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# THE VALUE OF MAF ADVISORY SERVICES IN A DAIRY DISCUSSION GROUP

A. D. DAWSON and M. E. SMITH

*Ministry of Agriculture and Fisheries, Hamilton*

## SUMMARY

Data from eight farms whose owners formed a discussion group receiving considerable advice from advisory officers were compared with South Auckland regional averages. Between 1972-4 and 1977-8 the eight farms increased milk-fat production by 31%, stocking rate by 22.5% and effective farm surplus by 42.3% relative to changes in the regional average. These figures indicate that there can be large financial gains to farmers and New Zealand from an adequate extension service. If the level of production was lifted to the same extent over the whole country, this could provide additional dairy produce worth \$75.4 million in f.o.b. value.

Farmers must gain confidence in an adviser before they will accept advice. For this the adviser must not only be technically competent but must also spend adequate time both with the discussion group and with each farmer as an individual.

## INTRODUCTION

Few attempts have been made to determine the value of advisory work by analysing the changes made by farmers. This paper is an analysis of data from eight farms whose owner/operators, together with farm advisory officers of the Ministry of Agriculture and Fisheries, make up the Lake Road Discussion Group, Hamilton.

The Lake Road group meets monthly. Normally, the meetings last about 4 hours and two farms are visited. During the period the cows are dry the pattern is altered so that all farms are visited at least twice. Some discussion days and additional field days were organized for visits to Ruakura dairy farms and leading farmers in other areas. Courses were also held on production and account analysis. Advice was given on all aspects of breeding, nutrition and management, with many additional visits and phone discussions being made, particularly to those farmers making the most rapid change.

## ANALYSIS

The accounts and records of the eight farms were analysed for milk-fat production, stocking rate and economic farm surplus

(EFS) per hectare. EFS is defined as the total cash farm income, adjusted for annual changes in stock numbers at market value, less all farm expenses including depreciation but excluding special depreciation, interest, principal, wages, rates and development.

The results were compared with figures for owner-operated farms in the South Auckland district collected by the New Zealand Dairy Board in its Economic Survey of Factory Supply Dairy Farms. The discussion group data were expressed as a percentage of the South Auckland average and were bulked within years to obtain a mean for each year.

The averages for the following three periods were analysed: Period 1, 1972-4 (the period prior to current advisory involvement); Period 2, 1975-6 (the first 2 years); Period 3, 1977-8 (the second 2 years).

## RESULTS

TABLE 1: DISCUSSION GROUP AVERAGE AS A PERCENTAGE OF THE SOUTH AUCKLAND AVERAGE

	1972-4	1975-6	1977-8
Milk-fat production/ha	120.1	128.7	151.1
Stocking rate/ha	117.7	128.5	140.2
EFS	120.3	127.1	162.4

Increases of 31, 22.5 and 42.3% in milk-fat production, stocking rate, and EFS, respectively, were achieved between Period 1 and Period 3 (Table 1). Changes were greater between Periods 2 and 3 than between Periods 1 and 2. The change was greatest for EFS and least for stocking rate. The stocking rate increased at a steady rate over the 4 years, while EFS rose twice as fast as production between Periods 2 and 3 as it did between Periods 1 and 2. These relative changes illustrate the practical and biological delays in implementing new farm practices, as well as the time required for the adviser to gain the farmer's confidence.

Table 2 shows that if the average South Auckland farm increased its production to the same extent as those surveyed, this would result in 5504 kg more milk fat and a gain in EFS of \$7744. The average South Auckland farmer would also increase his herd size by 30 cows. This milk-fat increase, at \$1.82/kg, would increase gross farm income by \$10 017.

TABLE 2: THE DISCUSSION GROUP CHANGES APPLIED TO THE AVERAGE SOUTH AUCKLAND FARM

	<i>Present</i> (/ha)	<i>Present +</i> <i>Change</i> (/hd)	<i>Extra</i> (/farm)
Production (kg milk fat)	279	365	5504
Stocking rate (cows)	2.07	2.54	30
EFS (\$)	285	406	7744

As might be expected, individual farm results showed wide variation. The group included the following:

- (a) A leading farmer whose production averaged 78.3% above the South Auckland average.
- (b) An early adopter whose production rose from 11.2% below to 76.7% above the South Auckland average.
- (c) A farmer who, through management skill and competence as a stockman, increased milk-fat production by 20.7% and EFS by 63.0% while maintaining only a modest, + 3% until 1977, 11.2% overall, increase in stocking rate between Periods 2 and 3.
- (d) A developing farmer who was below South Auckland average for production until 1977, stocking rate until 1978, and EFS until 1975.
- (e) An early leader, with little motivation to change, who consistently produced near his 6-year average of 24% above the South Auckland average.

#### DISCUSSION

If the 5700 dairy farms (33% of all New Zealand dairy farms) in the South Auckland area increased production by the same amount as the Lake Road Discussion Group, the value of the extra production (f.o.b.) to New Zealand would be \$75.4 million. An estimate of the cost of the present Ministry of Agriculture and Fisheries\* and Dairy Board Advisory Service in the South

\* Includes field officers and does not take into account the fact that most Ministry of Agriculture advisers spend a proportion of their time advising sheep and beef farmers as well as attending to administrative duties.

Auckland area, including salaries and servicing, is \$620 500 per annum. The salary and servicing of an adviser could be met by one-quarter of the value to New Zealand of the increased production achieved by eight members of the Lake Road Discussion Group.

To achieve these results it is important for an adviser to gain the confidence of this group. To do this takes time and requires an understanding of individuals within the group as well as the dynamics of the whole group. The adviser must be seen to be succeeding with farmers, and this requires a comprehensive knowledge of both the farmers' and the district's problems. Follow-up and continuity of advice are essential if the farmers' confidence and enthusiasm are to be maintained. The adviser is the major catalyst for the adoption of new research findings.

#### REFERENCE

N.Z.D.B., 1971-6. *An Economic Survey of Factory Supply Dairy Farms in New Zealand, 1970-71 to 1975-76*. N.Z. Dairy Board, Wellington.