EU will still be able to subsidize 12% of its production. The subsidies available to the EU for butter exports in 2000, for example, will exceed the total volume of world butter exports last year (excluding intra-EU trade). Compare that to the figures applicable to the United States. In 1994, about 2% of U.S. milk production will be exported under DEIP. In the year 2000, U.S. exports under DEIP will amount to only about 1% of domestic milk production.

This comparison of the respective export arsenals is not intended to intimidate or discourage, but rather to

indicate the magnitude of the marketing effort that will be needed. It also has major implications for the direction of U.S. domestic dairy policy. If world markets are indeed the source of prosperity, the domestic price support program must be modified so as to enable—in fact, compel—sales to export markets, in lieu of sales to the federal government. Some of the ideas that have been proposed for an export federation, or an export market coordination agency, are worth exploring.

Supply will not be a limitation on U.S. exports. To the contrary, milk supplies will be abundant: long-term, annual average milk production has increased 1.5–2% (only with catastrophic events, such as the 1993 flooding in the Midwest, will milk production decline); the introduction of production enhancement technology, such as rBST, will probably increase the rate of milk production; better herd management, genetics, and direct pricing signals, such as multiple component pricing systems, will also boost milk output and quality; and increased milk output is taking place despite faltering domestic demand for dairy products and without adjustment for the continued large surplus of milkfat. Thus, U.S. output at levels exceeding U.S. market demand will continue. In all likelihood this burgeoning milk output will be a continual spur to the development of new dairy market outlets abroad.

While the U.S. dairy industry will remain a major economic segment of the food industry, the sources of milk, its costs, its processing, and its use by consumers will change in the coming years. For trade, some of these shifts can be advantageous. For example, milk production has increased rapidly in the Pacific states and the Southwest, due to relatively lower cost of production in those areas. This milk, in its processed forms, is well situated for export to Mexico, Latin America, and the Pacific Rim nations.

Not all market development will or should take place through commercial activity. What about food aid? In the early 1980s, overseas food assistance was a major outlet for dairy production. Since the surpluses have diminished and the price of nonfat dry milk has increased substantially, only small amounts of butter and cheese have been exported through overseas donation programs. If access to world markets is limited by the number of people who can afford to pay commercial or near-commercial prices for dairy products, should we consider ways to keep a tight lid on U.S. milk production? No, that clearly would be a mistake. Instead, the lid could be loosened by committing a volume of U.S. assistance to least-developed countries in the form of dairy products. Indeed, the URA includes a Ministerial declaration that commits well-off nations to provide increased levels of food aid to least-developed countries that are not expected to benefit from the liberalization of agricultural trade.

The area of food assistance is one in which concerted political effort by the dairy industry can make a difference. The amount and kind of aid, where it is granted, and the terms of its delivery represent the kind of political, economic, and moral trade-offs that may become central to alleviating world hunger in the next century.

Constructing a Framework for the '95 Bill

Domestic price support policy and international trade will be two pivotal issues for the dairy industry in the 1995 farm bill. Based on the economic and political evidence, it is up to the dairy industry to face these challenges, to anticipate changes, and to identify realistic policy positions that can take the industry into a new age of restricted federal budgets and globalization of markets. How can an industry with such diversity formulate a comprehensive, meaningful, and defensible public policy?

It is difficult to think of a mechanism, or a forum, for surfacing and reviewing needed changes in dairy policy. This conference is a good start, but no routine, comprehensive means exists by which needed changes can be surfaced and thoroughly reviewed. Almost all problems, inconsistencies, and quirks end up as the subject of periodic congressional debate—at least once every 4-5 years. Yet, debate in the House and Senate represents the most inefficient problem identification and solution forum imaginable.

It will take time and effort to formulate a consistent policy framework that accounts for domestic and international demand. The industry should be working collectively toward constructing that framework. And it needs to work quickly because this is a timed exercise, with the EU holding the stopwatch. But even if the industry succeeds and develops a workable, judicious set of policies and programs, how do those ideas become public policy?

They often don't. Even more frequently, the process of changing policy takes too long to effectively meet the economic or social situation that the policy change was supposed to influence. Sound policy development requires constituency building. Top-down ideas

are very hard to enact into law. This lack of grass roots constituency was one of the downfalls of the proposed dairy "self-help" legislation in 1993. Many House and Senate staffers said that among their constituents, the silence was deafening.

Building a framework for the future involves education and eventual support from a solid political base. The industry has not performed well in this area. The framers of the U.S. Constitution provided ample safeguards against creating laws willy-nilly. They made sure that without the support of a solid majority, a bill was nearly impossible to pass. Congressional procedures have the effect of wearing down extreme positions. The votes are simply never enough. This process tends to move radical or reactionary policy ideas toward the center, so the outcome of legislation looks gray, rather than black or white. The administration's health care initiative, for example, recently became unraveled as rhetoric was reduced to specific legislative proposals. As the gray tones of a nebulous concept of health care reform became black-and-white provisions, support eroded.

One key political point will affect the farm bill: President Clinton was elected without having a majority of the popular vote. The lack of majority support has translated into down-to-the-wire votes on each major piece of legislation the White House has backed. It is difficult to imagine this President going directly to the people, as some of his predecessors have done, to seek support for one or another idea. For issues like agricultural policy that have never been part of the Clinton legislative program, the administration is unlikely to take or hold strong positions.

WORKSHOP SUMMARY

Bob Yonkers, Pennsylvania State University
Hal Harris, Clemson University
Joe Outlaw, Texas A&M University
Fran Howard

By far the topic that generated the most concern among workshop participants was federal order pricing. The main frustrations were the speed of the administrative decision making process, a lack of means for private handlers to forward contract for milk supplies, and class III/III-a pricing. The appropriate role of government in federal dairy policy, along with international trade and market development, ranked a distant second, while market stability and environmental regulation lagged further behind yet.

The various groups offered a wide range of solutions to the problems of federal order pricing. Several groups and many participants acknowledged that inequities within the system have created divisiveness among regions of the nation. Some thought that because of that very divisiveness, federal order pricing should not be tackled by Congress in the upcoming policy debates. Others disagreed. This division among workshop participants illustrates just how difficult it will be for the industry at large to solve its problems.

The Problem of Pricing

Much frustration was voiced about the delay in USDA's recent recommended decision for the Minnesota-Wisconsin Price Series replacement. Even federal and state regulators voiced concern regarding the process. "All of the i's have to be dotted and all of the t's have to be crossed" at several levels of government, noted one regulator. The slow pace of USDA, however, has not only frustrated the industry, but also has intensified the view among some that perhaps the industry would be better off without the order program. "Programs like that we don't need," said one processor. "Waiting for the M-W. Waiting for class III. People under that program don't need a market administrator. It's not efficient for consumers." Another participant went so far as to suggest that the order program be suspended for 18 months to evaluate its worth. Even though four of the seven groups discussed eliminating the federal order program, not one concluded that dismantling the program would help solve the problem of pricing.

"The Midwest is saying 'We need to look at the entire pricing system,' " noted Economist Bob Cropp, University of Wisconsin, who spoke at the conference. "I don't think we have kept it up to date." Cropp's sentiment was echoed by all seven discussion groups during the workshop portion of the conference. Four of the groups chose pricing as the most compelling issue facing the industry, two ranked it second, and one placed it third.

The failure of USDA to make a timely recommended decision for an M-W replacement was made even more acute by the solutions developed at the workshop to the problem of class III/III-a pricing. Although the M-W was discussed by nearly all of the groups, not one suggested a competitive A/B price like that favored three years ago at the national hearing. Solutions offered by this group were far more geared to the rapid changes occurring in today's industry and took into account the Midwest's ongoing frustrations. In other words, the group questioned whether the M-W was worth fixing. "Something has to come after the M-W," said one participant. "The industry has to move to something else."

Two groups suggested decoupling class I and class III prices and using a standard, national class III price. Two other groups suggested using product price formulas and two recommended eliminating or revisiting class III-a pricing. The group that suggested eliminating class III-a pricing also recommended implementing market balancing payments. Other suggestions were to eliminate class III pricing altogether, deregulate a region, such as the Upper Midwest to allow a larger volume of milk to set the class III price, and using a national standard price.

Some groups chose not to focus on class III/III-a pricing alone, but rather tackled a much broader topic—minimum pricing. "No one knows what the industry would be like without minimum pricing, without a

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class III price," said one analyst. Four groups discussed eliminating minimum pricing entirely, with two of those groups concluding that doing so would help solve some of the pricing problems facing today's industry. Eliminating federal order minimum pricing was viewed as a way to allow non-cooperative handlers a means to more favorably compete for milk by allowing them to secure milk supplies in advance, thus eliminating some of the price uncertainty they face.

Regionalism as a matter of pricing was discussed by several of the groups. Two suggested that class I differentials be revisited and that the price/distance relationships be evaluated—an issue Cropp told participants would not die in the Upper Midwest. One group said pricing should be kept separate from the upcoming policy debates. Regionalism has so divided the industry that reaching consensus is highly unlikely, this group argued. However, two other groups said regionalism has to be dealt with in the farm bill, or regional differences will only intensify. The regional pricing challenges facing the industry are as complex as the solutions are diverse. In the words of one participant: "We have one region crying for higher prices, while another is growing that doesn't need them."

Government's Role in Policy

Two groups chose the government's role in dairy policy as the most pressing issue facing the industry, while a third said it was the second most important issue. The two groups that actually developed objectives for dairy policy approached the topic differently, with one developing broad objectives and the other more concrete goals. The group that took the narrower approach said the farm program needs to be consistent with government trade objectives. Rural initiatives should be developed to first help farm families, and secondly small farms. Finally, this group thought "green payments" should be issued to producers who comply with waste management laws, a recommendation that follows the suggestion made by a conference speaker.

