# SHAREMILKING IN NEW ZEALAND

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**Abstract**

*This paper describes the essential features of sharemilking in New Zealand; the types of sharemilking agreements; the contribution to dairy output from farms on which a sharemilker is engaged; and sharemilking legislation. The paper outlines the essential features of variable order and herd owning sharemilking agreements and provides economic information on both agreements. The paper concludes that the future of sharemilking depends upon how it measures up against alternative arrangements. For both prospective sharemilkers and farm owners there are structures other than sharemilking which may prove to be more popular in future.*

*Keywords*: sharemilking – types, agreements, legislation

*Subtheme*: farm management

## History and origins

Sharemilking has a long history in New Zealand. The concept is believed to have originated from Scotland but it is thought that the share cropping system in the United States may have played a part in forming the early contracts.

The first recorded instance of sharemilking in New Zealand is found in the records of the Henley Land Co, on the Taieri Plains, in Otago. A Mr J Stevenson, manager of the company, reported introducing the system in 1884.

The system spread to the Waikato and Taranaki and it seems that by the late 1880s sharemilking was widespread throughout both the North and South Islands.

Since that time sharemilking has become an important institutional structure in the New Zealand dairy industry.

## Features of sharemilking arrangements

Sharemilking agreements are share leasing arrangements. Sharemilkers pay rent in the form of a share of production for the use of the farm owner's capital. Both parties (farm owner and sharemilker) share the risk of low milksolids production and/or a low milksolids price while both reap the rewards from high production and/or high prices.

The legal relationship between a farm owner and a sharemilker is that of principal and independent contractor, not employer and employee. Employment law is not relevant in the farm owner-sharemilker scenario. There are of course disagreements from time to time between sharemilkers and farm owners in relation to their contracts. If these should be decided in the Courts, which is unusual, it is the Contractual Remedies Act 1979 and case law which will be relevant in determining the dispute. The Act provides remedies for misrepresentation and breach of contract.

There are two parties to every sharemilking agreement and for the practical operation of any agreement one party must be given ultimate decision making power. This person is always the farm owner.

In every sharemilking agreement certain clauses are termed warranty clauses. These clauses relate to production in previous years, fertiliser applications, land area, for example. The land owner warrants that this information is correct and if it is not and the sharemilker relies on this information and it causes a loss then the landowner is legally liable. In effect misrepresentation has taken place and the Contractual Remedies Act applies.

All sharemilking agreements include dispute resolution clauses, designed to resolve disputes in an expeditious manner. Typically parties are required to negotiate in good faith in the first instance. If this does not succeed a formal dispute resolution process comes into play commencing with conciliation and ending with arbitration. Some disputes are decided in the Courts.

Of critical importance in sharemilking agreements is expenditure and the liability of each party for the various expenses. Certain expenses are always paid by sharemilkers. These include wages as it is the sharemilker who hires any labour, electricity to operate the milking plant, shed expenses and expenses associated with any machinery a sharemilker brings to the venture.

Landowners pay the expenses associated with land, buildings and other fixed assets, for example, rates and repairs and maintenance.

**Types of sharemilking agreements**

The two sharemilking arrangements in New Zealand are the Variable Order Agreements (sometimes termed lower order agreements) and Herd Owning Sharemilking Agreements (sometimes termed 50/50 agreements).

Under the variable order agreements, the capital required of the sharemilker is minimal, often only a few thousand dollars in the form of ATVs and perhaps calf rearing equipment. The rewards to variable order sharemilkers reflect their managerial skill and work effort.

Herd owning sharemilking arrangements require a substantial capital input by a sharemilker as they are required to provide all the livestock as well as the plant and machinery, other than milking plant. The greatly increased capital and heavier responsibilities result in much higher rewards for herd owning sharemilkers than for variable order sharemilkers.

**Herd operating structures**

Table 1 shows data for herd operating structures for 2008-09. It can be seen that just under 36% of farms are operated under a sharemilking arrangement. This number has remained remarkably stable over the last 10 years.



