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## LOWER ORDER SHAREMILKING IN NEW ZEALAND

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### ABSTRACT

The objective of this paper is to describe the principal features of lower order sharemilking in New Zealand. The paper outlines the nature of sharemilking in general and lower order sharemilking in particular. The legislation underpinning lower order sharemilking and the reasons for it are described. The legislation operates through “Orders” and the paper reports the obligations of employers and sharemilkers under the most recent (2001) Order. Statistics on lower order sharemilkers are presented. A case study shows the nature of the returns to lower order sharemilking. The paper concludes with comments on the likely future of lower order sharemilking in New Zealand.

**Keywords:** Sharemilking, lower order sharemilker, Sharemilking Agreements Act

### INTRODUCTION

The origins of sharemilking in New Zealand are usually attributed to Scotland, from where many early dairy farmers in New Zealand came, and where some form of sharemilking seems to have been practised in the early nineteenth century. By the late 1880s sharemilking is likely to have become widespread throughout both islands.

The objective of this paper is to report one sharemilking arrangement (the lower or variable order) in New Zealand. The rationale for sharemilking is outlined together with the legislation underpinning lower order sharemilking. Some statistics on lower order sharemilking are reported and the paper concludes with some aspects of a case study of a lower order sharemilking operation.

### Rationale for Sharemilking

Sharemilking is an arrangement where two parties, a sharemilker and a landowner, enter into a contract. There are two types of sharemilking arrangements; the lower order (the subject of this paper) and the 50-50 agreement. The former covers the situation where for a share of the milksolids income, the sharemilker milks the herd and undertakes sundry other duties. Capital investment by the sharemilker is minimal. Under a 50-50 sharemilking arrangement, the sharemilker supplies the livestock, plant and machinery except the milking plant, for a share of the milksolids income, and undertakes all the farm maintenance work.

The rationale for sharemilking is clear. Few dairy farmers wish to spend their entire working lives milking dairy cows. One option is to employ a sharemilker, while another is to hire an employee. Each has their advantages and disadvantages. A dairy farm owner, not wishing to personally undertake the milking, can engage a sharemilker.

For a dairy farm worker, sharemilking is often viewed as a step in the path towards farm ownership. Typically, sharemilking follows a period as an employee. The lower order agreement, with its minimal capital requirement, is an attractive next step. If successful, the necessary capital can be accumulated for a 50-50 agreement, leading perhaps to farm ownership or a stake in an equity partnership.

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Few sharemilkers consider sharemilking to be an end in itself; it is the opportunity to be self-employed, to accumulate capital and to develop a business that is its appeal. While most sharemilkers aspire to farm ownership, perhaps no more than 10% succeed. Some sharemilkers however, see sharemilking as a long term career.

### **Legislation**

The Sharemilking Agreements Act 1937 is the legislation underpinning all lower order sharemilking agreements. The Act was passed in the first term of the first Labour Government in New Zealand. The purpose of the Act was to:

“make provisions for safeguarding the interests of sharemilkers under sharemilking agreements.”

The Act provides for a standard sharemilking agreement to be altered from time to time following agreement between the parties representing employers and sharemilkers. Section three of the Act requires that each term in a sharemilking agreement between an owner and a sharemilker be no less favourable to the sharemilker than that in the statute.

New sharemilking agreements are termed Orders. Since the Act was passed in 1937, there have been ten new Orders, the latest being in 2001. The Act provided for administration within the Department of Labour (a Government Department) and employees of the Department (inspectors) are empowered to take proceedings on behalf of sharemilkers.

The Act also provides for other sharemilking arrangements to be brought within the scope of the Act. This has never happened because the parties prefer to set their own terms and conditions rather than to have these fixed by legislation.

It might be expected that given the changes in technology, the economic environment (the Act was passed shortly after the Depression of the 1930s), and the dairy industry that there would have been changes in the legislation. The Act itself has only been amended once (in 1985) and that was to exclude from its provisions, those sharemilking agreements where the sharemilker receives half the income from the dairying operations but the employer leases his herd to the sharemilker for the purposes of the agreement.

The fundamental purpose of the Act, to protect the interest of sharemilkers, remains intact, even if it is not always understood. This was demonstrated in 2001 when a dairy farm owner and employer made a complaint to the Regulations Review Committee (a committee of Parliament) with respect to the current Order. The substance of his complaint was that it (the Order):

“does not achieve the aim of protecting the interests of both parties to the sharemilking agreement.”