Economist Ron Knutson, Texas A&M University, strongly recommended green payments as a policy option for the 1995 farm bill. Green payments, or government subsidization for compliance with environmental regulations or waste management laws, Knutson said, is legal under the General Agreement on Tariffs and Trade (GATT), and the dairy industry needs to determine a way to put subsidies into the form of green payments. "That's what the crop people will be doing," Knutson noted. Green payments undoubtedly will be incorporated into the 1995 farm bill. "It's just a question of who will get them," he said, and whether they will apply to environmental practices or investments made prior to the '95 bill.

The other group took a far more theoretical tack toward developing the goals and objectives of dairy policy. This group thought dairy policy should promote efficiency and orderly marketing, or at least, not discourage it. Policy should also protect the industry from economic shocks, contrary to recent policy changes, and promote market innovation, while at the same time assuring adequate supply at prices reasonable to producers and consumers. Although it's not the government's role to assure reasonable prices for dairy products, it is the government's responsibility to promote adequate demand through product research and market development, the group decided. Policy should also facilitate private action, advance farm performance, and promote equity across regions.

Trade & Market Development

A close second to the government's role in policy, international trade and market development was the issue of third most concern discussed at the conference. All seven groups chose trade or international market development as a priority issue, but not one ranked it as the No. 1 issue facing the industry. Three ranked it second and four placed it third. A lack of information among participants regarding GATT and its potential impact on the U.S. dairy industry was apparent in the discussions, and acknowledged by a Canadian participant. Not surprisingly, it follows that several groups thought the government needs to assist the industry by supplying better international market data and forecasts for potential market impacts of the new trade agreements.

Speaker Andrew Novakovic, Cornell University economist, told participants on the first day of the conference that by some estimates world prices for milk and dairy products will increase 30–40% by the year 2000. "As soon as this happens, there will be a search for substitutes," he said. Because dairy products are highly elastic (sensitive to changes in price), lower-income sectors of the population will look for food alternatives and market opportunities will occur in pockets of high-income consumers within nations. For example, he said, high-income consumers in Mexico "will look for quality. That's the angle we need to pursue." Consistent

with Novakovic's recommendation, participants were not sold on the idea of an export board used to sell commodity products overseas, but rather thought U.S. exporters would do better focusing on developing markets for value-added products. Only two of the seven groups thought an export board would help develop international markets.

A combined U.S. subsidy limit of Dairy Export Incentive Program (DEIP) sales and government-to-government Commodity Credit Corporation (CCC) sales that will equal only 1%t of 1993's total production by the year 2000 has put the United States at a severe disadvantage to the European Union (EU), noted Washington-based economist David Dyer, another speaker at the conference. In contrast, the EU still will be able to subsidize 12% of its milk production by 2000. "The U.S. has nothing to lose by advocating no more subsides," Dyer argued. Yet, only one group suggested that GATT negotiations be reopened to try to cut EU subsidies, and not one group recommended that all subsidies be eliminated. Access to the Canadian market, however, was of major concern among groups as was access to other nations, but gaining access to Canadian consumers took precedence. "It does no good to talk about opening up markets in Europe if we can't reach an agreement with our northern neighbor," noted one participant.

Dyer also told the group that the United States has been viewed as a fickle partner in trade. U.S. exporters have been in and out of international markets, waiting for the government to allocate DEIP sales. EU nations, in contrast, have been busy building long-term relationships that will carry them for some time to come. Despite that strong and well-accepted statement, only one group listed developing long-term relationships as a solution to the potential impact freer trade will have on the U.S. dairy industry. Other solutions offered to minimize the domestic impact of the new trade agreements included government development of international markets, using quality as a marketing tool, implementing stronger import rules, and finding an alternative to DEIP that is consistent with GATT.

Market Stability

Ever since the government began to reduce the support price in 1985, market stability has become an ever increasing challenge for both processors and producers. In any one year, the M-W from high to low has fluctuated by as much as $3.95 per hundredweight, according to Cropp. A support price of $10.10 for 3.67% fat milk does little, if anything, to stabilize prices, he added. Dyer took an even dimmer view of the support price program by saying it has insulated the industry from inevitable change. The hidden costs of the program, he said, have been high, especially in terms of U.S. competitiveness in international markets. While the U.S. dairy industry was dumping surplus products on the government, he added, "our competitors abroad were developing an extensive and sophisticated marketing network around the world."

Only two groups chose market stability as a priority issue, however, one put it first and the other third. Neither group thought raising or eliminating supports were long-term solutions to current price instability. Both groups, however, said a lack of sufficient and timely data is a major cause of price instability and that better and more timely data would help stabilize prices by reducing overreactions to market changes. Production controls also were not viewed favorably by these groups, but use of forward contracts, a self-help program, and better use of the Coffee, Sugar & Cocoa Exchange dairy contracts through increased speculator investment were considered solutions to price instability.

Environment

Two groups placed increasing environmental regulations among the priority issues, one placed it second and the other ranked it third. Participants viewed increasing environmental regulations as a cost and equity issue, not as a problem in itself. In other words, they did not think solving the problem was a matter of stopping or reducing regulation—similar to the way some producers view the issue—but rather a matter of getting the job done in the most equitable and least expensive way.

The group that chose environmental regulations as its second priority issue solved the problem by saying, "The industry needs to improve its interaction with society and place more importance on societal values and preferences." The other group approached the issue from a more internal perspective and developed a plan of action for the industry. This group thought the industry should develop and propose standards rather than wait for environmental interests to develop provisions for the dairy industry—a stance consistent with the recommendations of two conference speakers. Environmental standards also need to be uniform across states and regions to promote equity

within the industry. To accomplish this, the group suggested using a regulatory forum similar to the National Conference on Interstate Milk Shippers.

Farm Bill

Only one group actually defined a dairy title for the 1995 farm bill. This group thought an extension of the 1990 farm bill with only minor adjustments was likely and that all pricing issues need to be handled outside the context of the '95 bill. In contrast, the group said export/import and international market orientation needs to be addressed within the bill, but that budget constraints would ultimately define the bill's parameters. Dairy must also take an active role in developing conservation and environmental provisions. Interestingly, all of the conclusions—except one—were based on recommendations given by conference speakers. Despite Cropp's warning that the Midwest would address its pricing concerns within the upcoming policy debates, this group thought pricing issues were too divisive to be addressed by Congress.

Production Shifts

The changing structure of the dairy industry and the shift of milk production west was of concern to all seven groups. Despite a presentation given by economist Mark Stephenson, Cornell University, that showed a close correlation between population movement and milk production shifts over time, workshop participants viewed some of the production shift west as an issue of policy. "I'm not convinced that regional shifts in milk production represent any real policy distortions," Stephenson said. "Population shifts appear to explain much of the change in national supply."

Still, Section 102 of the 1990 farm bill was raised as an issue by two groups and regional pricing was discussed by several, with two recommending that class I differentials be revisited. Some participants even thought that price regulation was so distorted that the industry would be better off deregulated. Others were not so much concerned with current regulation, but rather sought to develop ways in which the industry could help facilitate adjustment to a rapid structural change, both in terms of where the industry is locating and the shift to larger, intensively managed farms.

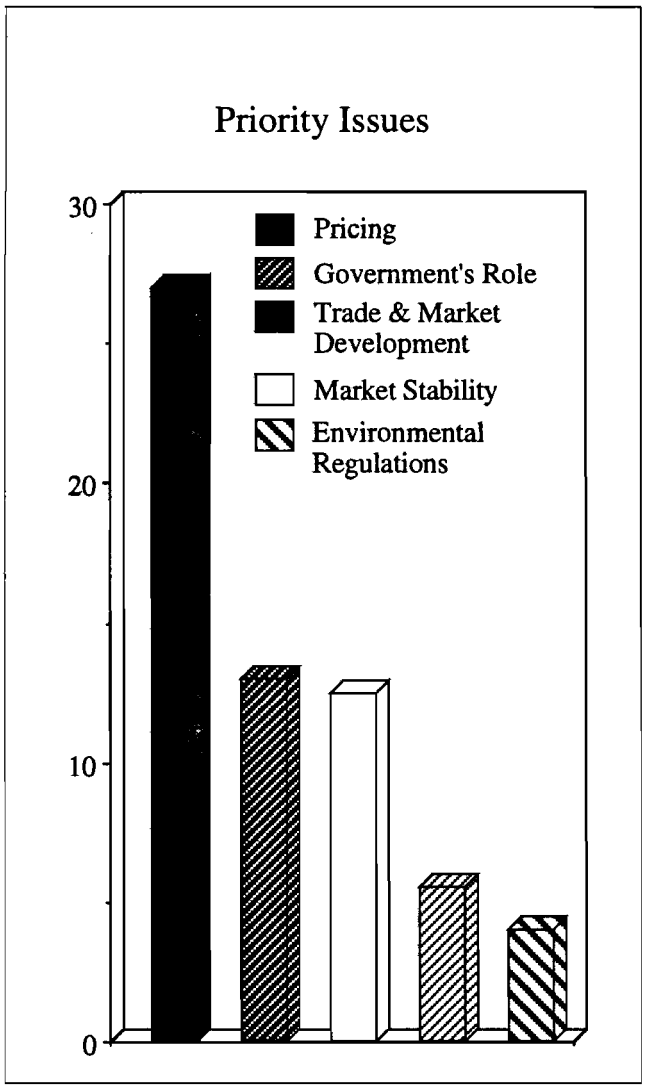
Conclusion

Several conclusions can be drawn from the workshop portion of the conference. First, and perhaps foremost, the economists and policy analysts who attended the conference were frustrated with USDA's inability to make timely recommended decisions regarding pricing. This frustration has led to even less acceptance of current price regulation. Furthermore, the solutions to the current problem of class III/III-a pricing problems developed at the conference were far more reflective of a rapidly changing industry than USDA's recent recommended decision for an M-W replacement. The view that regional pricing is a problem that needs to be faced also appears to be gaining support.