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**Table 1. Herd operating structures 2008-09**

| | Number | % |
|---|---|---|
| Owner-operators ** | 7,384 | 63.5% |
| Variable Order sharemilkers | 1,760 | 15.1% |
| Herd Ownership sharemilkers | 2,418 | 20.8% |
| Unknown | 56 | 0.48% |
| | 11,618 | 100% |

** Includes leased farms and contract milkers.
*Source:* New Zealand Dairy Statistics
Livestock Improvement Corporation
Hamilton
New Zealand

**Production on sharemilked farms as a proportion of total production**

Table 2 shows that farms operated under a sharemilking arrangement generated 37% of total milksolids in 2008-09, slightly higher than the number of sharemilkers as a percentage of all operating structures. It can be seen that the average milksolids per herd where a sharemilker is engaged is 7% greater than that for the average owner-operator.

**Table 2. Dairy production by operating structure**

| | Number | MS per herd | Total | % |
|---|---|---|---|---|
| Owner-operators | 7,384 | 116,614 | 861,077,776 | 61.7% |
| Sharemilkers | | | | |
| | 4,178 | 124,104 | 518,506,512 | 37.2% |
| Unknown | 56 | 253,298 | 14,184,688 | 1.01% |
| Total | 11,618 | | 1,393,768,976 | 100% |

*Source:* New Zealand Dairy Statistics
Livestock Improvement Corporation
Hamilton
New Zealand

**Variable Order Agreements**

These arrangements have a long history in New Zealand. A turning point for these structures occurred in 1937 when Government passed the Sharemilking Agreements Act, whose purpose was to make provisions for safeguarding of the interests of sharemilkers under sharemilking agreements. Interestingly, the Act was designed to protect people who are self employed. Undoubtedly Parliament took the view that variable order sharemilkers were "workers" and warranted the protection of the Legislature.

The Act set out in a schedule, minimum terms to apply to all sharemilking agreements. No term or condition in a sharemilking agreement is lawful if it is less favourable to the sharemilker than the term or condition set out in the schedule. Furthermore, farm owners are not allowed to "trade terms" by asking a sharemilker to accept in an agreement a term or condition less favourable to the sharemilker than in the schedule for a more favourable term or condition in an agreement than that in the schedule.

The terms and conditions in the schedule attached to the Act were those agreed to by farm owners and sharemilkers at that time. Since 1937 there have been twelve "Orders" (the term "Order" replaced the original schedule). A new order comes into force when representatives of sharemilkers and farm owners agree on the changes and it has been through the regulatory process. The most recent order came into force on 1 June 2001.



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Variable order agreements are one year contracts, but can be renewed if both parties agree.

For a variable order sharemilker key clauses are those in relation to stock numbers (number of in-calf cows and in-calf heifers) and records of milk grades and animal health issues, for example, somatic cell counts for the current and previous season.

In relation to remuneration, the sharemilker receives a negotiated share of the milksolids income; if the herd is more than 300 cows (termed the "agreed share"). This ranges from less than 20% to over 50%. Sharemilkers on larger herds typically receive a lower share of the milksolids income. If the herd is 300 cows or fewer sharemilkers receive 21% of the milk income net of operating costs.

Sharemilkers may receive a calf rearing allowance and a share of the proceeds from calf sales.

Included in the agreement will be the number of full time and casual labour units the sharemilker must provide. Sharemilkers always closely examine labour obligations in a sharemilking agreement as all costs associated with employees are their responsibility.

The agreements have 13 clauses relating to livestock and feed. There will be a maximum and minimum herd number which the farm owner must supply. In relation to feed, agreements stipulate the feed cover at commencement and termination and the feed supplements and associated obligations of the parties.

In a variable order agreement, it is the farm owner's responsibility to obtain the necessary resource consent and provide the required infrastructure for effluent disposal. Sharemilkers must operate the system in an efficient and workmanlike manner. Failure to do so renders them liable to be fined.

Sharemilkers have obligations to record and provide comprehensive information about livestock to the farm owner upon request and upon termination. They are responsible at all times for the care and husbandry of all stock.

Sharemilkers are responsible for control and eradication of weeds. The farm owner must provide the materials but all work is undertaken by the sharemilker.