It was pointed out by the Committee in its report to the House of Representatives that the purpose of the Act is to protect only the interests of sharemilkers. The report went on to state the objects and intentions of the statute would be satisfied if sharemilkers' interests were safeguarded, even at the expense of sharemilker's employers.

### **Basic Principles in Sharemilking Orders**

A number of principles have not changed over time. One of these is that sharemilkers are

independent contractors, not employees. This is a fundamental issue for employers as it means that legislation, giving rights to employees such as the Employment Relations Act 2000 and the Holidays Act 2003, do not apply to sharemilkers. Owners are not required to provide paid holidays for sharemilkers, nor do they fact the risk of a “personal grievance claim” for “unjustified dismissal”. The relationship between the employer and employee is a contractual one; a dispute between them is seen as a possible breach of contract and is resolved by mediation or arbitration. Although the issue could go to litigation this is very expensive and no sharemilking disputes have been resolved in the Courts since 1967.

Sharemilking contracts run for one year, but can be renewed if both parties agree. The contract is therefore highly uncertain for both. An owner faces the possibility that a competent sharemilker will move; the converse is however, that a poor performer can be easily dismissed. For the sharemilker, they can move after one year if the job is unsatisfactory, but of course they also face possible dismissal.

The owner (or the owner’s agent) has management and control of the farm, all of the operations and the management of the herd. Owners may not always choose to use their powers; operations may be left in the hands of the sharemilker. In the absence of directions or instructions, sharemilkers must act in conformity with good husbandry.

Some costs are the responsibility of the sharemilker. Sharemilkers must pay for any hired labour, electricity to run the milking plant, rubberware in the milking plant, costs associated with any machinery they possess and their own administrative costs, for example, accountancy fees. Other costs are split with the farm owner according to the legislation, for example, nitrogen fertiliser, purchased feed, silage and maize.

If the milk is downgraded, any penalty incurred is paid by the sharemilker. Downgraded milk realises a lower price and the owner must be paid the sum he would have been paid, had there been no downgrade. Sharemilkers are deemed to be liable as they have responsibility for cleaning the milking plant and any downgrades reflect failure to undertake that task.

Owners must provide sharemilkers with information on the number of cows to be milked, and in particular the minimum number of cows to be milked. Owners have the right to determine the dairy company to which the milk will be supplied, although this is currently not a major issue as perhaps about 97% of the milk in New Zealand goes to one company. In only a few areas in New Zealand do farmers have a choice of milk processor.

### **Changes in Orders Over Time and the Current (2001) Order**

There have been significant changes in Orders over time, in particular with respect to the sharemilker’s remuneration. From 1946 to 1990, the sharemilker’s portion of the milk income was fixed; in 1990 the sharemilker’s portion of the milk income was made “negotiable” reflecting the economic mantra at the time, with its focus on deregulation and the free market. This in turn, in 2001, was followed by the fixing of a “minimum reward” for those sharemilkers milking 300 or fewer cows. This development reflected strongly held views by the Sharemilkers Association that some younger sharemilkers in particular were earning very little for their efforts. Interestingly, anecdotal evidence is that farm owners, wherever possible, lifted cow numbers in excess of 300 where they can freely negotiate with sharemilkers the portion of the milk income going to each party.

The most recent Order, 2001, reflects a significant departure from previous Orders. Both parties, sharemilkers and owners, have sought to ensure that as far as possible, all issues of importance were addressed and requirements made as explicit as possible. The Order is however, an agreement; each party in addressing their own issues, had to be able to put up



something acceptable to the other side, for there to be an agreement.

The 2001 Order followed a period of lengthy negotiations that commenced in 1996. A total of 18 draft agreements were prepared over four years (Complaints Relating to the Sharemilking Agreements Order 2001) with the final agreement being 7 March 2001, a little under three months before the Order came into effect. Meantime it had to go through legal processes and be printed before its date of implementation so that the parties knew their rights and responsibilities.

Labour is an important issue for owners. Sharemilkers can be obliged to employ a specified number of full time and casual employees; must personally supervise each milking; must devote a reasonable proportion of the sharemilker's own time and of the sharemilker's labour force to general maintenance and reasonable permanent improvement on the land. The sharemilker is not allowed to vary the staff requirements without the written consent of the farm owner.