Moreover, by choosing the appropriate role of government in policy as the most important issue facing the industry, two of the groups appeared to be saying that the entire purpose of the dairy program needs to re-evaluated, or at least better understood. Most of the solutions developed to industry pricing issues lead to further deregulation regardless of the fact that recent steps toward deregulation have created more volatile markets. Price instability—often thought of as the industry's most pressing problem—actually received much less attention than other issues. What participants wanted most to deal with market instability was better and more timely market data—not more regulation.

From the trade discussion it was apparent that participants needed more information than they currently had in order to even define and develop solutions to the potential impacts freer trade could have on the industry. This lack of information may be one reason that trade ranked lower in priority than the more familiar topics of pricing and government's role in dairy policy. Participants made their requests for more information openly by asking for government assistance with data and forecasts. The tone of the trade discussions bordered on pessimistic. Despite an ongoing push by the National Milk Producers Federation for a self-help program that includes an export marketing board, most workshop participants concluded that an export board to help sell commodity products overseas was not the best long-term approach to develop international markets. A far more advantageous strategy, these economists and analysts said, would be to develop markets based on quality and value-added products.

Overall, the tone of the meeting was one of acceptance. Acceptance that the industry cannot control the course of current events, including a move toward a global market, increasing environmental regulations, fewer funds delegated for farm programs, and the changing face of the U.S. dairy industry. Participants of the workshop in general were more concerned with how to facilitate those changes than with stopping the inevitable.


Priority Issues
30
20
10
0
Pricing
Government's Role
Trade & Market Development
Market Stability
Environmental Regulations

GROUP #1

Facilitated by Andrew Novakovic, Cornell University

Group No. 1 was the only group to pick four priority issues. The group was well represented by the various sectors within the industry, but not by region. Regional representatives were from the Northeast and Midwest.

As its top priority issue, Group No. 1 chose the objectives and goals of federal dairy policy. The issue was brought up and chosen because one person new to the industry did not understand the "why's" of federal dairy policy. As other participants tried to articulate the objectives, group members mutually agreed that, indeed, the industry ought better articulate and understand the goals and objectives of federal dairy policy.

Federal dairy policy should promote efficiency and orderly marketing, or at least not discourage it, the group said. Also, policy should protect the industry from economic shocks. "Policy has been moving toward promoting economic shocks. At some point, shouldn't the goal be to reduce economic shocks?" argued one participant. The government also should promote market innovation, or at least not discourage it, and work to assure adequate supply at prices reasonable to both producers and consumers. At this point, a participant suggested that assuring adequate demand also be a goal of federal policy, which set off an intense discussion.

"Why is it the fed's responsibility to guarantee a market price for your product," said one group member. Another responded with, "If you talk adequate supply, you have to talk adequate demand, or let's just take the whole issue (of supply and demand) off the table." The discussion then turned to whether it was the government's role to assure adequate demand, or allow the industry ways in which to develop programs that expand markets. The group decided that policy should promote adequate demand by encouraging both market and product research development. Finally, the group said policy should help facilitate private collective action and promote equity across regions and markets. While farm performance is an issue policy can address, farm structure is not.

The group's No. 2 issue was the General Agreement on Tariffs and Trade (GATT) and international trade in general. Participants decided that to remain competitive in world markets the industry needs to expand export markets, while making internal adjustments to export opportunities, and exploit GATT loopholes.

In terms of expanding export markets, the group suggested that the industry coordinate export marketing activities and that exporters—including the government—develop long-term, committed relationships with international buyers. To accomplish these goals, however, the U.S. government needs to assist the industry by providing international market information and foster market development.

The group saw access to international markets as a definite problem. "Forget the Northeast compact. Let's guarantee supply into Canada," said one group member. Access to the Canadian market was viewed as essential. "It doesn't do any good to talk about opening up markets in Europe if we can't reach an agreement with our northern neighbor," noted another participant. An effort to obtain market access to other nations was suggested as well.

As a way to exploit GATT loopholes, the group suggested that the industry exploit the use of a GATT-legal class IV export program. During the discussion, however, it became apparent that the group lacked adequate information regarding GATT provisions and what will be considered "legal" under the new trade agreement.

Federal Milk Marketing Orders, including pricing, pooling, and the administrative decision making process—along with the varying impact those regulations will have on regions—was the group's third most important issue. Due to time constraints, however, the group summed up its pricing discussion by asking: "How do we justify or establish what prices should be?"

As mentioned earlier, Group No. 1 chose a fourth priority issue: increasing environmental regulations at both the farm and plant level and the resulting impact those regulations will have on regional production

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costs. This issue ranked a distant fourth and was chosen only on the facilitator's insistence that the group choose four issues. Again, participants did not have time to fully address solutions, but did say the industry should accept the reality of increasing regulation and strive to develop cost-sharing mechanisms.

Several problems were identified and discussed that did not make it to priority status. Those issues fall under one of four categories: public perception and consumer demand; processing; policy and industry structure; and education. Problems of public perception and consumer demand were: animal care and welfare; a need to identify, counteract, and take advantage of consumer trends; and lack of coordination between processor and producer promotion programs. Problems areas in the realm of processing were: food safety; impact of increasing yields, coupled with the lack of development and utilization of new technologies; the need to market milkfat in non-food industries; and lack of uniform product identity standards. In terms of education, the group saw a need for more funding of research and education and a lack of industry mechanisms for dialog and discussion.

In the broader category of policy and industry structure, the group identified four problems. First, some participants thought policy should facilitate farm exits and entry. Second, the necessity of the price support program was questioned. Third, price enhancement through the creation of interstate dairy compacts was considered a threat. And finally, the changing structure of the industry has unequal and negative impacts on regions and rural communities.

Several comments made by participants of this group concerning regional pricing and cost of production are worth noting. First one participant said: "I'm waiting for western dairy producers to come to the Upper Midwest and say, 'Wow, there's $3 more that I can get for my milk.' " Ironically, another noted a short time later that "We have one region crying for higher prices and another growing that doesn't need it." The policy and regulation underlying these issues were among the most discussed and controversial at the workshop, reflecting an industry-wide challenge.

Priority Issues

1. What are the objectives and goals of federal policy?
    - Promote efficiency and orderly marketing, or at least not discourage it
    - Protect the industry from economic shocks
    - Promote market innovation, or at least not discourage it
    - Assure adequate supply at prices reasonable to producers and consumers
    - Promote adequate demand by encouraging both market and product research development
    - Facilitate collective private action
    - While farm performance is an issue, farm structure is not
    - Promote equity across regions and markets

2. GATT/Trade
    A. Expand export markets
        - Coordination of industry export marketing activities
        - Develop long-term, committed relationships with international buyers
        - Government assistance in providing market information and market development
        - Push for market access of other countries, not acess to U.S markets
        - Access to the Canadian market

    B. U.S. reaction and adjustment to freer trade
        - Internal adjustment to GATT opportunities

    C. Exploit GATT loopholes and opportunities
        - Exploit the use of a GATT-legal class IV program

3. Federal Milk Marketing Orders: pricing, pooling, and administrative processes, plus regional impacts
    - How do we justify or establish what prices should be?

4. Environmental improvement at both farm and plant level and the resulting regional impact on cost of production
    - Accept reality: go for cost-sharing
    - This area needs lots of thought

All Issues:

Federal Orders
- Pricing (class I, M-W, class III-a
- Pooling
- Administrative Process

Expand Export Opportunities
- What are policy goals/objectives?
- Pricing of new products: intermediate, and/or new product forms. (e.g. dry solids-wet solids)
- Order pricing a deterrent to exporting certain products.

Impacts of yields increasing
- Development and utilization of technologies

GATT adjustments
- Implementing legislation
- domestic/internal responses

Improve export marketing (management) skills

Animal care/animal welfare

Current CCC assessment, especially as supply management tool and implications for "GATT legal"

Push marketing of milkfat into alternative uses

Policies to facilitate
- Transitions (farm exit/entry)

Price support program
- Can we live without it?

Environmental Improvements
- Farm level
- Plant level

Environmental Taxes
- Livestock unit taxes
- Discharge waste taxes

Food safety
- Antibiotics (*E. coli*)
- Pesticides

Interstate dairy compacts
- Price enhancement

Regional dispersion of plant milk cost and "mailbox price"

Funding for research and education

Ability to produce at low cost; dispersion of cost of production

How environmental regulations impact cost of production, regional or other competitive advantages

Consumer trends
- identify
- counteract
- take advantage of

Impact of changing dairy sectors/regions on rural communities

Coordination of producer and processor generic advertising and promotion

Product identity standards

Industry et. al. mechanisms for dialog, discussion, and research.

GROUP #2

Facilitated by Robert Jacobson, The Ohio State University

Participants in Group No. 2 focused quickly on problems in federal order pricing. Discussion was intense, but only in terms of the degree of change required not the need for change. The group concluded that the government's role in pricing is flawed in its cumbersome decision making process, especially in long-delayed federal order decisions.