The costs incurred in harvesting supplementary feed, growing and harvesting forage crops and maize silage, nitrogen, purchased feed and off farm grazing are of particular importance in variable order sharemilking. These costs are either paid by the farm owner or they may be shared with the sharemilker. If the latter applies, the sharemilker pays no more than the "agreed share", that is, the same percentage as the sharemilker receives from the sale of milksolids.

Finally, the farm owner is required to provide rent free accommodation to the sharemilker.

Generally, but not always, the farm owner will be closely involved in the operation of a variable order agreement. Often the owner will live on the farm. Sometimes however, decision making is left largely in the hands of the sharemilker.

Almost invariably variable order sharemilking is the first self-employed position a person (or couple) take in their dairying career. It is a big step. Usually a position on wages is left at the end of May and it will not be until 20th September until a significant milk cheque is received and in the meantime personal and business expenses must be met.

There are no statistics on the income and expenses for variable order sharemilkers. Below is shown details for a variable order sharemilker in the lower North Island:



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| | |
|---|---|
| Area: | 220 ha |
| Production: | 225,000 kg milksolids |
| Cow numbers: | 630 |
| Capital investment: | $20,000 |
| Share of milksolids: | 26% |
| Share of calf sales: | 26% |
| Calf rearing allowance: | $70 per calf |
| Nitrogen share: | Nil |
| Palm kernel extract: | 26% |

This arrangement is unusual in that the sharemilker does not pay for any nitrogen but pays 26% of any PKE purchased. Clearly in the event of a potential feed shortage there is a powerful incentive to use nitrogen (urea) to boost pasture growth rather than purchase PKE.

The "agreed share" of the milksolids income at 26% is relatively high for a herd of this size but special factors apply.

The estimated income and expenses for 2009-10 were:

| | | $ | $ |
|---|---|---|---|
| Income | Milk | 374,400 | |
| | Calf rearing | 9,660 | |
| | Calf sales | 5,378 | $389,438 |
| Expenses | Wages | 100,000 | |
| | Shed | 10,000 | |
| | Electricity | 26,000 | |
| | Vehicle | 12,500 | |
| | Insurance | 5,000 | |
| | ACC levies | 10,000 | |
| | Telephone | 3,000 | |
| | Accountancy | 4,000 | |
| | Administration | 1,000 | |
| | General | 10,000 | |
| | Tools | 1,000 | 182,500 |
| | | Surplus | $206,938 |

**Herd Owning Sharemilking Agreements**

About two-thirds of all sharemilking agreements are herd owning arrangements where the sharemilker provides the herd and all the plant and machinery other than the milking plant.

Unlike variable order arrangements, there is no specific legislation governing herd owning sharemilking agreements. Two organisations have agreements used in many sharemilking situations (Farmwise, an entity within the Livestock Improvement Corporation, a publicly listed co-operative and Federated Farmers of New Zealand (Inc), a body representing farmers). However, even in these situations it is not uncommon for there to be additional clauses. Some farm owners have their own agreements.

Herd owning sharemilkers require a substantial amount of capital and invariably have significant borrowings. One consequence of this is that the contract term is much longer than the one year contract associated with variable order sharemilking, typically three years.



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Remuneration is much higher also in herd owning agreements with the sharemilker usually receiving half of the milk income, all income from the sale of cows and heifers and normally all proceeds from calf sales.

A herd-owning sharemilker pays more expenses than does a variable order sharemilker. A herd owning sharemilker pays all animal related expenses (animal health and animal breeding), all expenses associated with milking (electricity, rubberware), half of any nitrogen or lime and all wages. Costs associated with purchased feed, including off farm grazing, are split evenly. The sharemilker pays expenses associated with any plant and machinery he/she owns.

The farm owner, in broad terms, pays for capital and operating costs associated with buildings, milking plant, water supply and fencing. Farm owners pay for fertiliser and must provide material for maintenance of fences and water supply, although sharemilkers must do the work.

If an input is expected to provide a short term benefit only, then the parties share costs equally. Thus the costs associated with nitrogen are invariably split equally. Likewise the costs associated with growing a forage crop such as turnips (cultivation, seed, fertiliser, weed/pest control) are shared equally but if the paddock is sown into new grass, the owner will pay for the seed as the pasture provides a long term benefit, probably beyond the term of the sharemilker’s contract.

