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Dealing with Surplus Milk Production in the Scandinavian Countries

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Preface

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Dairy policy in all Scandinavian countries except Denmark has long aimed at limiting milk production to domestic demand plus an allowance for seasonal variation. Losses on production above this level have to be borne entirely by the milk producers themselves. This implies that the farmers should be interested in keeping production in line with domestic demand and naturally also in increasing the domestic market. During the last five years the gap between supply and domestic demand has increased in most Scandinavian countries. Several attempts have been made to deal with the problem of excess supply. The policies taht have been tried in these countries and farmers' reactions offer interesting insights into similar U.S. policy issues.

The table below shows the number of milk producers and cows, the total milk production and the desired level of production decrease in the Scandinavian countries in 1983.

	Producer numbers (000)	Cow numbers (000)	Sales of milk off farms (mil. lbs.)	Desired production decrease
Denmark	33	998	11,540	5.6%
Sweden	37	661	7,940	4.9%
Norway	35	385	4,180	3.2%
Finland	74	656	6,500	5.2%

In this article each country will be studied separately as conditions vary. In Norway forceful measures have been taken to limit production increases. From 1977 to 1982 Norway operated a bonus arrangement which gave a higher price to producers who reduced production. This approach is somewhat similar to the Milk Diversion Program used in the U.S., insofar as it was voluntary and provided incentives to decrease production. In 1983 this arrangement was replaced by a quota scheme. Finland has tried to reduce agricultural production through a number of voluntary schemes, for example land reserves and premiums for cow culling. As the effect wasn't large enough, a quota scheme was introduced in Finland on January 1, 1985. Denmark, a traditionally successful dairy product exporter, has never wished to limit production. However, as a member of the European Community, Denmark has had to introduce a quota scheme. In Sweden discussions about limiting milk production have been going on for years. Temporary measures have been taken through investment control for all types of animal operations and a special "pension scheme" for milk producers aged 60-65 years old was introduced in 1983. These have had some effect, but not nearly enough. A new type of voluntary quota scheme will be implemented beginning July 1, 1985. A more detailed discussion of these plans is provided below.

NORWAY

Bonus Arrangement -- 1977 to 1982

Under this scheme producers who reduced their deliveries of milk below the previous one, two or three year levels were paid a higher price per hundredweight than producers who delivered the same amount or increased deliveries. The bonus payment was up 7.5% over the basic milk price. The bonus payments were financed by a deduction in the national basic price for milk. Although the 50¢/cwt. assessments paid in the U.S. were not officially earmarked to cover the cost of the Milk Diversion Program, they served a similar purpose. The decrease in milk production was principally aimed at gaining a higher basic milk price even for producers who did not participate in the program.

The bonus arrangement was easy to administer and explain to producers. It was voluntary and worked relatively well when the pressure on production was moderate. While the bonus arrangement was in operation the producer milk price trend was positive and government support of investment in dairy production was fairly extensive. Each year during the five years of the program, about 50% of the Norwegian producers received bonus payments. Only 8% of the producers received bonus payments all four years 1978 to 1981.

The main technical problem of the bonus arrangement occurs when deliveries exceed the bonus qualifying quantity by a small amount. The total payment for the milk delivered is reduced as bonus payments are lost. If production increased less than five or six percent, the income from the added production was often negative. This combined with the fact that increased deliveries one year gave higher bonus qualifying quantities in years to come led producers to increase production substantially in one year or not at all.

Since the bonus arrangement was introduced, yields per cow increased at a much lower rate than before. During the first years the system was in operation cow numbers fell while the numbers of heifers rose. Cow numbers increased again after 1980. This indicates that even if the bonus arrangement reduced production the capacity for producing milk was not reduced. Again, this experience seems to be similar to that in the U.S. during the Milk Diversion Program.

Quota Scheme - 1983 to present

Increasing cow numbers and increasing production pressure led to the implementation in January 1983 of a quota scheme for all holdings. The quota scheme has replaced the bonus arrangement.

The base is fixed according to the individual farmer's deliveries during the previous three years and should be calculated as a sliding average. For 1983, corrections were made so producers who had adjusted to the bonus arrangement would not lose by it.