Two opposing views developed within the group. The first side wanted radical reform in federal order pricing, primarily to deal with the issues facing the Upper Midwest. This side went so far as to suggest that the federal order program be suspended for 18 months to determine if the industry would be better off without it. The other camp acknowledged that the federal order program needs to adopt significant change, but thought changes should be made through the more conventional hearing process.

A long discussion as to whether the order program was necessary ensued. "At some point we have to decide if we are going to keep the federal order program. And, if so, how?" said one participant. Another supported retaining the order program because it provides the industry a framework in which to work, especially when implementing change. "Retain and review, or retain and restructure?" was the next question. "It's not just review," responded one participant. While another stated that "the problem with the federal order system is that it is so ingrained in everyone we can't envision an industry without it."

The group finally agreed that a national commission on milk pricing and milk price regulation be appointed to evaluate the federal order program. The commission would be charged with five tasks: examine the consequences of eliminating federal order minimum pricing; review and examine the need for classified pricing; review the purpose of class I differentials; consider the potential for regional or national pooling; and, finally, evaluate the administrative decision making process. The commission should be required to complete its evaluation of federal order price regulation within one year, the group said, with a national public hearing held shortly thereafter to review the findings. To guarantee that this process be completed, the group voted to make it a provision of the 1995 farm bill.

This group's other priority issue was international trade and its main concern was trade with the nation's northern neighbor. The only Canadian representative in the group expressed surprise at the low-level of information other group members had concerning the impact that the General Agreement on Tariffs and Trade (GATT) would have on the U.S. dairy industry. Participants voiced concern regarding the potential for increased competition between two nations and suggested the possibility of a consolidated Canadian/U.S. "national" pool.

To deal with the Canada/U.S. dairy trade standoff, group members recommended that a process be established in both countries that would permit a portion of the milk supply to move across borders at world market prices. To accomplish this, national subsidies could be established, such as optional quota in Canada and a class IV, or export price, in the U.S. Uncertainty remains, however, whether either optional quota or a class IV price would be GATT legal, and whether Canada would even allow such a process to occur.

Other problem areas that were defined by the group, but which did not receive priority status can be classified into four main categories: demand; supply; environment; and education. In the area of demand, the group acknowledged both a need to expand U.S. exports of dairy products and the fact that dairy products increasingly compete with other sources of fat and protein in the diet. Supply was discussed only in terms of how to control it, with management options defined as either through price, program, or vertical structuring.

In terms of the environment, the group suggested developing market-oriented plans to address environmental concerns, but was unsure how to incorporate environmental changes into the structure of the dairy industry and still remain competitive internationally. Coordinating efforts among environmental interests and the dairy industry to develop environmental regulations for dairy was also suggested, a stance consistent with recommendations made by conference speakers.

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One participant thought the industry's educational focus needs to shift toward a market orientation and away from government subsidization. Of concern to another was the apparent lack of information and limited innovative thinking that producers and processors have regarding alternative price and policy options. Finally, on unrelated issues, the opinion was voiced that future dairy policy needs to address the structural problems that will result from expanded trade, and the group identified interstate compacts as a problem rather than a solution in milk price regulation.

Priority Issues:

1. Government's role in pricing is flawed
   A. Inefficient decision process in Federal Milk Marketing Order Program
   B. Delayed DEIP allocations
   C. Review, study, and evaluate Federal Milk Marketing Order Program (maybe a national commission) to look at:
      - eliminating minimum pricing
      - examine classified pricing
      - purpose of Class I differentials
      - pooling, maybe regional or national
      - administrative decision process

   Group concludes that written into 1995 farm bill should be the requirement that a national hearing be held within one year

2. Trade
   - Establish a process in Canada and the U.S. that permits a portion of the milk supply to move across borders at world market prices under national export subsidies
     * Canada = optional quota, for example
     * U.S. = class IV price, for example

All Issues:

What is the appropriate role of government in
- Pricing?
- Consumer demand?
- Environment?
- International trade?
- Structure, including Federal Milk Marketing Orders?

Expanding U.S. exports of dairy products

Have agricultural policy address restructuring problems caused by expanded trade

Develop market oriented plans to address environmental concerns

Comprehensive reform of pricing

Major order consolidation, maybe one order

Canada/U.S. consolidated national pool

Canada/U.S. increased competitiveness among dairy producers and processors

Reduced product differentiation in both industry and government

Supply exceeds demand; should production be controlled by price or program?

Review of classified pricing, including export class

Vertical structuring to control production

Consumer demand; how dairy products compete with other sources of fat and protein

Coordination of dairy with environmental issues

Changing the educational focus away from historic program and toward market orientation

Review the Federal Milk Marketing Order Program decision making process and speed it up

How do we incorporate environmental changes and remain competitive?

Price Support Program and Federal Milk Marketing Order Program impede change in the industry

Interstate compacts are a threat

Producer and processor ignorance of alternatives and limited innovative thinking

GROUP #3

Facilitated by Robert Cropp, University of Wisconsin

Of all seven groups, Group No. 3 appeared to reach consensus most easily and efficiently. The group was represented well across sectors of the industry, but not across regions, with western representation lacking. Members not only agreed on which issues were important, but also on which three should be given priority status. The main disagreement arose when trying to rank the importance of the three priority issues.

"The purpose of the farm program," broadly speaking, was chosen as the No. 1 issue by members of this group, who developed concrete objectives for the nation's farm program. First, the group concluded that provisions in the 1995 and future farm bills need to be consistent with international trade objectives. To accomplish this, the dairy industry needs to forget about price enhancement at the farm level and focus on expanding international markets. The group also thought "green payments" ought to be incorporated into farm legislation to compensate producers who comply with waste management regulation. Funding of rural development initiatives to create jobs and services in small communities is needed to first help rural families, and second to help "small farms." Moreover, the group concluded that states, not the federal government, need to address structural changes at the farm level.

The "need to rationalize milk pricing" was the No. 2 priority issue of the group and an area where disagreement arose among group members. Section 102 of the 1990 farm bill was a point of dissension despite the absence of California representatives, and one area where the group could not reach consensus. "102 should be shot. I don't think it's going to do what it's supposed to do," said one Midwest participant. Another Midwest analyst replied, "I disagree. I want it written into the next farm bill."

As in all groups, a discussion evolved whether government should be involved in pricing at all, but the group was a little softer than outright suggesting that federal orders be eliminated. "The government could be separated in terms of pricing, but totally involved in terms of quality. You could have government in all of it or only in a portion of it," argued a federal order regulator. Group No. 3 was one of only three groups that did not list "eliminating federal orders" as a problem issue facing the industry.

The most interesting solution—in light of the fact that no Californians were present—offered by this group to reduce current pricing inefficiencies was a rendition of "If you can't beat 'em, join 'em." The group decided the industry should consider decoupling class I and class III prices and adopt a California-type pricing system. However, participants warned that doing so would "have implications for both the price support program and current make allowances," both of which likely would lower farm-level prices.

Another solution offered by the group to reduce current problems in pricing was to speed up administrative recommendations and procedures for change in the federal orders. The group voiced two other opinions related to pricing. First, they said, a national hearing to address problems in pricing is not recommended because it will be extremely difficult for the industry to reach consensus. And second, rigorous evaluation would remedy most, if not all, of the pricing issues, but both industry and government needs to quit dawdling and speed up the process for change.

As its third most important issue, Group No. 3 chose international trade, and developed concrete plans for action and strong policy stances. First, the group said, the U.S. government should insist on minimum access to the Canadian market. For the industry, the group recommended that it consider an export board independent of a "self-help" proposal, utilize all tools that are legal under the General Agreement on Tariffs and Trade (GATT) to boost U.S. competitiveness, and take advantage of quality standards as a way to develop international markets. Plus, the industry should try to acquire federal funds in the context of the '95 farm bill to be used for international market development. Finally, this group wanted USDA to conduct a study to determine the costs of milk production for major milk-producing nations and to project world milk prices and U.S. milk prices over the next several years. USDA, the

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group said, needs to answer the question: would the world milk price level the international playing field?

Other less pressing issues defined by this group reflected concerns about declining growth in consumption of dairy products and structural changes within the industry, as well as the impact that consumer attitudes have on those issues. The group thought that expanding demand when consumer attitudes are negative regarding rBST and other technologies could be a challenge, as could overcoming the adverse publicity that these new technologies generate. The industry also needs to work on improving quality standards, both in raw milk and finished dairy products, and help facilitate structural change within the industry, including those changes brought about by increasing environmental regulations. A lack of solid information regarding costs of production for individual farms, regions, and the nation also creates problems, the group concluded.

Priority Issues

1. Purpose of farm program
    - Farm bill provisions need to be consistent with international trade objectives, which involves a trade off between price enhancement to producers vs. international expansion of exports
    - Environmental: subsidize waste management compliance to assist producers
    - Rural development initiatives to create jobs and services in small communities to help farm families, and secondly, help small farms
    - Some of the structural changes need to be assisted by state initiatives

2. Need to rationalize milk pricing
    - Need to speed up administrative recommendations and procedures for change in the Federal Milk Marketing Order Program
    - Because it will be extremely difficult to build consensus for appropriate change, a national hearing is not the answer. Question whether Section 102 ought to be addressed in '95 farm bill
    - Consider decoupling class I from class III and adopt California-type pricing. This has implications for both the price support program and current make allowances
    - Evaluation will take care of problems; however, we need to speed up the process

3. International trade
    - GATT: hold tight on minimum access to Canada
    - Consider an export board independent of self-help
    - Use all tools that are legal under GATT
    - Use quality standards as an international marketing tool
    - Consider federal funds for international market development in '95 farm bill
    - Need USDA to study cost of production among major world milk producers: What would be the world milk price? U.S. milk price? Would world milk price level international playing field?