Safety of young children in cow sheds at milking has always been an issue if both parents milk. Under the 2001 Order, the farm owner must provide childcare facilities if it is necessary to accommodate children at the farm dairy during milking.

For owners, an important issue in lower order sharemilking is records, particularly those relating to the herd (calving dates, cow deaths, herd test results, mastitis cows and their treatment, for example). The sharemilker now must record and provide information on the above to the farm owner at any time upon request and upon termination of the agreement.

For sharemilkers, dispute resolution procedures are vital. The new dispute resolution process with its requirement that the parties in the first instance must negotiate in good faith and co-operate, will primarily benefit sharemilkers.

### **Numbers of Lower Order Sharemilkers**

Table 1 shows the number of dairy herds in New Zealand in 2003/04 in each operating structure, with 62.7% being owner operators and 37.1% being sharemilkers. There are 24.1% 50/50 sharemilkers with the balance being variable order sharemilkers (13%). The variable order sharemilkers have been categorised according to the proportion of the milksolids income being received. It is interesting to note that where the share of the milksolids income is relatively low, for example, less than 20%, the average herd size is relatively large (507 cows). Owners with large herds are driving down the sharemilker's proportion which sharemilkers are prepared to accept, to gain the advantages associated with milking a large herd.

The table shows decreasing average herd size associated with an increasing share of the milksolids income up to 30%. Above this, both the average herd size and share of the milksolids income increases.

Table 2 reports the percentage of herds in each operating structure for the last 10 years. The proportion of variable order sharemilkers increased from 8.8% (1994/95) to 14.1% (2001/02) but in the last two years has fallen by 1.1% to 13%. In this period (2001/02 – 2003/04), the percentage of owner-operators, 50% sharemilkers and those with an unknown structure all increased, in aggregate by 1.1%.

Table 3 shows the absolute number of dairy herds in each operating structure. In 2003/04 the number of owner-operators and 50/50 sharemilkers were fewer than in any of the previous nine years. The number of lower order sharemilkers in 2003/04, although lower than in the previous six years, was not as low as in the first three years of the decade.

### **Case study**

Little economic information is published on lower order sharemilkers. Economic Survey of New Zealand Dairy Farmers reports a range of financial information for owner operators and

Table 1. *Herd analysis by operating structure (2003/2004).*

| Operating structure     | Number of herds | Percentage of herds | Average herd size |
|-------------------------|-----------------|---------------------|-------------------|
| Owner-operators         | 8,000           | 62.7                | 286               |
| Less than 20% MS income | 78              | 0.6                 | 507               |
| 20 – 29% MS income      | 1,094           | 8.6                 | 342               |
| 30 – 39% MS income      | 212             | 1.7                 | 271               |
| 40 – 44% MS income      | 43              | 0.3                 | 285               |
| 50/50 MS income         | 3,072           | 24.1                | 326               |
| > 54% MS income         | 231             | 1.8                 | 314               |
| All sharemilkers        | 4,730           | 37.1                | 329               |
| Unknown                 | 21              | 0.2                 | 334               |
| All farms               | 12,751          |                     | 302               |

Source: Economic Survey of New Zealand Dairy Farmers 2003-2004. Dexcel Limited, Hamilton, New Zealand.

Table 2. *Trend in the percentage of herds in each operating structure for the last 10 years.*

| Operating structure | 1994/95 | 1995/96 | 1996/97 | 1997/98 | 1998/99 | 1999/00 | 2000/01 | 2001/02 | 2002/03 | 2003/04 |
|---------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Owner-operators     | 66.3    | 65.8    | 64.9    | 64.3    | 63.8    | 63.6    | 62.6    | 62.1    | 62.5    | 62.7    |
| Sharemilkers 50%    | 24.9    | 24.5    | 23.4    | 24.0    | 23.7    | 23.7    | 24.3    | 23.7    | 23.7    | 24.1    |
| Variable Order      | 8.8     | 9.7     | 10.8    | 11.7    | 12.5    | 12.7    | 13.1    | 14.1    | 13.2    | 13.0    |
| All sharemilkers    | 33.7    | 34.2    | 34.3    | 35.7    | 36.2    | 36.4    | 37.3    | 37.8    | 36.9    | 37.2    |
| Unknown             | 0.0     | 0.0     | 0.9     | 0.0     | 0.0     | 0.0     | 0.0     | 0.1     | 0.5     | 0.2     |

