The problems of commercial dairymen in northeastern Ohio, their sources of occupational information, and the relationships between their perception of needs and a professional's perception of their needs were studied. Questionnaires designed to assess these needs were mailed to 400 commercial dairymen and 141 professionals. Major problems, as seen by dairymen, were found to be breeding cows and heifers for high production, keeping cows healthy, and providing the right amount and kind of feed. Major problems of dairymen, as seen by professionals, are maintaining a labor supply, financing improvements, and manure handling and disposal. Sources that dairymen rely on for information are farm magazines, the county agent, the Extension specialist, veterinarians, and vocational agriculture instructors. (CK)
ABSTRACT

THE EDUCATIONAL NEEDS OF COMMERCIAL DAIROMEN IN
SELECTED NORTHEASTERN OHIO COUNTIES

A Thesis

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for the Degree Master of Science

by

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Abstract by:

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Introduction

The rapidly changing structure of the dairy industry in the seven Northeastern Ohio counties involved in this study has brought with it new and different problems with which dairymen must cope.

This study provides interesting information regarding educational needs of commercial dairymen as perceived by commercial dairymen and the professional worker who works with dairymen.

Another feature of this study that is enlightening is the sources of new ideas dairymen utilize in keeping up with new technology.

Objectives of the Study

To determine what the educational needs of commercial dairymen were, the following objectives were developed:

1. To determine what problems commercial dairymen would be facing, as perceived by dairymen and professionals.
2. To determine which problems will be most important to these dairymen.
3. To determine from what source commercial dairymen expect to receive needed information about dairying.
4. To determine if selected operational practices of commercial dairymen are related to their perception of problems.
5. To determine what relationship exists between dairymen's perception of needs and professionals' perception of dairymen's needs.
Methodology

Questionnaires were mailed to 400 commercial dairymen and 141 professionals who work with dairymen.

The questionnaire was designed as a fourfold attempt to assess the needs of commercial dairymen in selected Northeastern Ohio counties.

The five pertinent areas of the questionnaire were designed to obtain background and situational data about commercial dairymen, to determine the needs as perceived by dairymen, to determine the needs as perceived by professionals, to determine the present level of adoption of practices of dairymen as indicated by their use of new practices in dairy farming and to obtain data as to what source of information dairymen expected to use for new ideas in dairy farming.

Summary of Findings

The average commercial dairymen in selected Northeastern Ohio counties were under 44 years of age, milked 55 cows with an average milk production of 11,657 lbs. of milk per year per cow. The average dairymen in this study breed 25 per cent of their cows naturally, while having 75 per cent bred artificially. The average age of milk cows in these herds was less than five years of age, indicating that these cows had not yet completed three lactations.

The greatest number of these dairymen disposed of the surplus calves at about three days of age as deacons or veal.

Nearly all of the dairymen or 93 per cent reported a basic alfalfa forage program, with home grown feed grains enriched by purchased supplement to provide a 14 per cent protein grain ration.
Milking procedures on 84 per cent of the dairy farms were automated to the extent of milking in a parlor with automatic milking machines, pipe lines and bulk cooling-storage tanks. Only five dairymen still use a milk can cooler while four dairymen have automatic udder washers.

Even with the large operations most commercial dairy farms in selected Northeastern Ohio counties are still family type farms.

Less than one-third of the dairymen hire additional help and then in many cases it is only for the three or four summer months. Children were often cited as helping to feed calves or gather the eggs, so were counted as family labor, often while still very young.

The commercial dairymen indicated that 74 per cent used production testing as a management tool.

The most common new practices employed on farms of the respondents were: automatic feed handling, automatic milking equipment, spring seeding alfalfa without a companion crop, computerized farm records, partnership or incorporation, leasing more land for feed production, A. I. Owner Service, and breeding heifers to calve at 18-20 months of age.

The changes commercial dairymen anticipate making in the next ten years are revealing. They plan to increase milk production by 25 per cent by 1980 with nine per cent fewer cows and on 18 per cent fewer dairy farms. Dairymen plan to increase herd size from the present 55 cows to 74 cows per farm and production levels up from 11,657 lbs. per cow to 13,528 lbs. per cow per year. They indicated they would be feeding a higher quality roughage and would be increasing protein content of the grain ration from 14 per cent to 15.4 per cent by 1980.
Commercial dairymen indicated their greatest concern in the next ten years would be with breeding cows and heifers.