All Issues:

Purpose of farm program
- Price support and income support
- Small vs. large farms
- Farm structural changes

Need to rationalize milk pricing
- Federal Milk Marketing Order Program reform, M-W
- Pricing of nonfat solids is eroding producer returns: class III-a in orders; Class 4a and 4b in California
- Section 102

Environmental regulations

Demand expansion
- rBST and other technologies
- Consumer attitudes

Improving quality standards as a marketing tool
- Farm to consumer
- Plant to consumer

International trade
- GATT access to Canada
- Strategies for competitiveness
- Relative values of milk
- Proactive on exports; export board

Identify costs of production for individual farms and nationally

Overcome adverse publicity from rBST and the impact of other bio-technologies

Facilitating structural change

Price and income support

GROUP #4

Facilitated by Mark Stephenson, Cornell University

Members of Group No. 4 had no problem identifying issues and, in fact, identified 31 in all. By the end of the session, however, it was clear that pricing dominated the participants' thinking and was the foremost concern of the group.

Members of this group represented a cross-section of the dairy industry, with representatives from various regions, including the West, East, and Upper Midwest, as well as from sectors within the industry, including producers, processors, regulators, and government officials. Representatives from different sectors within the industry reached agreement more readily than did representatives across regions. In other words, disagreement was more heated among representatives from different regions than it was among sectors.

This group followed a slightly different procedure than other groups, and thus their priority issues were more narrowly defined than those of other groups. Once identified, individual issues were not categorized as in other groups. When choosing their top-3 priority issues, participants then decided to identify three major categories from which to choose one priority issue each. On the recommendation of the facilitator, however, the group agreed to chose priority issues across all categories as well as one from each of the top-3 categories. Interestingly, the top-3 issues were identical whether chosen across all issues or the three main categories.

For its No. 1 issue, Group No. 4 chose "pricing milk for manufactured products." This was the most narrowly defined issue chosen by any of the groups, and thus, was the one issue of the entire workshop that solicited the most solutions. All of the groups discussed pricing of manufacturing milk as an issue, but only Group No. 4 let it stand alone. Participants developed five alternatives to the current system of pricing milk used to manufacture class III, including III-a, products.

First, the group thought the industry could abolish regulated prices for manufacturing milk, letting local markets determine the value of class III/III-a milk. At the other extreme, the group said, the industry could use a standard and uniform manufacturing price, which would lessen those issues that currently divide the industry. Besides those more extreme positions, the group offered three other more middle-of-the-road solutions to class III/III-a pricing. Product price formulas could be used. The industry could revoke class III-a pricing, instituting market balancing payments instead to avoid the inequity that could result to the co-ops that offer market balancing services. And, finally, the group suggested deregulating a region, such as the Upper Midwest, to allow a large volume of milk to competitively set the value of manufacturing milk.

The other two priority issues chosen by this group were developing an industry with self-regulation rather than public regulation and the need to increase demand for dairy products both at home and abroad. Due to time constraints, however, the group was unable to develop solutions to its second and third priority issues.

A number of the group's pricing issues did not make it to priority status: volatility; class I differentials; economic regionalism; inequities in federal order pooling; pricing not reflective of regional production shifts; regional vs. national pricing; current price support level; and uncertainty as to whether to continue the Price Support Program at all.

One suggestion related to price offered by a participant of this group—eliminating federal order minimum blend prices—never made it onto the group's "issue list." Interestingly, though, two other groups offered elimination of minimum blend prices as a solution to current federal order problems. "Whether you're a co-op or proprietary plant, you can pay what you can afford, saying that co-ops and processors are equal," said the participant who offered the suggestion. Another responded, "You are eliminating classified pricing if you do that." The first participant then said, "No, I'm not. Milk would account to the pool for pricing, but processors would not have to pay the minimum blend price. I draw from the pool, but I don't have to pass it on to producers." A discussion then ensued as to whether eliminating federal order minimum blend prices would mean an end to classified pricing. The group could not reach consensus, so the suggestion was dropped.

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Three regulatory issues also did not make it onto the group's priority list. Those issues were major time delays in the federal order decision making process, legislative solutions to problems rather than administrative solutions, and the lack of information among legislators regarding the importance of food and agriculture to both the nation's well-being and the national economy.

Under markets and international trade, this group identified nine problems: the General Agreement on Tariffs and Trade (GATT) is a threat to the domestic industry; inability of government to enforce current trade agreements; the need to retool the industry for export channels; the need to define trade goals as international market development rather than surplus disposal; the need to coordinate market expansion with promotion efforts; the unsolved processor/producer dispute of raising nonfat solid standards of fluid milk in the federal orders; whether to eliminate federal orders; the need for better surplus handling mechanisms; and government purchases for domestic and international markets.

Miscellaneous issues defined by this group included the threat from anti-animal and anti-food groups, equity issues across farm size, and environmental concerns regarding clean water and waste management.

Priority Issues:

1. Pricing milk for manufactured products
    - Abolish prices for manufacturing milk
    - Product price formulas
    - Deregulate a region (M-W)
    - Eliminate class III-a pricing
    - Institute market balancing payments
    - Use standard manufacturing milk price
2. Industry regulation vs. public regulation of dairy industry
3. Increase demand, both domestically and internationally

All Issues:

Time lag in the Federal Milk Marketing Order Program decision making process

Price volatility

New basic formula

Pricing of milk for manufactured products

Increasing demand, both domestic and international

Role of government in industry

Surplus handling mechanisms

GATT is a threat to domestic industry

Class I differentials and basic formula price

Legislative vs. administrative solutions

How to globalize trade

Economic regionalism

Federal order pooling vs. pricing issues

National pricing changes to reflect changes in production

Enforcement of international agreements

Raising nonfat solid standards of fluid milk

Elimination of federal orders

Coordination of market expansion and promotion efforts

Structural change at both the farm and processor level

Anti-animal and anti-ag/food groups

Industry regulation vs. public regulation of dairy industry

Environmental concerns
- Clean water
- Waste

Regional vs. national pricing

Equity issues across farm size

Educating legislators about importance of food (agriculture)

Retooling industry for export channels

International market development vs. surplus disposal

Component pricing

Price support level

Whether to continue price support program

Government purchases for domestic and international programs

GROUP #5

Facilitated by Larry G. Hamm, Michigan State University

Participants in Group No. 5 unequivocally focused their full attention on the pricing issues at hand, but the make-up of the group prohibited members from reaching consensus. Representatives from a large national bottler and a national farm advocacy organization created a group setting in which opinions were often polar opposites.

The group's No. 1 priority issue, to "rethink or reengineer the milk pricing system," could not be resolved. The closest members came to developing solutions to the pricing problems they defined was to recommend that pricing issues "not be incorporated into the 1995 farm bill because there is not a consensus point within the industry." The pricing issues defined by members of this group were similar to those chosen by other groups, such as the need to reconcile federal order pricing with California state pricing, develop a workable replacement for the Minnesota-Wisconsin price, think about decoupling fluid and manufacturing markets, and consider consolidating or eliminating federal orders.

USDA's recent delay in releasing its recommended decision for an M-W replacement was also a point of frustration for the group as a whole as well as among members. "Programs like that we don't need—waiting for the M-W, waiting for class III. People under that program don't need a market administrator. It's not efficient for consumers," said one participant. A federal order employee responded by saying that even though processors may not see a gain from the order program, it definitely benefits producers.

Consensus was reached more easily on the group's remaining two priority issues. "The relationship of the U.S. dairy industry to global changes" was the group's No. 2 issue. Participants concluded that first the industry needs to better understand international trade issues, and then respond accordingly by developing export markets. Although trade rules are currently stacked against the U.S. dairy industry, the group said it's not time to panic as major changes are unlikely to immediately follow implementation of the General Agreement on Tariffs and Trade (GATT). Participants also concluded that import product rules need to be reviewed and industry-wide institutions considered to implement and police exports and imports.

For its third priority issue, Group No. 5 chose environmental and animal welfare issues. Uniform environmental rules were favored, but whether to implement those rules at the state or federal level was not determined. Consensus was reached that water is the principal environmental concern and that large dairy operations, as opposed to small dairies, are responsible for a major share of water problems. "We have to equalize environmental laws. Big feedlot operations are more prone to effect ground water than the family farm in the Midwest or Northeast," noted one participant. Another agreed that "water is the key thing, and it's not cows standing in the stream creating the problem."

Group No. 5 was the only group that actually succeeded in defining a dairy title for the 1995 farm bill. Even though pricing issues will be discussed within the context of the bill, the group decided those issues should be resolved through the hearing process, not within the legislation. Whether the industry can hold onto the basic structure of the federal order program and whether it wants to continue the Support Price Program will be the two major pricing issues facing the dairy industry in the '95 policy debates.

Unlike pricing, international market orientation and import and export regulations need to be addressed within the context of the 1995 bill. The group wanted stiffer regulations for imports of low-quality dairy products and extension of the promotion assessment to apply to imported dairy products. Whether export authority can be extended to the industry and remain consistent with GATT provisions, or GATT-legal, also needs to be explored in the context of the '95 farm bill. Moreover, the dairy industry should take an active role in developing conservation and environmental provisions, and not wait for outside influences to impose provisions on the industry. Federal budget constraints will define the parameters of the legislation, but Congress likely will extend the 1990 farm bill with only minor adjustments, the group added.

