

Building Resilient Dairy Farms

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Recently, I had the chance to attend the 2009 European Association of Animal Production meeting. It's always interesting to learn about agriculture in other places. For me, the most insightful presentation was by Dr. Ika Darnhofer from the University of Natural Resources and Applied Life Sciences in Vienna, Austria. Surprisingly, her presentation did not include anything about our traditional animal production topics, like nutrition, reproduction, and genetics. But, what she presented was probably the most timely information for the current situation in the dairy industry. Dr. Darnhofer described the concept of **farm resilience**. What is farm resilience? Webster's dictionary defines resilience as "an ability to recover from or adjust easily to misfortune or change."

It's easy to see how this concept can apply to a dairy farm, given that dairy farms are constantly changing, complex businesses. Farm resilience is characterized by the ability (1) to constantly evolve while protecting against shocks to the system, (2) to readjust to adapt to stresses, (3) to implement strategies to take advantage of strengths, and (4) to continually adapt to the current situation. Darnhofer proposed that, in farming systems, surprises are unavoidable and the timing and length of crises cannot be predicted. Thus, farms that intend to stay around need to be able to cope with surprises and adapt to stresses. She suggested four strategies to build farm resilience.

1. Learn to live with change and uncertainty

First, discard the idea that the situation will remain stable and learn to expect the unexpected. As crises occur, learn from each of them. Maintain a flexible farming system and be ready to change business strategies when necessary. Limit debt levels and maintain caution with large, long-term investments or contracts. If possible, spread risk by cooperating with other farmers or making purchases that are easy to sell or convert to uses in other enterprises. Finally, do what farmers do best, by using existing buildings and equipment in creative ways or doing things yourself rather than hiring them to be done by someone else.

2. Nurture diversity

The ability to cope with changes increases with diversification—of crops, animals, breeds, products, and enterprises. On-farm independence may be increased by looking for ways to rely less on others for labor, nutrient management, energy use, or even money. Similarly, maintain diversity in where you obtain information. For example, some information may come from conversations with friends and neighbors. On the other hand, information may also be obtained through workshops, seminars, and classes. Both on-farm experiments and new knowledge created from controlled research experiments are critical to exploring new dairy business opportunities.

3. Combine different types of knowledge and learning

The uncertainty that is characteristic of farming means that traditional thought processes, like stability, income maximization, technical fine-tuning, and biological

optimization, must be balanced with adaptability, resilience, and flexibility. Traditional, practical knowledge gained through daily management of the dairy farm should be combined with the knowledge and information created through science. Farm study groups may also provide an excellent opportunity to get new ideas and learn new things. In addition to listening to industry professionals and other farmers, it is important to listen to what society and urban consumers has to say about the type of farming operations where they would like to see their food produced. Lastly, don't overlook the value of listening to business partners and family members.

4. Create opportunities for organizing yourself and links with others

Establishing a strong network of friends, family, and contacts can help with farm resilience. Being involved in dairy producer and political organizations can help you be prepared to deal with change through collective action. Perhaps more importantly, being involved with organized community groups, such as church, local sports, civic organizations, may prove beneficial in dealing with the impact of outside influences on your dairy business.

Dr. Darnhofer's insight into farm resilience certainly applies to the current situation in the dairy industry. Today's economic conditions have created a complex set of problems and changes for dairy producers to deal with. How could you have prepared to manage against the shock of decreased milk prices accompanied by increased input prices? Dairy operations who are most likely to maintain their position in the dairy industry are those that are the most resilient by being the most prepared to deal with change, uncertainty, and the pressure of internal and external forces. A resilient dairy farm develops creative solutions to dealing with change as the "rules of the game" change. The dairy farm you manage will only become increasingly more complex with increased consumer concerns for food safety, animal well-being, and the environmental impact of dairy operations. Those dairy farms that adapt through continual evolution will successfully make it through the difficult times. Resilient dairy farms take advantage of existing strengths, absorb system shocks, and adapt to changes by taking advantage of the new opportunities they create. Striving for dairy farm resilience may help you avoid the traps that occur when the dairy farm is viewed as a constant, consistent, unchanging system.