Breeding problems ranging from finding the right kind of bulls for high producing cows to higher conception rates on first service for greater efficiency in milk production. Also of much concern to dairymen were problems dealing with sanitation and mastitis control. These problems interfere with and reduce the efficiency of the milk production capacity of dairy cows.

Feeding dairy cattle was also shown to be a problem of much concern to dairymen. Dairymen indicated a concern for the production of a sufficient supply of good quality roughage. They intend to use higher quality roughage to help increase milk production. They indicated concern for developing strong producer coordination to improve the milk marketing system. They also indicated concern for developing a research and promotion program to support the milk marketing system.

Dairymen reported a concern for improvement in dairy farm record keeping. Some suggested that milk production records and farm account records be combined into one complete farm record program that would use the advantages of the computer.

It is noteworthy to consider the different emphasis placed on the problems by the two groups, i.e., commercial dairymen and professionals. The professionals have indicated four concerns in the top six that did not even appear in the top ten list of concerns as seen by the dairymen. They were labor supply, financing improvements or expansion, manure handling and manure disposal. Professionals indicated they perceived dairy farm
records to be more of a problem than the dairymen indicated it to be. Dairymen indicated a higher degree of concern for the problem of breeding cows and heifers than did the professionals.

The greatest disagreement between the professionals and the dairymen was concern over the problem of buying replacements. Dairymen placed this at no concern while professionals indicated it as some concern.

Dairymen with the largest herds and the largest farms had a significantly greater concern about milk marketing than did those dairymen with smaller herds and smaller farms. Those with the largest farms indicated a greater degree of concern about feed and labor supply, milking procedures, and financing than did those dairymen with the smallest farms.

The concerns of the dairymen who planned to expand herd size were quite different than the concerns expressed by those who did not intend to expand. Those concerns where differences did appear were dairy farm records, financing improvements, manure handling, housing cows and heifers, raising replacements and feed storage.

The herd owners whose cows were on an official production testing program indicated a greater concern about financing improvements or expansion than did those herd owners whose herds were not enrolled in any type of a production testing program.
Conclusions

Commercial dairymen in selected Northeastern Ohio counties have indicated they will be expanding the size of their dairy herd, will be feeding higher quality roughages, a higher protein grain ration, using more machinery and equipment, adopting newer practices and producing more milk per cow which adds up to a total increase of milk marketed from fewer dairy farms.

The major problems they foresee as obstacles in increasing production and efficiency are breeding cows and heifers for high production, keeping cows healthy, providing the right amount and kind of feed, marketing milk at a profit, raising the calves and keeping farm records to assist in management decisions.

The professionals see as problems dairymen must face as maintaining a labor supply, financing improvements, and manure handling and disposal. They agree with dairymen that sanitation, mastitis prevention, feeding the milking herd and marketing milk will also be problems that need attention.

Dairymen will use many sources to obtain information on new ideas in dairy farming. The information sources that dairymen will rely on for new ideas in dairying are in order of use; farm magazines; the county agent, the Extension specialist, veterinarians, and vocational agriculture instructors.

Commercial dairymen most readily accepted the new practices that reduced the work load or made the work easier.

Those new practices that required a large cash outlay were the least used new practices.

Expansion was planned by the majority of dairymen.
The author presented specific recommendations regarding Extension education programs. The recommendations were based on the findings of this study and the author's reactions to the findings.

Because the concerns of professionals and dairymen differed significantly, he suggested that professionals increase their efforts to identify specific concerns of the commercial dairyman, and then to plan programs to satisfy those concerns. The needs of the expansionist dairyman may be unique enough to require specific programs for that audience.

Since commercial dairymen rely on farm magazines as a primary source of information, Extension personnel should improve their competencies in this area and then utilize those skills more.

The Cooperative Extension Service should take the initiative in developing a coordinated educational program for commercial dairymen on a county and/or area basis.