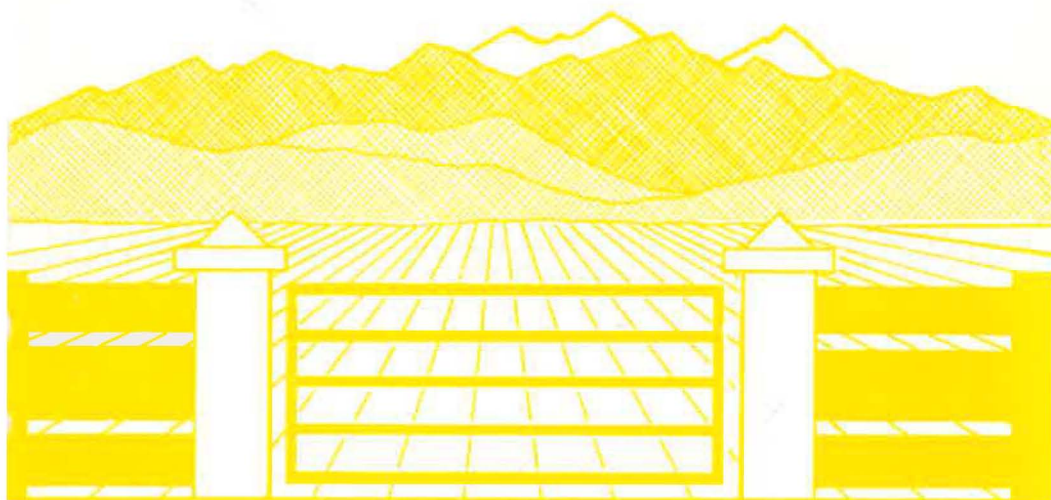




**Lincoln College**

**Farm Management and Rural Valuation Department**

# **1982 Farm Budget Manual**



## **Part 2 Financial (Volume 1)**

# **1982 FARM BUDGET MANUAL**

**Part 2: FINANCIAL**  
Volume 1      Sections 1–4

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## PREFACE

The Lincoln College Farm Budget Manual is published in two parts: Part 1, the Technical Manual, which is revised biennially, and Part 2, the Financial Manual, which is revised every year.

The 1982 edition of the Financial Manual contains seven sections: Assistance and Incentives for Farmers; Farm Capital and Finance; Farm Revenue; Farm Expenditure; Enterprise Analysis; Taxation for Primary Producers 1982; and Estate and Gift Duties.

Prices quoted in this Manual are those pertaining to the period from late 1981 to early 1982. As most people would be aware, prices for many commodities will rise in the coming year. Therefore, the prices contained in this Manual should be used as a guide only. Up-to-date figures should always be obtained where possible in any financial planning.

Trade names of various products are used only to acquaint the reader with some of the types available, and for clarity and convenience. No preferential endorsement by the College is intended. Nor is criticism of similar or alternative products implied.

I would like to express my grateful thanks to Miss Elizabeth Burtt for her conscientious work in supervising the revision and updating of the Manual, and also to Mrs Heather Marshall and Mr Frank Minehan for gathering and collating the information. Special thanks must also go to Marion Mischler for her many hours of conscientious work in deciphering and transferring the manuscript to the Word Processor.

To all other members of the College staff, commercial firms and organisations who provided information and assistance in the revision of this Manual, I extend my thanks.

I trust all readers of the Manual find it of interest and value.

R.J. Diprose  
Senior Lecturer in Farm Management  
Editor  
March 1982





## INTRODUCTION

In an era of increasing sophistication in farm management analytical techniques, the budget remains the simplest and yet most versatile technique available to the farmer and his adviser. Essentially a farm budget is a written plan which formalises an anticipated farm programme and translates it into expected financial results.

Some reassurance can be gained from the knowledge, as the following prose indicates, that the basic financial problems have been with us for some time now. However, through budgeting, the requirement for dollars and cents does become slightly more quantitative.

- IN HOT H<sub>2</sub>O -

My Grand'fer farmed in days of yore,  
But I must farm in 'eighty-four:  
My Grand'fer grew large crops of grain,  
In spite of drought, disease and rain:  
My Grand'fer farmed, to my surprise,  
Without one expert to advise.  
I wish I'd farmed in days of yore  
Instead of Nineteen-eighty-four  
While thick the experts round me stand  
To guide and lead me by the hand:  
My wheat, they say, will never grow  
Without its need of H<sub>2</sub>O:  
Nor will my barley ever thrive  
Without some more P<sub>2</sub>O<sub>5</sub>.  
My roots, it seems, will likewise rot,  
Unless I dress with Phos. and Pot.;  
While if I add to ample P  
A modest dose perhaps of C  
It seems quite certain I shall then  
Upset the ratio of N.  
It's doubtful if I'll ever see  
A blade of grass on yonder lea,  
Unless I buy, without delay,  
One hundred tonnes of S. of A.  
Thus wise I farm in Eighty-four  
Would I had farmed in days of yore.

One day (perchance of experts rid),  
I'll farm as well as Grand'fer did:  
But first I'll need, it's obvious sense,  
A tonne or two of Dollars and Cents.

ANON

The final form of any budget will depend on the purpose for which it is to be used and the vocation and point of view of the person doing it. Thus budgets produced for the same farmer by his farm adviser and his accountant might vary quite markedly in approach and presentation.