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Three other issues of interest addressed by the group did not make it to priority status or into the 1995 farm bill discussion. Participants voiced concern regarding the impact export initiatives would have on U.S. dairy consumers in terms of affordability of dairy products. Also of concern was the impact other farm programs, such as feed subsidization, would have on the dairy industry. And, finally, the group said, as export subsidies are reduced, the industry needs to determine where to allocate the $250 million currently being used for Commodity Credit Corporation (CCC) purchases and Dairy Export Incentive Program (DEIP) sales.

Priority Issues:

1. Rethink/re-engineer the milk pricing system
    - This should not be incorporated into the '95 farm bill because there is not a consensus point within the industry

2. Relationship of U.S. dairy industry to global changes (GATT/NAFTA)
    - Export markets
    - Import product rules
    - Industry-wide institutions to deal with international issues?

3. Environmental and animal welfare issues
    - How the industry interacts with general citizen and societal values and preferences

Issues for the 1995 Farm Bill

GATT
- Lower quality products imported
- Promotion assessment

Do we support the continuation of the support program?

What is the industry's ability to hold onto the basic structure?

Fiscal constraints

Export authority for the industry

Will we have a "new bill" or an extension of the 1990 farm bill?

Conclusions Regarding 1995 Farm Bill

Pricing issues "should" be handled outside the context of the '95 farm bill, even though they will be discussed within the context of the bill

Export/import and international market orientation should be addressed in the '95 farm bill

Budget constraint will define '95 farm bill parameters

Dairy must be involved in conservation and environment discussion and provisions

There is a significant probability that there will be an extension of the 1990 farm bill, with only minor adjustments

All Issues:

Examination of the Federal Milk Marketing Order Program
- Within AMAA of 1937?
- Within the rules and implementation process? Problem with timing and speed of administration
- Do we even need federal orders?
- Should examination and/or changes be incorporated into the '95 farm bill?
- Federal Milk Marketing Order Program interface with GATT/NAFTA

GATT and farm bill interface
- Examination of promotion issue on imports
- Examination of phyto-sanitary issues

Export orientation: create institution for all things afforded by GATT
- Is there a need for this?
- If so, in what form?
- Self-help?
- Do we adjust current institutions or a create new one in light of GATT?

Sharpen focus in context of consumer
- Willingness and ability of consumers to pay (e.g., impact of export initiatives)

Basic formula price
- What should the government's role be?

Decouple fluid and manufacturing markets

How much burden can be placed on fluid markets?

Environmental issues
- Uniform rules; state vs. federal
- Water principal concern, but also chemical use

Effect of other farm programs, such as feed subsidization, on dairy

Effect of other non-farm programs, such as Clean Water Act and Coastal Zone Management Act, on dairy

Who and what will be traded-off in the next farm bill

How do we build coalitions?
- Inside the dairy industry
- Outside the dairy industry

The entire milk pricing structure
- Federal Milk Marketing Order Program
- State orders (California/Section 102)
- Unregulated pricing

Animal welfare/animal care issues

Where to allocate the $250 million currently used in the CCC purchase/DEIP program?

GROUP #6

Facilitated by Al Ortego, Louisiana State University

Group No. 6 was one of only two groups that chose market stability as a priority issue and the only group to make it the No. 1 issue facing the dairy industry. However, heated disagreement arose within the group as to whether market stability or federal order pricing deserved top ranking.

Market stability was defined as an issue of farm level pricing and production control. The group concluded, however, that raising the price support level was not an option and that implementing production controls is not realistic due to lack of industry support. Therefore, Group No. 6 was left with the challenge of developing solutions to limit price instability within a market-oriented dairy policy.

Group members developed three solutions to that challenge, but not without disagreement. First, they said, use of dairy contracts on the Coffee, Sugar, & Cocoa Exchange could be enhanced by enticing speculators. Next, a self-help type of program could be implemented to help stabilize prices. And finally, better market information could be provided to the industry.

However, all members were not sold on the group's solutions. "For the average co-op that sells fresh cheese, futures are unnecessary. If you don't have inventory, it does you no good," said one participant. Regarding self-help, another thought it could be used to police production, while yet another said, "I think self-help will just drive more farmers out of business faster."

For its No. 2 priority issue, this group chose the Federal Milk Marketing Order Program (FMMO) and defined three main problem issues: administrative decision making process, regional pricing, and class III/III-a pricing. In terms of the administrative decision making process, the group thought a limit of six months should be placed on USDA to publish a recommended decision following a hearing. And reducing the bureaucracy, the group added, would "help solve other federal order problems" as well.

The problem of regional pricing was defined as the current levels of class I differentials and using Eau Claire, Wis., as the single basing point. Surprisingly, this group had no participants from the Upper Midwest. However, at least one member had worked in the region in the recent past. Members of the group concluded that the industry needs to make a strong effort to reconcile its differences in this area and review the distance/price relationships of class I differentials. "Production shifts have created a need for more than one basing point," the group noted.

Because USDA's long-delayed decision on the replacement for the Minnesota-Wisconsin price series is only a temporary solution, Group No.6 developed what it thought were more workable solutions to the problem of current pricing of manufacturing milk. Stopping short of recommending repeal of III-a pricing, participants concluded that "class III-a pricing is not consistent with economic efficiency and proper resource allocation and should be revisited for long-run impacts." The other two solutions offered to the problem of class III/III-a pricing were reflective of the fact that a class I processor from the East was a member of the group. First, the group suggested that class I prices be decoupled from the M-W price—which is often higher than the true value of manufacturing milk, not only in the Upper Midwest but also nationwide—and tied to a national average for class III values. Or the class III price could be allowed to float, which would be more reflective of local markets, and pooling would be extended to only class I differentials. In effect, this would allow processors to draw from the pool, while eliminating their obligation to pay federal order minimum blend prices.

Market development was Group No. 6's third most important issue. The group first gave the promotion programs a thumbs up, then turned to international markets. This group wanted Congress to re-open negotiations on the General Agreement on Tariffs and Trade (GATT) to try to convince the European Union (EU) to reduce its level of export subsidies. Participants also thought the industry should work to find an alternative to the Dairy Export Incentive Program (DEIP) that is consistent with GATT provisions and fund a self-help type of export development program.

Overall, this group was very pessimistic about the ability of the U.S. dairy industry to penetrate foreign markets and the government's current role in develop-

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ing foreign markets. "DEIP is a joke. All we are doing is selling powder overseas instead of to the CCC. There is no development strategy," said one group member.

"I'm very pessimistic about the international marketplace. I don't think we'll break into it within the next five year," said another. A third, however, saw some hope: "We'll never be able to meet $8 milk, but if you take away EU subsidies...."

Very few of this group's problem issues either did not make it to priority status or into a solution to a problem. Issues that remained "problem issues" only were environmental challenges, an ineffective price support program, current size of federal orders, and food aid and nutrition programs.

Priority Issues:

1. Market stability: farm level pricing and production control
    - Reduce price volatility
        a. no chance of raising supports
        b. improve futures market by enticing speculators
        c. specific goal of self-help should be to provide more stable prices
        d. production controls have no support and it is not realistic to pursue at this time
        e. better market information

2. Federal Milk Marketing Order Program
    - Recommended decisions out within six months of hearing
        a. no extensions
        b. reduce bureaucracy
        c. would help solve other federal order problems
        d. political pressure
    - Regional pricing
        a. class I differentials and basing point
            * structure to conform more to economic theory
            * review distance/price relationships
            * production shifts have created need for more than one basing point
            * industry needs to make strong effort to reconcile differences in this area
    - M-W price, class III and III-a pricing
        a. recent M-W revision is temporary solution
        b. decouple class I price from M-W, but tie it to a national average price for class III values
        c. class III-a pricing is not consistent with economic efficiency and proper resource allocation and should be revisited for long-run impacts
        d. let class III price float, pooling only class I differentials.

3. Market development
    - Continue promotion programs
    - Find an alternative to DEIP that is consistent with GATT
    - Re-open GATT negotiations to get European Union to reduce export subsidies
    - Industry funding of finance export development program (a type of self-help)

All Issues:

Market development
- Domestic promotion
- International

Environmental challenges

Market stability
- Farm level pricing
- Production controls

Federal Milk Marketing Order Program
- Decision making process
- Regional pricing
- M-W

Structure of industry

Price support program
- Ineffective

Federal order price for class III
- Class III-a pricing not the best solution
- Component pricing

Industry advertisement and education

Federal order class I pricing

- Decoupling
- Geographic structure
- Order size

Self-help

Supply management

Food aid and nutrition programs

GROUP #7

Facilitated by Jerry Hammond, University of Minnesota

Group No. 7 focused heavily on the problems of current federal order pricing and developed concrete recommendations to "improve" the system, as well as adapt order pricing to a changing dairy industry. The group's No. 1 priority issue was defined as "rationalizing federal orders, state orders, and the Support Price Program."

This group took a positive approach to pricing problems by saying that the "loss of a workable manufacturing base price provides the industry with an opportunity to re-examine the nation's pricing system." Members of the group, represented heavily by the processing sector, concluded that to avoid the potential problems associated with trying to develop a replacement for the Minnesota-Wisconsin price as a mover of class prices, the industry should simply set class I and class II differentials, then pool only those differentials. This would eliminate federal order minimum prices, including the minimum blend price, and allow processors to forward contract for milk supplies. The result not only would put cooperatives and privately held processors on a more equal footing when competing for milk, but would also reduce market risk.