An important issue now in herd owning agreements, relates to dairy company share holding. In New Zealand the dairy industry is dominated by cooperatives with a shareholding requirement of one share for each kg of milksolids. Shares are held by farm owners. For sharemilkers it is important to know the number of fully paid shares (a warranty clause) held by the farm owner and the consequences of production being in excess of current shareholdings. Options in this situation are for the owner and/or sharemilker to purchase additional shares or for the milk to be paid for as unshared supply, which attracts a lower price. Whichever option is chosen, it needs to be sorted out before a sharemilking agreement commences.

For a sharemilker it is critical to obtain the best possible information on all those factors influencing production and expenses when contemplating entering into a herd owning sharemilking agreement. Some of this, for example past production, cow numbers, fertiliser application, soil test data and supplement requirements will be included in the sharemilking agreement which must be studied carefully. The agreement provides not only past information but also obligations on sharemilkers which they must incorporate into their budgeting.

Sharemilking agreements have evolved over time. More quantitative data is now required, for example, on pasture cover on termination of an agreement, soil test data and condition score of cows at commencement of an agreement. Effluent disposal is a major issue now in dairying and the obligations of both parties are made explicit. Essentially the sharemilker is responsible for the efficient operation of the system and the owner must obtain the necessary resource consents and provide a system for effluent disposal.

Tables 3 to 6 show average financial information for a sample of approximately 120 herd owning sharemilkers in 2007-08 and 2008-09. The sharemilkers are not the same in each year. The year 2007-08 was a high payout year while returns in 2008-09 were much lower.



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**Table 3. Cash operating surplus and operating profits for herd owning sharemilkers**

| | | 2007-08 | | 2008-09 |
|---|---|---|---|---|
| Income | | | | |
| Milk sales | $ | 411,185 | $ | 306,998 |
| Net livestock sales | | 11,386 | | 27,137 |
| Other sales | | 2,806 | | 4,749 |
| Total | | 425,377 | | 338,884 |
| Inventory change | | 64,964 | | 19,219 |
| Gross income | | 490,341 | | 358,103 |
| Expenditure | | | | |
| Farm working expenses | $ | 224,980 | $ | 250,958 |
| Labour and management allowance | | 66,547 | | 70,048 |
| Depreciation | | 16,769 | | 20,660 |
| Other adjustments | | 2,618 | | -652 |
| Total expenditure | | 310,914 | | 342,318 |
| Operating profit | $ | 179,427 | $ | 15,785 |
| Cash operating surplus | $ | 200,397 | $ | 87,926 |

*Source:* Dairy New Zealand Economic Survey
Dairy New Zealand
Hamilton
New Zealand

Table 3 shows cash operating surplus and operating profits for the two years. It can be seen that both operating profits and cash operating surpluses were much lower in 2008-09 than in 2007-08, 64% of the fall in operating profit being due to decreased milk sales. Almost 93% of the decline in the cash operating surplus was associated with the decreased milk sales.

From Table 4 when non cash operating expenses (rent, interest, personal drawings, income tax, principal repayments and capital expenses) are deducted from the cash operating surplus, the value for 2007-08 remains positive but that for 2008-09 becomes a deficit.

**Table 4. Cashflow for herd owning sharemilkers**

| | | | 2007-08 | | 2008-09 |
|---|---|---|---|---|---|
| Cash operating surplus | | $ | 200,397 | $ | 87,926 |
| Less rent, interest, income tax | | | 75,117 | | 70,955 |
| | Surplus | | 125,280 | | 16,970 |
| Add non farm income | | | 1,885 | | 17,594 |
| | Surplus | | 127,165 | | 34,564 |
| Less capital and principal | | | 19,050 | | 1,087 |
| | Surplus | | 108,115 | | 35,651 |
| Less drawings | | | 64,165 | | 55,161 |
| Cash surplus | | $ | 43,950 | $ | –19,150 |

*Source:* Dairy New Zealand Economic Survey
Dairy New Zealand
Hamilton
New Zealand

Tables 5 and 6 report equity growth in the 2007-08 and 2008-09 years. In the former this was substantial with average equity growing from $297,133 to $783,678, an increase of $486,545. This reflected both significant retained earnings and assets growing faster than liabilities, in part due to higher livestock values at closing reflecting favourable dairy prices.