The Lincoln College budget is designed primarily as a teaching aid and so lays considerable emphasis on formalising the farm programme for the budget year. The Society of Accountants budget on the other hand is designed for use by accountants whose main interest lies in the finances of the farm rather than the details of the farm programme.

The information in this Manual is set out to assist the individual in assessing any farming orientated financial transaction or computation with a reasonable degree of accuracy.

Section 1, Assistance and Incentives for Farmers, contains direct extracts from the M.A.F. Information Services booklet "Rural Industry Incentives 1981-1982".

Section 2, Farm Finance, gives a brief description on the forms of capital and provides information regarding possible sources, lending terms and lending rates.

Section 3, Farm Revenue, is an attempt at assessing representative levels for farm prices for the present financial year.

Section 4, Farm Expenditure, is likewise an attempt at formalising a financial basis for assessment of farm costs. The information contained in both Sections 3 and 4 should be regarded in light of present highly inflationary times.

Section 5, includes samples of Gross Margin Analysis, Cash Flows for long term crops, and two budgets, to demonstrate these techniques in assessing different enterprises.

Section 6, Income Taxation, examines the taxation system in New Zealand with reference to individuals, companies, partnerships, trusts and primary producers. There are several worked examples of taxation liabilities.

Section 7, Estate and Gift Duty, contains details of how these Duties are determined for the current financial year, supported by worked examples.

# **FARM BUDGET MANUAL**

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## **SECTION 1**

### **ASSISTANCE AND INCENTIVES FOR FARMERS**



## 1. ASSISTANCE AND INCENTIVES FOR FARMERS

### 1.1 INTRODUCTION

This section contains direct extracts from the M.A.F. Media Services Booklet "Rural Industry Incentives 1981-82", and other contributors.

Whilst this section sets out briefly those measures of direct benefit to farmers it makes no attempt to include the wider range of Government Support for the primary industry, such as advisory services, research and grants to various bodies and organisations.

### 1.2 FARM SETTLEMENT

Details on available finance and current charges are given more fully in Section 2 - "Farm Capital and Finance".

#### 1.2.1 Farm Settlement Finance

Preference for finance for farm settlement is given to:

- applicants such as sharemilkers, farm employees, and farmers' sons who are purchasing a first farm; and
- farmers who are purchasing additional land to make an existing unit economic.

Other factors considered are the applicant's qualifications and experience in the type of farming he proposes, personal contributions (cash, stock, or land), the price being paid, other borrowing, and whether farm earnings will cover commitments such as loan charges, farm expenses, and maintenance, and provide a reasonable standard of living for the applicant and his family.

Though most loans are granted to purchase self-contained viable units, some are granted as a stepping stone to farm ownership, and to help retain competent workers in the industry.

[Rural Banking and Finance Corporation]

#### 1.2.2 Special Settlement Loans

The Special Settlement Loans Scheme aims to settle young farmers who would not otherwise have the opportunity of purchasing a farm, and who have demonstrated qualities of thrift, initiative, and outstanding ability to manage a farm enterprise.

Loans up to 85% of the Rural Bank's valuation of the essential land, buildings, stock and plant may be advanced. Interest is at the current farm purchase rate, presently 9%, rebated to 7.5% for the first 3 years, and repayment terms are flexibly administered to accommodate fluctuations in farm income. Applicants must have a minimum unencumbered contribution of 15% of the ingoing total, with a reasonable proportion from personal savings. Preference will be given to applicants in the 25 to 40 year age group, with their own transport and (desirably) with some academic farming qualification.

Properties are at the applicant's own choice, but must be reasonably priced, economic units, with an adequate standard of improvements. Most loans will be made for the purchase of sheep, dairying, or mixed-cropping farms, though other types of agricultural enterprises may be considered.

[Rural Banking and Finance Corporation]

#### 1.2.3 Maori Lands Finance

The Maori Land Board provides financial assistance to farmers of Maori descent to enable them to develop Maori lands, purchase farms, stock and plant, and for land improvement. The Board's lending policies are flexible, and each case is considered on its merits. It will lend on horticultural enterprises as well as for traditional farming projects.

The Board will lend to Maori incorporations and to trustees for owners of Maori land, and to any company in which the majority of the share capital is owned or held for the benefit of Maoris.

Special assistance may also be available under the Marae Enterprises scheme to assist Maori communities and groups to make more efficient use of their resources.

[Department of Maori Affairs]

#### 1.2.4 Land Settlement

The Land Settlement Board is responsible for the development and settlement of Crown Land.

Each year, Government decides, on the basis of available finance, the number of improved farms to be offered by ballot to landless farmers. To participate in a ballot, applicants must:-

- be New Zealand citizens, by birth or naturalisation;

- not have owned an economic farm;
- be 25 or more years of age;
- have 5 calendar years full time farming experience and shall not have been out of full time farming for more than 3 of the last 8 years at date of settlement.
- have fulfilled the educational training requirements as follows:
  - \* have completed four week courses in each of 2 years in basic husbandries and farm management to a satisfactory standard; or
  - \* have been awarded the Trade Certificate in Management; or
  - \* have been awarded an appropriate diploma by Massey or Lincoln.

Persons born before 1946 may elect to sit an assessment course to establish the extent of their knowledge - details available from the Department.

Stock and plant are provided, at current prices, by the Board, on settlement.

Finance is available from the Land Settlement Board for the capital over and above the stipulated deposit or cash contribution required to take over the farm, stock, and plant. Interest payable on the current-account mortgage granted in the first instance is 7.5% for the first 3 years, then 9%. Interest rates are reviewed every three years.