Source: Economic Survey of New Zealand Dairy Farmers 2003-2004. Dexcel Limited, Hamilton, New Zealand

Table 3. *Trend in the number of herds in each operating structure for the last 10 years.*

| Operating structure | 1994/95 | 1995/96 | 1996/97 | 1997/98 | 1998/99 | 1999/00 | 2000/01 | 2001/02 | 2002/03 | 2003/04 |
|---------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Owner-operators     | 9,711   | 9,702   | 9,833   | 9,435   | 9,159   | 8,820   | 8,705   | 8,476   | 8,215   | 8,000   |
| Sharemilkers 50%    | 3,642   | 3,614   | 3,455   | 3,522   | 3,403   | 3,280   | 3,372   | 3,240   | 3,114   | 3,072   |
| Variable Order      | 1,290   | 1,420   | 1,595   | 1,716   | 1,800   | 1,761   | 1,815   | 1,924   | 1,740   | 1,658   |
| All sharemilkers    | 4,932   | 5,034   | 5,050   | 5,238   | 5,203   | 5,041   | 5,187   | 5,164   | 4,854   | 4,730   |
| Unknown             | 6       | 0       | 128     | 0       | 0       | 0       | 0       | 9       | 71      | 21      |
| Total:              | 14,649  | 14,736  | 14,741  | 14,673  | 14,362  | 13,861  | 13,892  | 13,649  | 13,140  | 12,751  |

Source: Economic Survey of New Zealand Dairy Farmers 2003-2004. Dexcel Limited, Hamilton, New Zealand.



50/50 sharemilkers only and no such information is provided for lower order sharemilkers.

A single case study was undertaken of a lower order sharemilker to identify the issues in a lower order sharemilking arrangement. Basic information is shown in Table 4.

**Table 4. Physical and financial information for case study sharemilker.**

|                       |   |
|-----------------------|---|
| Area of farm          | 100 ha  |
| Effective area        | 85 ha   |
| Run off               | 69 ha   |
| Average production    | 100,750 kg milksolids   |
| Herd size             | 340 cows and 2 yr heifers   |
| Income (sharemilker)  | No income from stock<br>29% of milksolids income<br>Calf rearing allowance of \$80 per head |
| Capital (sharemilker) | \$19,000  |

The sharemilker is on a yearly contract and somewhat unusually has been a sharemilker for his current employer for 12 years. He owns a small piece of land and travels to the farm each day. The farm owners are four sisters and the operation is overseen by a consultant who visits the farm every 6-8 weeks, accompanied by a representative of the owners.

The farm has a run-off of 69 ha in addition to the milking platform of 85 ha effective. The principal capital items are bikes used to travel to the farm daily and for movement around the farm. Capital investment by the sharemilker is minimal, the principal resource being labour; its important that labour productivity, both the sharemilker's own labour and that of his employee, be as high as possible. Reliable bikes are important here.

Part of the sharemilker's capital consists of calf rearing equipment, designed to make calf rearing (a sharemilker responsibility) as easy as possible and thereby boosting labour productivity. The equipment is also "portable capital" which can be removed if the sharemilker were to leave the job.

Table 5 shows the sharemilker's estimated income and expenditure.

Table 5 shows a surplus of \$68,299 from which to meet depreciation, income tax and personal drawings. If depreciation was \$3,800, the taxable income would be \$64,499 and income tax would be \$16,425, leaving a tax paid income of \$48,074 for personal drawings.

The two principal expenses are wages and feed costs, which includes nitrogen, maize silage, hay and balage. Unlike wages, which are paid entirely by the sharemilker, feed costs are shared with the owner. For example, the sharemilker pays 29% of the nitrogen cost and all the harvesting costs for the maize silage.

Various measures can be used to evaluate business performance, including a range of return on capital criteria. These measures are of limited interest for evaluating sharemilker performance as the capital investment, as discussed previously, is minimal. The rewards to sharemilkers comes from physical effort. Indeed the Government, in enacting the Sharemilking Agreements Act 1937, saw little difference between sharemilkers and employees and the need to provide "protection" for sharemilkers like employees. Hence the Sharemilking Agreements Act 1937.