The group further decided that pooling over larger manufacturing areas would help reduce regional controversies regarding the current level of class prices, or Class I differentials. In the extreme, participants said, pooling could be national. The group also noted a need to mesh federal order pricing with California price regulation, but offered no recommendations.

As its second most important issue, Group No. 7 chose environmental regulations at the farm level. Participants suggested that the dairy industry develop environmental standards, rather than wait for environmental groups to propose standards for the industry—a stance consistent with recommendations made by conference speakers. Regulations should be uniform and consistent across regions of the country to reduce inequities at the farm level, the group said. To accomplish this, the industry could consider using a forum modeled after the National Conference of Interstate Milk Shippers (NCIMS). NCIMS is a biannual conference of state regulators, industry, and Food and Drug Administration (FDA) representatives. A similar environmental conference may include state, or county, regulators and representatives from industry and the Environmental Protection Agency (EPA).

The group's final priority issue was "facilitating industry adjustment to a market with greater price instability and international components." An interesting discussion regarding the need for more timely market statistics developed regarding this issue. Participants acknowledged that federal order data provides the industry with far better information than what other commodity industries have available, but in the realm of inventories, sold data is sorely lacking—creating even more price instability. "Did the cheese exchange just move 2 cents because it wants milk? It's out of inventory? Or because inventory is of the wrong form?" said one participant, describing his frustration with inventory data. "Panic shoots prices through the moon. It just gets crazy," he added.

To reduce price instability, the group suggested wider use of forward contracts—which coincides with its pricing recommendation—and better industry data on both inventories and consumption. How to reduce the even greater price instability that could result from international trade was addressed, but no concrete recommendations made. Group members were not sold on current proposals for an export board.

Other problems defined by the group that did not make it to priority status can be classified into three main areas: farm operations, marketing and international trade, and ongoing issues that impact the future of the industry. In the first category, the group saw a need for policy to address the changing structure of the industry at the farm level, facilitate improved farm management, and create better ways for producers to evaluate new technologies, such as rBST, and facilitate faster adoption of such technologies.

In the realm of marketing and international trade, this group defined the issues well, but had more questions than answers: how can the U.S. compete internationally, given its high domestic price of milk? How

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should the marketing industry respond to the use of biotechnology? And what can the industry do to resolve the conflict between international trade and domestic price instability. A suggestion was also made that marketers focus on value-added products rather than commodities to carve a niche in international markets.

Ongoing problems impacting the future of the industry as defined by this group were the continuing decline in per capita consumption of dairy products and intense regionalism that leads to divisiveness on all issues. The group questioned whether regionalism should be addressed through legislation.

Priority Issues

1. Rationalizing federal orders, state orders, and price support
    - Loss of manufacturing base price is an opportunity to re-examine entire system
    - Fixing differentials only, pool differentials, eliminate minimum pricing
    - How to mesh federal orders with California regulation

2. Environmental regulations and dairy farming
    - Industry proposed standards
    - Uniform and consistent
    - Consider form and procedures of the National Conference of Interstate Milk Shippers

3. Industry adjustment in a market with greater price instability and increased international components
    - Wider use of forward contracts
    - Better industry data, both inventory and consumption
    - Is an export board needed? If so, what form and functions?

All Issues:

Milk production and farming
- Environmental issues
- Pricing
    a. management and profit of farms
    b. changing structure of dairying
- Technology
    a. how to evaluate rBST
    b. how to change or adapt to new technology
- Price security and stability
- Improvement of dairy farm management

Markets and international trade
- How can U.S. compete internationally, given high domestic price?
- How does marketing industry respond to use of biotechnology?
- Inadequate market information
- How would industry operate in freer market?
- Products vs. commodities in export markets
- Conflict between international trade and price stability
- Marketing board or private exporters?

Dairy policy
- Declining per capita dairy consumption
- Industry adjustment to fewer or no government programs
- Regionalism leads to divisiveness on all issues; should it be dealt with by legislation?
- Challenge of a nationally coordinated pricing system
- Federal Milk Marketing Order Program
    a. base price
    b. component pricing
    c. differentials
    d. procedures

EPILOG

At the time this paper was written, nine months after the Invitational Workshop for Dairy Economists and Policy Analysts was held in Minneapolis, several changes had occurred in the dairy industry and in Congress. But has anything really changed the future of U.S. dairy policy and the dairy industry? No. The industry continues down the path of consolidation toward larger farms, larger cooperatives, and larger processors producing ever larger volumes of milk and milk products. Regional diversity of opinion as to what dairy policy should be is as strong as ever with growing factions within regions in today's national dairy market.

The political atmosphere of the nation and political makeup of Congress has changed drastically, but that is likely to have little affect on the path dairy policy will take. In the November 1994 elections, the Republicans swept both the House and Senate. Sen. Richard Lugar, Ind., became chair of the Senate Agriculture Committee. Rep. Pat Roberts, Kansas, took over the House Agriculture Committee, and Wisconsin's Steve Gunderson now heads the House Livestock, Dairy, and Poultry subcommittee. With Gunderson in charge, hope in the Upper Midwest has been renewed that someone friendly to the region's concerns is in a position to make a difference. Along with the new make up of the agriculture committees, the appointment of Secretary of Agriculture Dan Glickman could forestall any major decisions on dairy policy as all try to get a handle on the most complex of all agriculture programs—dairy. Moreover, the newly empowered Republicans are unlikely to make any sweeping changes to agriculture programs, potentially alienating their rural constituents with the November 1996 elections so close at hand.

A series of field hearings on the 1995 farm bill confirmed that the issues in the dairy industry have changed little over the past decade, with perhaps one exception: the cry for supply management has lost its poignancy as the producer segment of the industry accepts the futility of its attempts to enact such a program in a world moving toward open trade.

Most regions, the Southeast, Northeast, and much of the Southwest, generally support the status quo. Upper Midwest producers—now joined by Washington state producers—continue to sound their battle cry to "level the playing field" through changing or eliminating Class I differentials—an issue that likely will be revisited through the hearing process, not within the context of the 1995 farm bill. Likewise, other issues, such as order consolidation, a permanent M-W replacement, and how to reconcile California state pricing with federal order pricing, are likely to be handled through federal regulation, not legislation.

To further hinder change, USDA budgets and departments have been cut drastically in an effort to streamline government. The time involved in the hearing process—already a thorn in the industry's side—is not likely to improve anytime soon.

Yet, change is upon us. South American countries are being considered for accession to the North American Free Trade Agreement and the General Agreement on Tariffs and Trade was implemented on Jan. 1, 1995. Information and knowledge about market access to international markets and foreign markets, in general, is sparse in the U.S. as evidenced by participants at the workshop. Change has occurred more rapidly in the past decade than in any other in the history of the industry, but legislation and regulation have been slow to keep pace—market factors are in control.

The move away from regional dairy markets toward a national market and the fast-paced decline in dairy farms, dairy cooperatives, and dairy processors was of major concern to those who attended the first Invitational Workshop for Dairy Economists and Policy Analysts. Participants viewed the Federal Milk Marketing Program as inadequate to deal with today's fast-paced change, or at least insufficient to facilitate that change. Nearly all of those present (88%) indicated that they would be interested in attending a future workshop on the Federal Milk Marketing Order Program.

Thus, the **1995 Invitational Workshop for Dairy Economists and Policy Analysts** has been scheduled for **October 24 & 25, 1995**, in **Kansas City**. The workshop will focus on implementation of the expected 1995 Farm Bill.

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APPENDIX A. WORKSHOP PARTICIPANTS

Mr. Craig Alexander	Dairy Institute of California	CA
Mr. Edward D. Anna	Dairylea Cooperative Inc.	NY
Dr. Don Ault	Ag-Nomics Research Associates	MN
Mr. Neal Bjornson	Associated Milk Producers, Inc.	TX
Mr. Mike Brown	National All-Jersey, Inc.	OH
Mr. Silvio Capponi, Jr.	USDA-AMS-Dairy Div.	DC
Mr. Rodney K. Carlson	Milk Marketing, Inc.	OH
Mr. Paul Christ	Land O'Lakes, Inc.	MN
Thomas W. Cosgrove	U.S. Senate Agriculture Committee	DC
Dr. Thomas Cox	University of Wisconsin Dept. of Agr. Economics	WI
Mr. Nelson Coyle	Canadian Dairy Commission Policy & Program Analyst	CANADA
Dr. Robert Cropp	University of Wisconsin Dept. of Agricultural Economics	WI
Dr. Lynn Daft	Abel, Daft & Earley	VA
Mr. Jerry Dryer	The Jerry Dryer Group	IL
Nicole Dumas	Kraft General Foods	IL
Mr. David Dyer		VA
Mr. Paul Farris	Purdue University Dept. of Agricultural Economics	IN
Mr. Richard Fleming	Market Administrator Texas/New Mexico Mktg. Area	TX
Mr. William G. Francis	Market Administrator's Office NY-NJ Milk Marketing Area	NY
Mr. John Frank	U.S. House Committee on Agric. Republican Consultant & Counsel	DC
Mr. John Fridirici	Grande Cheese Co.	WI
Mr. Edward Gallagher	Market Administrator's Office NY-NJ Milk Marketing Area	NY
Marcia Glenn	Kraft General Foods	IL
Steven Halbrook	Farm Foundation	IL
Mr. Bob Hall	Upstate Milk Coop., Inc.	NY
Dr. Larry G. Hamm	Michigan State University Dept. of Agr. Economics	MI
Dr. Jerome W. Hammond	University of Minnesota Dept. of Agr. & Applied Econ.	MN
Dr. Harold M. Harris	Clemson University Dept. of Agr. & Applied Economics	SC
Mr. Monte L. Hemenover	Monsanto Company	MO