[Department of Lands and Survey]

#### 1.2.5 Farm Ownership Accounts

Farm Ownership Accounts, designed to help farm workers, share-milkers, students, and others associated with farming to buy a farm, can be opened with the Post Office Savings Bank, a trustee savings bank, or some building societies.

The account is available for the purchase of a first farm, or for the purchase of stock and plant to go sharemilking or share farming for the first time.

With the written consent of the Rural Banking and Finance Corporation, an account can be opened by any New Zealand citizen who has attained the age of 15 years, and who -



- being a pupil at a secondary school in New Zealand, intends to become a farmer; or
- is undertaking a course of study which will assist him to become an efficient farmer; or
- is principally engaged or employed in the farming industry or in any associated servicing industry in New Zealand; or
- has some other relevant experience or qualification which, in the opinion of the Rural Bank, will enable or assist him to become an efficient farmer; or
- is the spouse of a depositor.

The depositor must elect to save under either a purchase grant scheme or a tax-rebate scheme.

(i) Grant Option

The depositor may save up to \$5,000 per annum and receive a tax-free grant of between 25 and 50% of his savings, depending on how long the account has been open. The maximum grant is \$30,000 on maximum eligible savings of \$60,000. The minimum qualifying period for a grant is 3 years from the date the first \$250 is saved.

(ii) Tax Rebate Option

A depositor may deposit up to \$5,000 per annum (with a maximum of \$60,000 per account in a special Farm Ownership Account and claim a tax rebate of 45c for each \$1 of the annual increase in savings. There is a limit of \$2,250 (45% of \$5,000) or the depositor's tax liability, if it is less than that amount.

Interest at the rate of 3% per annum is payable on balances in both types of account. A depositor who commences to save under the purchase grant scheme may transfer to the tax-rebate option during his savings term but not vice-versa.

[Rural Banking and Finance Corporation  
and New Zealand Post Office]

## 1.2.6 Suspensory Loans for Sharemilkers

A sharemilker buying his first dairy farm may be forced to sell a substantial part of his existing dairy herd if it exceeds the farm's carrying capacity. To overcome the

heavy tax liability on this type of sale, an interest-free suspensory loan may be granted, secured by a mortgage on land. Providing the recipient remains in occupation and actively farms the property on his own account for 10 years, the loan is written off. For tax purposes the amounts written off will be regarded as assessable income but spread equally over the year of remission and next 2 succeeding years.

Applications should be lodged at the nearest office of the Rural Banking and Finance Corporation as soon as an agreement has been signed but not later than the date on which any agreement to purchase becomes unconditional.

[Rural Banking and Finance Corporation]

#### 1.2.7 Stamp Duty Exemption on First Farms

A bona fide farmer who goes into farming on his own account may be exempted from the payment of stamp duty in respect of the purchase of his first farm. In general, the purchase must comply with the following criteria before the exemption will be allowed:

- the purchaser or his spouse, or both together, cannot own or have owned a substantial interest in farm land or a farming company.
- the property must be capable of supporting a full-time farming operation.
- the purchaser must actively farm the property within 2 years of purchase.
- the purchaser must acquire a controlling interest in the farm or farming company and not dispose of it within 2 years of acquisition. In the case of more than one person acquiring the land or shares, each of those persons who qualify for a first farm exemption in their own right must hold, in the aggregate, a controlling interest in the farm land or farming company.

The claim of exemption from stamp duty will normally be made through the purchaser's solicitor.

[Inland Revenue Department]

#### 1.2.8 Farm Vendor Settlement Finance Schemes

These schemes provide that 50% of the interest earned by retiring farmers from money left in farms sold to new farm

purchasers approved by the Rural Bank is exempt from taxation.

The aim of schemes is to assist suitably qualified and experienced farmers to purchase their first farm by encouraging the outgoing farmer to invest in the industry. Retiring farmers have the option of investing in either a farm vendor finance bond issued by the Reserve Bank on behalf of the Rural Bank, or a farm vendor mortgage. In both cases the minimum term is 7 years and the interest rate 9%. The maximum amount which can qualify for the concession is \$250,000.

There are, however, essential differences between the 2 schemes.

(i) Farm Vendor Finance Bonds:

Under the bond option, the vendor accepts a 7 year bond (which can be redeemed at the end of the 7 years or on prior death of the bond holder) for at least 40% of the sale price of the land and buildings.

If the sale price is less than the current Government valuation, the amount of the bond investment is to be not less than 40% of current Government valuation of the freehold or lessee's interest. The maximum is 80% of the Rural Bank's valuation of the land or \$250,000, whichever is the lesser.

The interest rate payable on the bond is at present 9% per annum for the whole term of 7 years.

The vendor is able to deduct 50% of the interest earned on the bond for income tax purposes, and is able to convert the investment to cash at the end of 7 years. The bonds are redeemable on death to meet the needs of beneficiaries and the payment of estate duty.

Under the bond option the Rural Bank takes a mortgage for a term of up to 25 years on standard Rural Bank lending conditions and thus relieves the purchaser of the need to refinance at the end of 7 years.

The purchaser must have a personal equity (unencumbered capital or farming assets) of not less than 20% of the value of the farm as a going concern.

The bond scheme gives farmers prepared to reinvest at least 40% of the sale price in their property a

Government-guaranteed security and relief from the administrative problems of taking and holding a mortgage.