**Table 5.**        *Sharemilker’s income and expenditure.*

|   |                 |                         |
|---|-----------------|-------------------------|
| <u>Income</u>                           |                 |                         |
| 100,750 kg milksolids @ \$4.50/kg (29%) |                 | 131,479                 |
| Calf rearing: 69 calves @ \$80/head     |                 | <u>5,520</u>            |
|   | <b>Total:</b>   | <b><u>\$136,999</u></b> |
| <u>Expenses</u>                         |                 |                         |
| Wages (one employee)                    | \$22,000        |                         |
| Shed expenses                           | 5,500           |                         |
| Electricity                             | 5,000           |                         |
| Vehicles                                | 8,400           |                         |
| Insurance                               | 1,700           |                         |
| Accident Compensation Levy              | 3,000           |                         |
| Telephone                               | 2,000           |                         |
| Feed (includes nitrogen)                | 20,000          |                         |
| Accountancy                             | <u>1,100</u>    | <u>\$68,700</u>         |
|   | <b>Surplus:</b> | <b>\$68,299</b>         |

**Table 6.**        *Analysis of sharemilkers’ hours of work.*

| Activity       | Days      | Hours/day  | Total    |
|----------------|-----------|------------|----------|
| Calving        | 56        | 10.5       | 588      |
| Normal milking | 220       | 8.0        | 1760     |
| Dry period     | 61        | 8.0        | 488      |
| Vacation       | <u>28</u> | <u>0.0</u> | <u>0</u> |
|                | 365       |            | 2836     |

Source: Zach Ward, personal communication.

Determining the return per hour of work is problematical for a self-employed person. The sharemilker estimated his hours of work as shown in Table 6.

The sharemilker undertakes only the morning milking during the normal milking period, leaving the farm about 3.00 pm, with the employee to undertake the evening milking.

Using the estimate of 2836 hours and a net profit of \$64,499, the return per hour of work is \$22.74. This sum however, does not allow for interest on the sharemilker’s capital. If we take this to be \$1900 (10% on \$19,000), the return per hour falls to \$22.07. Whether this is “high” or “low” depends upon the particular sharemilker, his/her earning ability and the importance of additional income. Interestingly this sharemilker has chosen to hire an employee, who, *inter alia*, undertakes the evening milking. The sharemilker has sacrificed income for lifestyle.

The sharemilker, like other lower order sharemilkers, evaluates proposals for change (from farm owners) in terms of the likely impact on income and hours worked. Some of the issues involved can be illustrated by a recent decision of the owners to install an irrigation scheme. This decision was taken by the owners but was made after full consultation with the sharemilker, who fully supported the proposal. The analysis in Table 7 shows the basis for the sharemilker’s



support for the irrigation proposal.

The return per hour to the sharemilker from irrigation is about twice that being earned from baseline activities.

**Table 7. Returns to the sharemilker from irrigation.**

Additional production

|                           |           |              |
|---------------------------|-----------|--------------|
| Extra milksolids produced | 12,000 kg |              |
| Milksolids price          |           | \$4.50/kg MS |
| Additional income         |           | \$15,660     |

Additional labour requirements

|                                    |                              |
|------------------------------------|------------------------------|
| Days irrigated                     | 140 (late October-mid March) |
| Labour required per irrigation day | 2 hrs                        |
| Labour required from extra cows    | 0.25 hrs/normal milking day  |
| Normal milking days                | 220                          |
| Total extra labour hours           | 335                          |
| Return per hour of labour          | \$46.75                      |

Source: Zach Ward, personal communication

## CONCLUSION

This paper has described lower order sharemilking, an important ownership structure in the New Zealand dairy industry. The future of the sector will be determined by sharemilkers, employers, both of whom will be influenced by industry economics. A farm owner can employ a lower order sharemilker or a manager. For an owner, a lower order sharemilker is likely to be more expensive than a manager when dairy incomes are high. The converse applies when dairy incomes are low. A sharemilker means some loss of control for the owner compared to employing a manager. The latter is however, likely to involve more work for the owner. It is the interplay of these forces which will determine the future of lower order sharemilking in New Zealand.

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