Each year a proportional figure is fixed in the quota scheme. This is the factor by which the base (the 3-year average) is multiplied in order to obtain the quota to which the full price shall be applicable. For 1984 the proportional figure is 90%. The proportional figure does not apply to producers with base quantities less than 88,300 pounds, to producers who have been allotted special quota as they have developed their farms, or to producers in the northernmost part of Norway.

Where production is limited by natural conditions, the rules for the quota scheme provide for the following exceptions:

-- farm development;
-- change of owner starting up milk production;
-- expansion of roughage area by fresh cultivation or long-term lease of land;
-- production cut-backs because of fire, natural disaster, etc.

In 1983, approximately 14,000 milk producers applied for quota according to the special rules. This corresponds to 40% of all cow milk producers in Norway. The rules for 1983, however, cover farm development etc. back to 1977. Therefore, in a "normal" year, it is expected that 2000 to 3000 producers will apply for a quota to be fixed in accordance with the special rules.

Over quota deliveries are paid approximately 27% of the full milk price. This is based on world market prices for butter.

The National Association of Milk Producers, which represents all producers in Norway, conducted a survey about the quota scheme in 1983 among 1000 milk producers. Twenty-eight percent were positive toward the system, 34% were neutral, and 30% were negative.

One of the most criticized points of this quota scheme is that the base is calculated as a sliding average. This enables farmers who can afford it to "buy" quota by producing overquota milk (expensive and risky). Also farmers who adjust to their quotas lose in the long run as their bases will gradually be reduced. Another point of criticism has to do with the fact that producers who have increased production on the basis of a large proportion of purchased concentrates are allowed to produce in relation to previous production, while newly established farms have to produce in proportion to the amount of fodder they produce. Therefore a system that will regulate the quota of milk in relation to the quantity of fodder that is produced on one's own farm has been discussed.

The Quota Scheme From the Farmer's Viewpoint

Lars Haga operates a dairy farm in one of Norway's best farming districts 30 miles north of Oslo in southeastern Norway. His base according to the historical average was 298 thousand pounds but as he had enlarged and modernized his dairy barn in 1979, he was allotted a quota in accordance with the special rules.

For every 10 cows there has to be room for 12 cows, 6 heifers, and some space for calves. Also the farm has to able to supply 65% of the fodder for the cows. Lars Haga's quota in accordance with these rules is 28.5 cows x 11,590 pounds = 330,300 pounds. The proportional figure of 0.90 is not applicable during the first four years as this is a case of farm-development. As Lars' cows produce more than 11,590 pounds of milk per year he has reduced his number of cows to 24 - 25.

Lars Haga thinks that the quota scheme is complicated and that it must be expensive to administer. The thing that worries him and his fellow farmers most is that the quota scheme just like most other agricultural policies in Norway favors production in the north of Norway. They would prefer a system where each district had its own quota. This concept has also been discussed in the U.S.

Discussions about reducing quotas on farms that cannot produce enough fodder also worry Lars Haga's fellow farmers. Requirements will be tougher for farms in better agricultural districts as many of the dairy farms in these districts use a lot of concentrate because their acreage is small. The quota scheme has, to some extent, caused disruption between older established dairy farmers and younger ones. Up until now all producers who have wished to start milk production have been allotted quotas. Many established dairy farmers oppose this. They reason that no new producers should be allowed to enter milk production until demand and supply balance.

Many farmers question the way in which the quota scheme reduces milk production. Approximately one third of the milk producers with half of Norway's milk production have to reduce their deliveries. Most others are exempt from large reductions either because their deliveries are less than the base cutoff of 88,300 pounds (this applies to 40% of the producers and 16% of the milk deliveries) or because they have been allotted quotas in accordance with the special rules.

Production in 1983 was 1.4% lower than the year before. Without the quota scheme production would probably have increased significantly as the 1982 roughage crops and grazing in the summer 1983 were extremely good. Approximately one third of the producers delivered more milk than their quotas. Average over production among them was 8%. Very few producers exceeded their quotas by more than 50%.