(ii) Farm Vendor Mortgage Guarantee:

The mortgage guarantee option is an extension of the Farm Mortgage Guarantee Scheme operated by the Rural Bank. This option provides the same taxation benefits for the vendor who is unable to invest the full 40% of the sale price as required under the bond option.

The vendor takes a mortgage from the purchaser in the normal way, and is guaranteed by the Rural Bank against loss of capital should the purchaser fail to meet his obligations under the mortgage.

The scheme offers valuable benefits to the vendor. He qualifies for a tax exemption by having 50% of the interest earned on the guaranteed mortgage exempt from the income tax. He can be protected against loss of capital, can lend relatively smaller sums behind prior mortgages without risk, and can handle his own mortgage administration.

For the purchaser, the scheme has the attraction that he obtains a reasonable fixed interest rate mortgage for at least 7 years on either a first or subsequent security. The vendor may have his mortgage guaranteed by the Rural Bank under the Mortgage Guarantee Scheme (see page 1.16). The benefits of the guarantee against loss of capital and the taxation advantages are likely to encourage vendors to sell their properties to eligible new farmers.

It should be noted that the mortgage is not refinanced by the Rural Bank at the end of the term, and renewal or repayment must be negotiated by the parties concerned.

The basic conditions laid down by the Rural Bank for the guarantee option are:

- the mortgage may be on a flat or table basis, or on demand if provision is made for repayment over, or at the expiry of, a term of not less than 7 years. The mortgage may be a first, second or subsequent security.
- the interest rate for a minimum of 7 years must not exceed the standard Rural Bank settlement rate (currently 9%).

- the maximum amount of the loan eligible for a guarantee is \$250,000 or 80% of the borrower's mortgageable interest in the land, whichever is the lesser.
- a purchaser, or purchasers, must not hold or have held an interest as owner or shareholder in a farm property which would have been regarded by the Rural Bank as being suitable for his settlement as a full time farmer. He must also personally occupy and farm the property.
- a purchaser must have a personal equity (unencumbered capital or farming assets) of not less than 20% of the value of the farm as a going concern.

All types of farms regarded as suitable by the Rural Bank for the settlement of farmers will be considered, provided they are economic units (or can be developed to an economic standard in a short period). Propositions regarding the strengthening of uneconomic units may be considered in special circumstances.

[Rural Banking and Finance Corporation]

## 1.3 FARM FINANCE AND DEVELOPMENT

### 1.3.1 Livestock Incentive Scheme

The Livestock Incentive Scheme aims to encourage farmers to achieve a permanent increase in the number of livestock carried on an existing holding. A farmer whose property has an unexploited carrying capacity, and who intends to permanently increase pastoral production, can seek a suspensory loan or a taxation incentive.

#### (i) Loan Option -

An interest-free suspensory loan of \$12 per qualifying stock unit.

(This loan will be written off if the increase is sustained for 2 years.)

#### (ii) Taxation Option -

A deduction from taxable income of \$24 per qualifying stock unit.

(This deduction may be used, in whole or in part, in any of the 3 tax years after the increase has been sustained for 2 years.)

The scheme applies to farms carrying sheep, cattle (beef or dairy), or deer. Livestock will be converted to stock units to establish the basis for payment of a loan or for the deduction from taxable income. Allowance will be made for land devoted to cash cropping on mixed- farming properties.

To be eligible, the farm's potential minimum carrying capacity at the end of the program must be:

Dairy	65 cows and replacements (500 stock units)
-------	---

Sheep and other livestock -	1000 stock units.
--------------------------------	-------------------

The programme must be commercially viable and offer a substantial and permanent increase in livestock numbers and production.

Applicants must have a mortgageable interest, a satisfactory lease or some other written agreement, giving them the sole use of the land to which the programme applies, for the period of the programme and for at least 2 years thereafter.

#### Stock Increase Programme

- The programme may be for a minimum of 1 year and a maximum of 3 years. The scheme is open until 31 March 1982, and the farmer must submit his programme for approval by the Rural Bank before that date.
- The basic number of stock units will normally be calculated on stock held at 30 June 1981; but when this is less than the 30 June 1980 carrying capacity, an average of the two figures may be used by the Rural Bank to determine the basic carrying capacity of a particular property.
- Before the increase in livestock units qualifies for either incentive, the farm must achieve an increase equal to 2%, 3% or 4% of the basic stock units, depending on the length of the programme, with a minimum increase of 50 units spread over the whole programme. This means that a 1 year programme will need to show a more than 2% increase; and a 2 year programme, a more than 3% increase; or more than 50 units in each case, whichever is the greater.
- The amount of the suspensory loan or the tax incentive will be calculated on livestock units in excess of

these basic increases.

Farm advisers and farm consultants can assist a farmer to prepare his application.

[Rural Banking and Finance Corporation]

### 1.3.2 Development Finance

Any reasonable need for development finance may qualify for a loan, including clearing, grassing, fencing, top-dressing, housing, farm buildings, roading, planting, water supply, irrigation, and purchasing stock and essential plant.

Priority is given to applicants who actively farm their own properties, and special attention is paid to farming ability.

[Rural Banking and Finance Corporation]

### 1.3.3 Development Expenditure

Refer to Taxation Section.

### 1.3.4 First-Year Taxation Allowances - Buildings, Plant and Machinery

Refer to Taxation Section.

### 1.3.5 Stock Loans

#### (i) Short Term: (5 to 7 years)

Sharemilkers and other farmers who do not own the land they farm may obtain loans to purchase stock and plant.