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**Table 5. Capital structure and equity growth for herd owning sharemilkers (2007-2008)**

| | | | | |
|---|---|---|---|---|
| 1.7.07 | Assets | Livestock | $ | 508,957 |
| | | Other | | 203,542 |
| | | Total | | 712,499 |
| | Liabilities | | | 415,366 |
| | Equity | | | 297,133 |
| 30.6.08 Assets | | Livestock | $ | 942,049 |
| | | Other | | 479,536 |
| | | Total | | 1,421,585 |
| | Liabilities | | | 637,907 |
| | Equity | | | 783,678 |
| Growth in equity from retained earnings | | | $ | 111,230 |
| Growth in equity from capital | | | | 375,315 |
| | | Total | $ | 486,545 |

*Source:* Dairy New Zealand Economic Survey
Dairy New Zealand
Hamilton
New Zealand

**Table 6. Capital structure and equity growth for herd owning sharemilkers (2008-2009)**

| | | | | |
|---|---|---|---|---|
| 1.7.07 | Assets | Livestock | $ | 887,282 |
| | | Other | | 368,972 |
| | | Total | | 1,256,254 |
| | Liabilities | | | 548,259 |
| | Equity | | | 707,995 |
| 30.6.08 Assets | | Livestock | $ | 548,293 |
| | | Other | | 420,614 |
| | | Total | | 968,907 |
| | Liabilities | | | 672,382 |
| | Equity | | | 296,525 |
| Growth in equity from retained earnings | | | $ | –34,586 |
| Growth in equity from capital | | | | –376,884 |
| | | Total | $ | –411,470 |

*Source:* Dairy New Zealand Economic Survey
Dairy New Zealand
Hamilton
New Zealand

The situation in 2008-09 was reversed with average equity falling by $411,470 due to poor dairy prices and a decline in livestock values.

These tables show the importance of dairy prices in equity growth for herd owning sharemilkers. High dairy prices boost both retained earnings and asset values.

**Future of sharemilking**

The future of the sharemilking system in New Zealand depends upon both farm owners, who offer sharemilking contracts and those who might seek a position as a sharemilker.

Farm owners who wish to cease the day to day work associated with dairying, and those on larger farms who need staff, have a range of options. In the first instance they can hire employees, engage a variable order sharemilker or contract milker.



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Contract milking appears to be growing in popularity but there are no records of the number of these arrangements. Contract milkers are independent contractors who receive a flat payment for each kilogram of milksolids. Contract milking agreements vary widely but invariably contract milkers are responsible for wages, electricity in the shed and certain shed expenses. Contracts run for one year and contract milkers are required to provide the plant and machinery as would a variable order sharemilker.

It is a bigger step for a farm owner to move to a herd owning sharemilking operation. It is likely to be a permanent move. It is often not an option if there is substantial debt as the farmer is giving up half the milk income and all of the livestock income. There is also a significant loss of control, however capital is freed up from the sale of the livestock and some plant and machinery and this could be an important advantage.
For those planning a career in the dairy industry, at some stage a decision needs to be made as whether to remain an employee or go down the path of contract milking/variable order sharemilking leading to herd owning sharemilking, an equity partnership and possibly farm ownership.

It is the interplay of these forces that will determine the importance of sharemilking in the future of the dairy industry. Other structures are evolving and for sharemilking to retain its importance it will need to be competitive against other options for both farm owners and prospective sharemilkers.

**Conclusions**

Sharemilking has been an important institutional arrangement in the New Zealand dairy industry with just under 40% of dairy output being produced on farms on which a sharemilker is engaged.

Farm owners, who could offer sharemilking positions and those who might seek to become sharemilkers, both have options. The future of sharemilking will depend on how sharemilking is viewed against the alternatives.

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