All in all Tor Mogstad, board member of the National Association of Milk Producers, considers the quota scheme to be positive. There have been quite a few problems though. One problem is that production in 1980 was very important for the calculations of base quantities. Producers who for some reason had low deliveries that year feel unfairly treated. (Production increases after 1980 were not considered in full when bases were calculated.) Another group of farmers who have been hard to accommodate in the quota scheme are the ones who have improved their farms slowly over time. It has been difficult to determine who has made an investment that is significant enough to qualify for special quota.

A word from Tor Mogstad to anyone who is contemplating a quota scheme is that the fairer you try to make the system the more complicated it gets. If you try to satisfy too many objectives, it might not work at all.

DENMARK

Denmark has a long tradition of exporting dairy products. Milk production is almost 2.5 times as large as domestic demand. Producer prices depend largely on what income the exports generate. In order to secure their traditional export markets Denmark joined the European Community (EEC) in 1973.

The common agricultural policy practiced by the European Community includes support of dairy product prices. This is turn has led to an increasing milk surplus which has become a great burden to the EEC-budget. In March 1984 the EEC decided to freeze the quantity of milk for which they would guarantee price support at the 1981 level plus one percent. This quantity has been divided between member countries so that each has a quota fixed for the next five years. Today 236,200 million pounds of milk are produced every year in the EEC countries, compared to 135 to 140 billion pounds in the U.S. The total quota is fixed at 218,500 million pounds per year, but consumption is only 192,000 million pounds per year. This means that there will still be a 14% surplus to export.

Each member country decides how to allocate the national quota. It is possible either to allot an individual quota to each dairy or to allot quotas to the dairies who then in turn divide them among their suppliers. In the first case, an assessment equalling 75% of the target price of milk has to be paid by the individual farmer for deliveries in excess of his quota. In the case of dairy plant quotas, assessments are applicable first when the entire plant quota is surpassed. As some producers reduce their market sales it will normally be possible for others to exceed their quotas. The assessment for exceeding dairy quotas is set at 100% of the target price. It is paid by the producers who have produced significantly more than their quotas.

The quota system has been in force since April 1, 1984. Assessments for production above quotas shall be paid on a quarterly basis. If quota in the first quarter is exceeded and production in the second quarter falls below quota the assessments will be refunded.

Denmark has chosen the dairy plant quota system. A primary purchasing organization for milk the "Maelkeudvalg" has been created. All dairies both private and cooperative have joined. Through the establishment of the Maelkeudvalg all Danish milk producers can be regarded as belonging to one dairy plant or firm. This will enable them to use the whole of the national quota before any assessment has to be paid and all will be treated equally and not according to the structural development of the dairy they actually belong to. (Holland and Great Britain are planning to organize similar "national dairies" next year. Similar behavior between companies is reported in France, although not "nationwide".)

Denmark's national quota for 1984/85 is 10,890 million pounds. This is 5.6% less than production in 1983. For the years 1985 to 1989 production has to be reduced one percent further. The general producer base equals milk deliveries in 1983. Quotas are arrived at by reducing the base by 6.7%. Special cases can be allotted higher base quantities than their 1983 milk deliveries. Producers who have developed their farms shall be allowed to use the quantity they planned for (up to a maximum 13,910 pounds per cow), if it is higher than their 1981 deliveries.

Most Danish farmers are not very happy about this quota system which they feel has been forced upon them. However it is felt to be better than a sever price cut as it will keep other EEC member countries from expanding their production at the expense of Danish milk producers.

In an interview earlier this year, Thomas Jorgensen, chairman of the Danish Dairy Federation, which represents all Danish producers, said that the quota system on top of EEC's restrictive pricing policy leads to a double punishment of milk producers. Now there is a freeze on prices and a production ceiling. Danish farmers do realize the necessity of limiting surplus milk production and are willing to accept measures that will address the problem. Quotas, however, create problems of administration and impede natural structural development. It is important, Thomas Jorgensen points out that limiting milk production is only temporary. The most efficient and skilled producers and dairies must have a reasonable and stable environment in which they can work.

SWEDEN

On January 1, 1983 a special "pension" scheme for older milk producers was introduced in Sweden. Milk producers aged 60-65 years old could apply for a special "pension payment" if they retired from milk production. The payment was 18% of the farmer's total milk payment in 1981 up to a maximum of 165,600 pounds per year. In order to obtain the "pension" the farmer has to sign a contract that he will continue farming but quit producing milk. He is, with some exceptions, allowed to raise heifers but not to expand beef cattle, pork or poultry operations. Payments are made on a monthly basis until the farmer is 65 years old. At 65 the regular pension plan starts and the "milk pension" stops.