Reasonable security of tenure, or a satisfactory 50/50 sharemilking agreement (normally 3 years) is needed. Provided the applicant can meet his commitments and make a reasonable contribution from his own resources, a loan of up to 60% of the market value of stock and plant may be advanced on first security.

#### (ii) Long Term: (up to 25 years)

These loans are available for -

- stock purchased or increased (through retention of stock that would normally be sold) in association with development or the purchase of additional land.
- purchase of stock for diversification, where the new stock is more costly per unit or a change is being made from dry stock to breeding stock.

Loan limits and security are flexible.

[Rural Banking and Finance Corporation]

#### 1.3.6 Maori Land Board Loans

The Maori Land Board provides loan finance to experienced farm workers of Maori descent to purchase stock and plant for sharefarming purposes (see section 1.2.3).

[Department of Maori Affairs]

#### 1.3.7 Plant and Machinery - Finance for Purchase

A limited number of loans for the purchase of plant and machinery are available from the Rural Bank to:

- farmer group machinery co-operatives or syndicates for plant for use on their own land,
- individual farmers undertaking extensive development projects,
- and soundly established owner/operator agricultural contractors providing an efficient and essential agricultural service to farmers.

Emphasis will be placed on essential requirements, in connection with land development work, rather than the purchase or normal replacement of tractors and plant required by farmers to continue with existing farming systems.

Loans generally not exceeding two-thirds of cost, for tractors, plant and farm machinery, excluding road transport vehicles and aircraft, will be considered and loan terms will be up to 5 years with interest at 14% per annum on the reducing balance. Loans of up to 50% of value of good second-hand plant not more than 2 years old, subject to an acceptable certificate from an agent as to condition and age, may also be considered. Security arrangements can be flexible, but a mortgage of land would normally be



required, in addition to an instrument by way of security over the machine.

The availability of this type of finance from the Rural Bank is intended to complement and not replace<sup>4</sup> the many other sources of credit available. Because of this essentially complementary role, farmers and agricultural contractors will generally have to rely on their traditional sources of finance for their plant and machinery requirements. Similarly, applications to refinance debts incurred with other lenders or hire purchase arrangements cannot be entertained.

[Rural Banking and Finance Corporation]

### 1.3.8 Marginal Lands Board Finance

The Marginal Lands Board operates as a Government lender of last resort, providing finance to farmers to restore, maintain, and increase production on properties that are not economic, but are potentially so.

The only applications considered by the Board are those which are unacceptable to other lenders, or where the terms on which finance is available are so demanding that the property could not service them.

Finance is available, generally, on current-account mortgage in the first instance, for development, to buy stock and chattels, to buy additional land to make a farm economic, and to refinance existing securities to enable additional development to be undertaken. In addition, loans are available for purchase of uneconomic farms by landless applicants.

Finance and advances for development, stock, and plant, plus livestock, can attract a concessional interest rate of 7.5% for the first 3 years and, afterwards increasing to 9%. Advances for amalgamation can attract these concessional rates. No concessional interest rate is available on finance for refinancing. Interest rates are reviewed every 3 years.

The Board has advanced money for orchards, market gardens, pig and deer farming, as well as for traditional farming ventures; it will consider any reasonable proposition aimed at increasing production from the land.

[Department of Lands and Survey]

### 1.3.9 Refinancing of Farm Debts

When a farmer is in financial difficulty, assistance is available for refinancing his onerous short-term debts. The aim is to provide long-term financial stability for the farmer, within the limits of his earning capacity, rather than the complete repayment of the debt. First mortgages and institutional mortgages are not normally re-financed.

Priority is given to efficient, credit-worthy farmers who have severe liquidity problems which are hindering further progress or the maintenance of past development. The interest rate is 11%.

[Rural Banking and Finance Corporation]

### 1.3.10 Seasonal Finance

Seasonal finance on a current account basis is available for tobacco growers, pip-fruit growers, and (as the need arises) for other farmers, especially in periods of depressed farm incomes. First-time farmers and those who are carrying out substantial development programmes may also qualify for seasonal finance, if it is not readily available from other sources.

[Rural Banking and Finance Corporation]

### 1.3.11 'Nil' Livestock Values for Taxation

Refer to Taxation Section.

### 1.3.12 Energy Conservation Expenditure

A farmer who incurs capital expenditure (which is not normally deductible for income tax purposes\*) in acquiring and installing certain kinds of new plant, machinery or equipment for use for the purposes of energy conservation may claim an immediate 100% write off in the year the expenditure is incurred. In addition, the cost of improving or altering certain kinds of plant, machinery, equipment, or of insulating such assets or buildings for use for the purposes of energy conservation will also qualify for the 100% first year write off.

The 1981 Budget contains a proposal to abolish, from 1 April 1982, the 100% tax write off for energy conservation expenditure. From that date a new loans scheme, to be administered by the Ministry of Energy, will apply. Although validating legislation had not been passed at the

time of going to press, it is expected that provision will be made to allow the tax deduction to continue in respect of qualifying expenditure incurred after 1 April 1982, where a binding contract is entered into prior to that date.

- \* It would not include, however, energy conservation expenditure of a private nature such as to the family residence.

[Inland Revenue Department]

### 1.3.13 Farm Mortgage Guarantees

To encourage lenders to invest their funds in farm mortgages, the Rural Bank guarantees farm lenders against loss should the borrower ultimately fail to repay a loan. The Rural Bank does not itself grant a loan.