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Mr. John Hitchell	The Kroger Co.	OH
Ms. Fran Howard		MN
Mr. Stewart G. Huber	Farmers Union Mlk. Mktg. Coop.	WI
Mr. Cary Hunter	Market Administrator Texas/New Mexico Mktg. Area	TX
Dr. Robert E. Jacobson	Ohio State University Agricultural Economics Dept.	OH
Dr. Ronald Knutson	Texas A&M University Dept. of Agr. Economics	TX
Mr. Paul Kyburz	Market Administrator Upper Midwest Mktg. Area (No. 68)	MN
Ms. Mary Keough Ledman	Stella Foods, Inc.	IL
Mr. Bruce E. Lee	Hershey Chocolate Co. Commodities Operations Dept.	PA
Mr. Tom Little	Dairymen, Inc.	DC
Mr. Joseph C. Mathis	Eastern Milk Prod. Coop., Inc.	NY
Mr. John Mengel	USDA-ASCS-DAAD	DC
Dr. James Miller	U.S. Dept. of Agriculture ERS-CED-LDP-Dairy	DC
Mr. Lyle Newcomb	Dept. of Agriculture & Markets Div. of Dairy Services	NY
Dr. Andrew Novakovic	Cornell University ARME Dept.	NY
Dr. Kenneth Olson	American Farm Bureau Federation Dairy Department	IL
Dr. Albert J. Ortego, Jr.	Louisiana State University Agr. Center Div. Ldr., La. Coop. Ext. Serv.	LA
Dr. Joe Outlaw	Texas A&M University Dept. of Agr. Economics	TX
Mr. Michael Reinke	Kraft General Foods, Inc.	IL
Mr. Dennis Schad	Atlantic Dairy Cooperative	PA
Dr. Mark Stephenson	Cornell University ARME Dept.	NY
Mr. Richard Stillman	USDA-ERS Leader, Dairy Research	DC
Mr. Michael Suever	Lehigh Valley Dairies, Inc.	NJ
Ms. Sue M. Taylor	Leprino Foods	CO
Ms. Michelle Thom	Inst. for Ag & Trade Policy	MN
Ms. Audrey F. Throne	Hershey Chocolate Co.	PA
Mr. James Tillison	Alliance of Western Milk Producers	CA
Mr. William C. Tinklepaugh	Master Dairies, Inc.	IN
Ms. Laura Topel	Kraft General Foods	IL
Mr. John Umhoefer	Wisconsin Cheese Makers Assn.	WI
Dr. Robert Yonkers	The Pennsylvania State Univ. Agr. Econ. & Rural Soc. Dept.	PA

APPENDIX B. WORKSHOP EVALUATION

Summary

Overall, both the attendees and non-attendees felt that holding the workshop was a good idea. Attendees conveyed a high satisfaction level and thought the workshop was successful. Factors that influenced attendance were government travel restrictions and scheduling conflicts. Cost had a small bearing on the decision whether to attend or not.

The overwhelming response (96% attendees and 94% non-attendees) to holding future workshops like this gave the committee a clear mandate. Sixty-one percentof the attendees felt the workshop should be held every year, while another 35% felt every other year was sufficient. Holding a workshop on Federal Milk Marketing Orders was viewed positively by 88% of both groups. Other topics the group was interested in were GATT and systems, or pricing, of milk.

Most attendees' comments were favorable concerning the workshop's format and implementation. The biggest concerns dealt a more convenient hotel and starting the sessions on time. Favorable comments were made about the content and group interaction. The overall message was to continue with this endeavor. Attendance and participation will continue and probably increase if the content and format address the issues dicussed in the first workshop. Specific responses by attendees and non-attendees are provided in the following tables.

Analysis

Of the 33 participants who filled out the post-conference questionnaire, 73% were trained as economists. Twenty-nine, or 88%, were currently working in the field of dairy economics or policy. All of the various sectors of the industry were represented. However, government employees were by far the largest group in attendance. Nearly half were employed in government. Producer and processor organizations were equally represented, with 18% of the participants working in each sector. Twelve percent were employed by universities and 12% represented lending institutions, non-profit organizations, or were private consultants.

The subject of the conference, the 1995 Farm Bill and Beyond, was the main reason the participants decided to attend the conference. All of the participants said the subject of the workshop influenced their decision to attend. But the opportunity to talk with fellow economists and analysts was also a major drawing point for participants, with 61% saying it was a major factor in their decision to participate and 36% a definite factor. The opportunity to hear the views of those making presentations at the meeting was also a major drawing point for 55% of those who filled out a questionnaire, while 30% indicated it was a definite factor in their decision.

For the most part, participants felt neutral to positive about the cost and location of the conference. Most (85%) thought the cost of the conference was reasonable and 82% did not think the location inconvenient.

Most heartening of all when analyzing the survey results was the fact that 97% said they would attend similar workshops on a regular basis if given the chance. Nearly two-thirds (61%) said they would attend such a conference every year while 35% said they would attend every two years. The remaining 3% said they would attend another workshop on the 2000 farm bill. When asked whether they would attend a workshop on federal milk marketing orders, 88% responded affirmatively.

Participants also were asked to suggest topics for future workshops. Six people indicated that they would like to attend a workshop on trade and market development. Five topics were suggested by two people each: update of this workshop; environmental issues facing the industry; future strategic planning; measuring policy; and alternative forms of pricing. Other topics suggested by single individuals were: processor technology; promotion programs; government's role in the industry; how to change the system; industry structure; producer education; class III and III-a pricing; regional cost of milk production; and conversion to a market economy.

Participants were asked what they liked best about the workshop. Three-fourths said the professional interaction. Twelve percent liked the presentations given by committee members, while a much smaller percentage indicated that the question and answer sessions follow-

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ing the presentations, the attempt at future planning, or the subject of the conference were the most valuable aspect of the workshop.

Opinions as to what was the worst aspect of the workshop were much more varied. Fifteen percent said too much time was spent on "backgrounding." Twelve percent thought a lack of focus in the discussion groups was the most frustrating aspect. Other aspects deemed "the worst part of the workshop" received comments by three or fewer people. Those comments follow: finding the hotel or the distance from the hotel to the airport; pretense of objectivity; travel cost; being limited to one discussion group; lack of a next step; lack of written materials during the conference; lack of issue identification prior to the workshop; too much noise during the discussion session; discussion groups too small; too much structure; and overall too short.

The general comments made by the participants were mixed. Fifteen percent complained that there was no action plan incorporated into the workshop. Nearly the same number of people indicated that they were pleased with everything about the workshop. Several people thought there should have been more time devoted to the discussion groups and less time to the presentations. Others asked for more focus, more outside input, and more leadership from university economists.

Workshop Evaluation

Attendees Summary

1. What factors influenced your decision to attend this conference?

	Percent Responses					
	Strongly Agree				Strongly Disagree	Mean
a. Subject of conference	88	9	0	0	3	1.21
b. Chance to talk with fellow economists/analysts	61	36	0	0	3	1.49
c. Chance to hear dairy economists present information and viewpoints	55	30	12	0	3	1.67
d. Cost of conference, including travel is too high	9	6	43	21	21	3.39
e. My organization's travel budget is too tight	21	3	27	24	24	3.27
f. Location (city) is convenient	24	9	49	9	9	2.69

2. What did you like most about the Workshop?

3. What did you like least about the Workshop?

		Percent Response
4. Would you like to attend another Workshop like this?	a. once a year	61%
	b. every two years	35%
	c. other_____	3%
	d. never again	0%
5. Would you be interested in a future Workshop focused on Federal Milk Marketing Orders?	a. no	12%
	b. yes	88%

6. What other topics would you like to see covered in future Workshop?

7. Please circle all of the following which apply to you:	Percent Response	Number
a. trained as an economist	73%	24
b. worked in economics/policy analysis	88%	29
c. producer organization	18%	6
d. processor organization	18%	6
e. other industry	3%	1
f. other (list)	9%	3
g. government	49%	16
h. university	12%	4

8. Please give us any general comments you would like to make.

Workshop Evaluation

Non-Attendees Summary

1. What factors influenced your decision to attend this conference?

	Percent Responses						
	Strongly Agree				Strongly Disagree	Missing	Mean
a. Subject of conference	3	0	3	21	44	29	4.46
b. Chance to talk with fellow economists/analysts	3	0	6	15	50	27	4.48
c. Chance to hear dairy economists present information and viewpoints	3	0	3	18	50	27	4.52
d. Cost of conference, including travel is too high	15	18	21	15	6	27	2.72
e. My organization's travel budget is too tight	18	24	9	12	12	27	2.68
f. Location (city) is convenient	3	6	24	21	15	32	3.57

		Percent Response
2. Would you like to attend another Workshop like this?	a. yes	94%
	b. no	3%
3. If yes, would you be interested in a future Workshop focused on Federal Milk Marketing Orders?	a. no	12%
	b. yes	88%

4. If yes, what other topics would you like to see covered in a future Workshop?

5. Please circle all of the following which apply to you:	Percent Response	Number
a. trained as an economist	82%	28
b. worked in economics/policy analysis	79%	27
c. producer organization	27%	9
d. processor organization	18%	6
e. other industry	0%	0
f. other (list)	0%	0
g. government	35%	12
h. university	29%	10

6. Please give us any general comments you would like to make.

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