



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

STRUCTURAL ADJUSTMENTS IN THE EUROPEAN UNION AND
UNITED STATES DAIRY INDUSTRIES: FARM MANAGEMENT
IMPLICATIONS

ORGANIZER STEPHEN HARSH (USA)

RAPPORTEUR RUUD HUIRNE (THE NETHERLANDS)

The dairy industry in industrialized countries is rapidly undergoing a transformation. In both the United States (USA) and the European Union (EU), the number of farms is declining. Others are facing tighter profit margins and a consolidation of marketing channels. The structural change is due to new developments in production technologies (including biotechnology and computer-based control systems) and the increasing influence of world markets (leading to greater price instability and problems in market access).

Against this background, presentations were given by F. Kuhlmann (Germany) and S. Harsh (USA) on the cost structure and appropriate efficiency measures for German and US producers. Kuhlmann presented trends on production, costs and returns from a modest-sized dairy enterprise on a research farm at Marienborn. Production has increased, while prices received have steadily declined, the overall effect being a reduction in the production cost of a kilogram of milk. Nevertheless, current return over variable costs is positive, but when also accounting for fixed costs the returns are slightly negative. Kuhlmann also presented financial results from 13 corporate farms, located in the former East Germany, that were large by European standards. The farms had cost structures that were very similar to those at Marienborn and, on average, also incurred negative returns over total cost. Expanding on the discussion, colleagues from the National Dairy Research Institute at Braunschweig (Germany) presented results based on international comparisons, using different assumptions regarding the size of business and technology employed.

Harsh presented profitability and efficiency information on US farms. He contrasted the cost and return figures for large integrated cropping with dairy farms in Michigan with dairy enterprises of modest size, finding that expenses varied by category between the two groups although the overall profitability was very similar when adjusted for operator supplied capital and labour. Harsh had also prepared a comparison of farms involved in a detailed cost accounting project. This suggested that well-managed farms can cover all costs, despite the difficulties caused by a recent drop in milk prices, but poorer management inevitably results in losses.

Identifying the type of operation that will be able to survive in this changing environment for both areas formed the basis of the subsequent discussion.

Considering growth as a means used to enhance competitiveness, G. Hadley (USA) reported on his examination of large commercial dairy farms in Michigan and Wisconsin, where herd size had often doubled with farms becoming more specialized. The changes had enabled farms to maintain production and reduce the per kilogram cost of labour. The drawbacks were personnel management problems and public relations difficulties connected with waste disposal and contagious herd diseases. Farm profitability (measured by the percentage return on assets and the return on equity) for the first two years following expansion increased slightly over previous periods. Expansion appears to improve dairy farm viability and increase competitiveness. Expansion as a means to remain competitive in the EU was also discussed. However, the quota system has a tendency to limit growth opportunities. The problems related to expansion in the EU are very similar to those experienced in the USA, particularly those related to human resources management.

In the final presentation, C. Wolf (USA) dealt with risk and uncertainty associated with the recent structural changes. He indicated that American dairy farms have been growing and becoming more specialized for many years, though the past decade has witnessed an acceleration of the trend. Factors behind the change are prices (milk and feed), economies of size, demand changes, and cooperative and processor consolidation. Milk prices have been volatile in the 1990s as the government support price has been below market equilibrium. At the same time, feed prices have been low, allowing farmers to specialize in milk with little risk on the input side. Technology at the farm and processor level has allowed much larger firms to take advantage of spreading fixed costs across many units. A dramatic increase in per capita consumption of cheese has seen processor growth, with consolidation in a few large firms. Producer cooperatives have often merged to offset processor market power. Futures markets have sprung up as a potential method to offset milk price risk. Vertical coordination through contracting and outsourcing are also increasingly common risk management strategies. R. Huirne (The Netherlands) noted that EU producers are also experiencing more volatility in prices. However, they have had less experience in dealing with risk and uncertainty issues and are seeking advice and guidance.