Mortgages which qualify for guarantee are those raised for any acceptable farming purpose, including purchase of land, development, working expenses, and the refinancing of current accounts or existing mortgages.

Most competent farmers are eligible, including individuals, a family or other partnership, and private companies or trusts.

[Rural Banking and Finance Corporation]

## 1.4 FERTILISER

### 1.4.1 Fertiliser Price Subsidy

A subsidy of \$15.00 per tonne is payable on locally manufactured and imported fertilisers.

The method of payment for superphosphate is by deduction from the cost of the raw materials used in manufacture. For other imported fertilisers, the subsidy is paid at the point of first sale in New Zealand.

The ex-works or ex-store price has therefore been reduced by the equivalent of \$15.00 per tonne, and no farmer claims are involved.

[Ministry of Agriculture & Fisheries]

#### 1.4.2 Fertiliser Aerial Spreading Bounty

Fertiliser spread by a commercial aerial-spreading contractor qualifies for a bounty of \$2.00 a tonne.

The contractor invoices the farmer with the net amount after subsidy.

[Ministry of Agriculture & Fisheries]

#### 1.4.3 Transport Subsidies on Fertiliser and Lime

A subsidy is payable on the transport of fertiliser and lime from a works, a merchant, or its port of entry to the farm gate. The rates are:

First 65 kilometres -	8 cents per tonne per kilometre
Next 185 kilometres -	5 cents per tonne per kilometre
Kilometres in excess of 250 -	3 cents per tonne per kilometre

The supplier invoices the farmer with the net amount, after subsidy. For imported fertilisers, the maximum distance subsidised is 435 km.

[Ministry of Agriculture & Fisheries]

#### 1.4.4 Co-operative Fertiliser-Spreading Facilities

To help reduce fertiliser spreading costs, the Rural Bank will consider applications for loans to construct or upgrade airstrips, storage bins, and access roading. Preference will be given to co-operative undertakings.

As problems of security and equitable distribution of debts between participants can arise in such arrangements, the Bank will consider the alternative of making advances to individual contributors, with (if necessary) security over their individual farm properties.

[Rural Banking and Finance Corporation]

#### 1.4.5 Fertiliser and Lime - Deferred Cost

Refer to Taxation Section.

#### 1.4.6 Fertiliser Transported by Air and Sea

Fertiliser conveyed by heavy aircraft to offshore islands and to parts of the Marlborough Sounds is subsidised at 25.0 cents per tonne per kilometre of flying distance.

The distance from the works to the airfield is subsidised at normal transport rates.

Subsidies on fertiliser conveyed in these areas in light aircraft are calculated at ground-transport rates.

Where fertiliser travels by sea during some stage of its delivery from the works, the subsidy is paid, as if the fertiliser had been delivered by rail and/or road directly from the nearest works.

Where delivery by road and rail is impracticable, the subsidy is calculated on the basis of the distance from the nearest works, including the sea portion of the journey.

[Ministry of Agriculture & Fisheries]

### 1.5 FORESTRY

#### 1.5.1 Forestry Encouragement Grants

Cash grants, equal to 50% of the qualifying costs of establishing and maintaining an approved woodlot, are available up to a maximum of \$750 per hectare, to persons whose qualifying costs do not exceed \$300,000 in any one financial year. The minimum area of planting eligible for a grant in any one financial year is 2 hectares.

Application must be made to the Forest Service not later than 31 August in the year preceding establishment.

Qualifying costs are:

- Land clearing and preparation.
- Fencing (costs of new fencing, up to \$70 per hectare).
- Trees and planting, blanking and releasing.
- Pruning and thinning.
- Fertilisers and other chemicals and their application.
- Disease and pest control (insect, fungal, and animal).

- Temporary internal roads and access tracks, including any associated culverts and bridges, up to \$70 per hectare.
- Land tax on land used for forestry.
- Rates.
- Insurance against fire.
- Interest on loans for forestry (limited by their impact on profitability).
- Professional forestry services and advice.
- Repairs and maintenance to temporary fences; to plant and equipment used for land preparation and planting, and the tending and maintenance of the tree crop; to temporary buildings and temporary roads and bridges; and to access tracks.
- Fire protection and suppression.
- Rent on land leased for forestry.
- Hired plant and equipment.
- Subscriptions to the Farm Forestry Association or the New Zealand Forest Owners' Association Inc.

[New Zealand Forest Service]

#### 1.5.2 Modified Grants Scheme for Protection/Production Planting

The same conditions apply to this as to the grants scheme, except that 66.6% of the qualifying cost of establishment (instead of 50%) will be met. For costs incurred after establishment, only the usual 50% will be refunded. The area must be one where a protection/production woodlot is considered to be the best land use.

[New Zealand Forest Service]

#### 1.5.3 Plantings for Shelter or Erosion Control

Refer to Taxation section.

#### 1.5.4 Woodlot Taxation Incentives

The value of growing trees is specifically excluded from any valuation for assessment of land tax. Where a local authority levies rates on the capital value (as distinct from the land value), the value of timber trees or of trees for shelter or amenity purposes is exempted by statute from inclusion in property valuations for the purpose of levying rates. Also, the timber value of standing trees is exempted from estate duty. Refer also to Taxation Section.