The "milk pension" arrangement has not attracted quite as many farmers as had been hoped. By May 1984, 734 farmers with a total of 77.3 million pounds of milk had joined the pension scheme. One reason why the scheme was not considered so attractive was that only farmers in the north of Sweden were allowed to continue keeping heifers and calves for beef production. In July 1984 this restriction was eliminated, the "pension payment" was raised to 23% of the milk price and the maximum amount for which one could be payed was raised to 220,800 pounds.

Up until recently, producers were negative towards a quota scheme but as production did not decrease and world market prices stayed low it could not be entirely dismissed. A new type of quota scheme will be introduced in Sweden beginning July 1, 1985. The interesting point in this new scheme is that quotas will not be mandatory. In this scheme producers can chose whether to join the quota scheme or to continue as before.

Producers who join the scheme will be allotted a quota for which they will receive full price and excess deliveries will be paid at world market rates. Quota quantities will be guaranteed in years to come unless domestic milk consumptions shows a rapid decline. If possible the quotas will be raised two percent per year which equals the annual increase in milk yields.

Producers who choose not to join the quota scheme will be paid a blended milk price which will depend on their share of the Swedish market and the "surplus" production among producers in this group. The idea is to give producers a choice and to let the milk price regulate investments in milk production.

FINLAND

Milk accounts for 43% of the total agricultural income in Finland. Milk pricing is therefore an instrument of great importance, necessary to maintain adequate agricultural incomes. Finland has long been fighting oversupply in almost all agricultural sectors and has tried many voluntary measures to adjust production.

Annual payments have been made to farmers who set aside their land from agricultural production for a three year period. Contracts could be extended up to 15 years. In 1969, an additional premium was paid for cows culled under the contract scheme. This premium has been considered to have had an impact on reducing supply. A further scheme for cow culling was introduced for cows with diseased udders in 1980. This scheme however, most probably induced an increase of milk production as diseased cows could be replaced with mastitis free cows.

In July 1981 a bonus arrangement was introduced under which a farmer who reduces milk deliveries by at least 25% (or a minimum of 44,200 pounds) of the previous years deliveries is entitled to a special payment. The payment for milk not produced is approximately 43% of the recommended milk price. A farmer giving up milk production entirely is entitled to the same payment per hundred-weight of milk not produced provided that other operations are not expanded. This program has become very popular but its effect has been hampered by the fact that only a limited amount of money has been available for it.

During the last five years milk production has surpassed domestic demand by 30 percent. In 1982/83 the Finnish government ordered a special committee to draw up an agricultural plan. As a result of this plan the major aim of dairy policy became to reduce the number of producers by 23,000 and milk deliveries by 773 million pounds. To implement this reduction a quota scheme was proposed.

The quota scheme was introduced in Finland on January 1, 1985. The goal is to reduce milk production mainly by restricting new entrants and expansion on existing farms. Together the bonus arrangement and the two-price system are estimated to reduce production by 331 million pounds. The quota scheme will be introduced for a two year period and will work as follows

Every milk producing farm will be allowed to deliver the same amount as produced during either of the last two years. The highest production level will be considered as the quota and will be paid full price. Quantities exceeding quota will be paid at world market rates which are only about a third of the full producer price.

All deliveries up to 66,200 pounds will be paid the full price. Only farms with deliveries exceeding 66,200 pounds will be subject to quotas. In 1983, 48% of the producers delivered less than 66,200 pounds. Their total share of Finnish milk deliveries is approximately 30%.

The system also provides for quota calculated on the basis of cow numbers with 11,480 pounds per cow. This applies to farms transferred after 1979 or if farm development has taken place after 1979. In order to calculate quota in this way a new farm must also be able to produce at least two-thirds of the fodder needed.

According to Juhani Rinta, board director of Valio, the Finnish Milk Producers Federation, representing all Finnish producers, most farmers do see why quotas are necessary. The main problem is emotional. Just like farmers all over the world the Finnish farmer considers his freedom to decide what and how much to produce as something very important.