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Small Acreage Options

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### Farmstead Dairy Processing

Facing increasingly volatile milk prices, some small-scale dairy farmers--and large-scale dairy producers, for that matter--have considered on-farm processing as a way of moving up a link on the food chain to capture a larger percentage of the retail dollar. A farmstead dairy processing conference a group of us put together in Wisconsin in November 1999 attracted more than 250 people who were interested in exploring this option.

There are a number of dairy products that could be produced from cow, goat, or sheep milk in an on-farm processing facility. Cheese and bottled milk are the most common but yogurt, cheese curds, or even kefir, a fermented milk product popular in parts of the Middle East, are other possibilities. (In this article we won't discuss Kumiss, a potent fermented drink made from mare's milk which originated in northern Russia).

On-farm processing is not easy. It requires some highly specialized technical skills in addition to marketing savvy. The regulations governing dairy processing are quite strict. The capital outlay to build and equip a processing facility can run to hundreds of thousands of dollars. It takes time to build the market for farm-processed products; it might be years before all of the herd's production can be sold as farm-processed products. However, a dairy farmer who is able to make it over or around all of these hurdles will find that there is the potential to make a respectable profit selling value-added dairy products.

As with almost any non-commodity farm product, a good place to start is by researching the market potential for your products. There is no sense in going any further if there isn't a strong probability that the market is just waiting for your product to land on the shelf. Market assessment is extraordinarily important with processed dairy products because this business is going to take a large investment of time and money. Also, the products are perishable so must be sold quickly. The products usually can't be held in storage while waiting for a market to develop.

Check with your state's food safety regulatory agency to get the relevant regulations governing the type of processing you would like to do. In Wisconsin, talk to the folks in the Division of Food Safety at the Department of Agriculture. In addition to regulations pertaining to the processing facility, food safety staff can

also give you details about any technical training requirements you will have to meet. For example, you will have to complete a pasteurization course to operate a milk pasteurizer on your farm. Another example: Under current Wisconsin law, a person has to complete an 18-month apprenticeship before he or she can make cheese for retail sale (although the WI Department of Agriculture is currently working to relax that rule for farmers making cheese exclusively from their own milk).

It is also a good idea to check with your town or county zoning administrator, particularly if you are considering having an on-farm retail store. Some places may require that part of the farm be zoned commercial or that a conditional use permit be obtained in order to operate.

If you are thinking of bottling milk for retail sale, find out how the Federal Milk Marketing Order will affect your operation. Here in Federal Order 30, a dairy farmer who bottles and sells his or her own milk is classified as a “producer-handler” and is no longer a “producer.” The good news is that a producer-handler does not have to share with the rest of the pool the (Class I) premium he or she gets for their bottled milk. The bad news is, if the farmer is still selling a portion of their milk as Class III to a plant that participates in the pool, that milk cannot be pooled and thus, is not eligible for a share of the pool’s Class I premiums. The plant can essentially pay any price it wants to pay for that milk. You need to negotiate terms with your current plant before you start bottling.

Equipment can be another challenge for the on-farm processor. Smaller-scale equipment tends to be hard to find and relatively expensive. It could easily cost \$50,000-\$300,000 to set up a basic processing facility, depending on the products to be produced and whether or not the farmer is able to find some used equipment.

There are creative ways to work around some of the regulations and capital costs. Several groups of dairy producers are working with local independent cheese plants to have their milk made into cheese carrying their own label. They are avoiding the apprenticeship requirement, the capital cost, and the time it takes to develop expertise in cheese-making. Instead, they are focusing their efforts on selling the product. There is a dairy farm near Hayward, WI that is leasing cows to people in town and charging a per-gallon “boarding fee” when their leaseholders dip milk out of the bulk tank. It’s legal; the milk belongs to the people leasing the cows.

Anecdotal evidence from people who are doing on-farm processing in the upper Midwest suggests that the per hundredweight equivalent price for cows’ milk is from \$15 to \$30 when the products are sold in the retail market. Of course, more labor and other costs are going into processing and marketing than in a

conventional dairy operation. However, it appears likely that a producer could get a reasonable return on the investment if he or she does a good job of developing and satisfying their market.

There are some excellent resources available if you would like to explore on-farm processing a bit further. Dr. Gary Frank from the University of Wisconsin-Madison's Center for Dairy Profitability has put together a very helpful decision aid spreadsheet: FarmSTead MILK Processing (FSTMILKP.xls), which is available for free downloading from the Center's website ([www.wisc.edu/dairy-profit](http://www.wisc.edu/dairy-profit)). The Small Dairy Resource Book: Information sources for farmstead producers and processors by Vicki Dunaway is available from the Sustainable Agriculture Network. Some information from the conference I mentioned above, including a videotape of the presentations, are available from Norm Monsen at the Wisconsin Department of Agriculture (800) 942-2474.