[Inland Revenue Department]

### 1.6 SOIL AND WATER

#### 1.6.1 Irrigation

Assistance is given for approved community irrigation schemes. A Government grant provides the finance for the headworks. None of this cost is recovered. The cost of off-farm distribution works is initially met in full by Government grants. Once the scheme is operating the farmers' half share of off-farm distribution works plus ruling rates of interest, is recovered in the water charge over a 40-year period. The Government provides interim finance for the full cost of on-farm works. A suspensory loan is provided for one-half of the fixed on-farm costs. This loan is written off after 10 years with 1/10 being abated each year, provided the farmer does not sell his farm and meets the requirements of the development programme. The remaining one-half of the annual cost of on-farm work is recovered from the farmer at the end of the year, often through normal interest bearing loans provided by the Rural Banking and Finance Corporation (up to 100% for these costs).

In addition, Rural Banking and Finance Corporation loans up to 100%, with provision for deferral of interest and/or principal repayment, may be given for schemes that do not meet the policy; for example, some spray irrigation equipment or a scheme covering less than the requirements for a community scheme.

[Ministry of Works and Development  
and  
Rural Banking and Finance Corporation]

#### 1.6.2 Catchment Control Schemes, River Control and Land Drainage, and Soil Conservation Works

Assistance may be available for approved proposals to

protect farmland from flooding, for community drainage schemes, and for erosion-control works. The rate of grant varies with a maximum of 3:1, depending on a number of factors (including the off-site, or downstream, value of the works). Assistance is provided on condition that the farmer will contribute, as appropriate, to the maintenance of the works.

Works are promoted through the appropriate catchment authority to assist farmers in formulating and preparing proposals.

The works for which a grant may be available include:

- Catchment control schemes that involve river control and flood protection, drainage and soil conservation works, treating them in a comprehensive manner.
- Community drainage schemes involving drainage channels, outfalls, and pumping structures.
- Soil and water conservation plans for individual farms. This may include erosion-control fencing; the provision of alternative grazing where severely eroded country is to be retired; and various structures and planting, over-sowing, and topdressing specifically to control severe erosion.

[Catchment Authorities]

### 1.6.3 Rural Water-Supply Schemes

Assistance is given for approved community rural water-supply schemes which incorporate a minimum of four farms and service at least 800 hectares. There is a 1:1 grant for most off-farm and on-farm works. The responsibility for promoting schemes rests with county councils.

Design assistance is provided through consultant engineers and Ministry of Agriculture and Fisheries staff. Water treatment requirements are provided through the Health Department. The policy is administered by the Ministry of Works and Development.

[County Councils; Ministry of Works and Development; Ministry of Agriculture and Fisheries; Health Department]

### 1.6.4 Pollution Prevention Expenditure

Refer to Taxation Section.



## 1.7 NOXIOUS PLANT, PEST AND DISEASE CONTROL

### 1.7.1 Cattle Tuberculosis and Brucellosis Eradication Schemes

Farmers are responsible for presenting cattle for testing and for arranging the slaughter of reactors. Government contributes the cost of the testing (either by providing ministry staff or, in some circumstances, by paying the farmer's veterinarian to carry out the tests) and pays compensation for any reactors.

The compensation payable on reactors to either test is as follows:

- In addition to the carcass proceeds, 90% of the difference between an average carcass value and an average replacement value, assessed monthly for differing classes of animals over 6 weeks of age.
- Where a reactor is condemned at the works, 90% of the average carcass value, in addition to compensation.
- A seasonal bonus payment on the following classes of reactor, slaughtered within the period allowed:
  - \* Town supply cows, at \$98 each.
  - \* Factory-supply cows 18 months of age and over, at a varying rate (according to the month of test) on tests carried out between June and January in the North Island and between July and February in the South Island.
  - \* In-calf beef breeding cows and heifers, and cows with dependent calves at foot, at a rate estimated as one-half of the average price of weaners for the season.
- Tb-reactor meat is not eligible for export, and a support scheme is operated to ensure that the proceeds to farmers equal the export-schedule rates applying at the date of slaughter. Compensation against discounting at sale of beef-breeding cattle under movement control because of tuberculosis infection is payable up to a maximum recommended each 6 months by the National Animal Health Advisory Committee.

[Ministry of Agriculture and Fisheries]

### 1.7.2 Noxious-Plants Control Scheme

The Noxious-Plants Control Scheme provides for a subsidy of 50% of the cost of the chemicals used to control specified noxious plants.

The subsidy applies only to work for which a programme has been drawn up and approved by the district noxious plants authority. Claims are paid by M.A.F. Where a programme of mechanical clearance is recommended as the most appropriate means of control, reimbursement will be no more than 50% of the equivalent cost of the initial chemical application that otherwise would be used, or 50% of the actual cost of the operation, whichever is the lesser.

The local administration of noxious-plants control is the responsibility of the district noxious plants authority. Administration is co-ordinated by nine regional committees, and the national policy is formulated by the Noxious Plants Council.

[Ministry of Agriculture and Fisheries]

### 1.7.3 Noxious Plant Eradication - Temporary Employment

Under the public sector job creation programmes it is possible for district noxious plant authorities to offer finite short-term noxious-weed eradication projects to the Department of Labour.

The Department will reimburse district authorities for the cost of wages and some of the overheads for the workers engaged through the department on approved projects.

The only qualification is that the projects offered must be additional and labour-intensive and not reduce the existing employment opportunities of spraying contractors or staff levels of authorities.

[Noxious Plants Authorities]

### 1.7.4 Nassella Tussock

The North Canterbury and Marlborough Nassella Tussock Boards derive most of their funds from a Government subsidy, based on county contributions. The boards carry out control work on farms within their districts. (Farmers meet 50% of the cost.)

A 'county scheme', administered by 16 local authorities in the South Island and 5 in the North, provides for farmers to be reimbursed for 50% of the cost of undertaking appro-

ved nassella tussock control programmes themselves. This scheme also operates now in the North Canterbury and Marlborough Nassella Tussock Board's districts, as a complement to those Board's activities.

#### 1.7.5 Australian Sedge

North Island local authorities administer a scheme which pays 50% subsidy to farmers towards the cost of controlling Australian sedge by a range of approved control methods.

Farmers arrange with the county to carry out a control programme approved by the Ministry of Agriculture and Fisheries. On its completion, the county pays the subsidy and is reimbursed by MAF.

[North Island Local Authorities]

#### 1.7.6 Pest Control

The income of pest destruction boards charged with the control of rabbits, opossums, and other similar pests on rateable land from rates levied on farmers is subsidised dollar for dollar by Government. In addition, district grant payments may be made where the land will not stand sufficient rates to allow adequate control of pests from finance available through rates and subsidy.

[Local Authorities;  
Ministry of Agriculture and Fisheries]

### 1.8 ADVERSE-EVENTS RELIEF

#### 1.8.1 Adverse Events - Taxation Relief

Taxation relief is available to a farmer who is forced to sell livestock because of an 'adverse event' such as a fire, flood, disease, or drought. Provided certain conditions are met, the excess of the sale price over the standard or 'nil' values used by the farmer is not included in his assessable income until the year in which replacement livestock is bought.

Farmers should make application for tax relief through their accountants to the Inland Revenue Department.

[Ministry of Agriculture and Fisheries]

## 1.8.2 Adverse Climatic Events - Emergency Services

Helicopters, fixed-wing aircraft, and specially equipped ground machinery may be used in certain emergencies for inspection and relief work. Wherever practicable, equipment owned by commercial organisations is used; but if no suitable equipment is available, Ministry of Defence resources can be employed. Farmers must agree in advance to meet half the transit cost of moving the aircraft or the equipment and the personnel to the headquarters established for the emergency operation, and also half the cost of operations on their own properties.

[Ministry of Agriculture and Fisheries  
and Ministry of Defence]

## 1.8.3 Adverse Climatic Events - Loans

Loans are granted to farmers in Government-designated disaster areas who suffer hardship as a result of severe climatic conditions such as droughts, hail and snowstorms, and flooding. If an early recovery appears likely, a loan is granted, regardless of the normal security margins.

The terms and conditions vary, according to the degree of hardship; both principal and interest may be deferred for 2 years. In cases of severe hardship, interest of up to \$1,200 a year for the first 2 years may be converted to a suspensory loan. Loans may be used for all forms of farm expenditure, including purchase of feed, cartage, sprays, living expenses, and so on.

[Rural Banking and Finance Corporation]

## 1.8.4 Adverse Events - Temporary Employment

There is provision under the public sector job creation programmes for registered unemployed persons to be made available to local authorities or the Ministry of Agriculture and Fisheries to undertake labour-intensive relief work on farms following floods, droughts or other emergency situations brought about by climatic events.

The Department of Labour will reimburse the employing authority for the cost of wages and some of the overheads for the workers employed through the Department of Labour on approved projects.

[Department of Labour;  
Ministry of Agriculture and Fisheries]

## 1.9 EDUCATION

### 1.9.1 School Boarding Bursary

School boarding bursaries are granted to pupils, either primary or secondary, who are obliged to live away from home in order to receive their education.

Eligibility is determined by the distance to the nearest state school or school transport service; for children up to 10 years of age, the distance is 3.2 kilometres, and for those 10 years and over, 4.8 kilometres. Bursaries may also be awarded to children suffering from specific disabilities, who are boarding away from home to receive special education that is not available at their local school and who are not already benefiting from boarding assistance provided by way of public funds. There is no specified period of tenure of the bursary, and there is no limit on the number of bursaries awarded annually.

The school boarding bursary is at the rate of \$700 per annum per eligible child.

Additional assistance is also available in the form of payment towards travel to and from boarding school at the beginning and end of each school term for children who live in very remote areas. Parents will be reimbursed for travel costs in excess of \$10 per return trip for pupils eligible for school boarding bursaries, who are travelling between their home and the nearest suitable boarding school.

Boarding assistance is also available for secondary students to pursue specified academic and technical courses where these are unavailable locally, and for study at the sixth and seventh form levels where the education that is available locally does not include accrediting of the University Entrance qualification. Where a pupil eligible for these bursaries resides within reasonable travelling distance of a school offering the required course, transport assistance in lieu of a course bursary may be available.

Maori and Polynesian pupils for whom no secondary school facilities are available within daily reach of home or for whom a complete secondary school course is not available locally, may qualify for a Maori and Polynesian Secondary School Scholarship at the rate of \$850 per annum.

Maori Education Foundation assistance may also be available to Maori pupils of secondary age who meet the criteria of merit and need.

The level of all bursaries is subject to annual review.

[Department of Education]

### 1.9.2 School Transport Assistance

School pupils under 10 years of age who live more than 3.2 kilometres and pupils 10 years and over who live more than 4.8 km from the nearest state school or private school of their denomination, may be eligible for school transport assistance.

Eligible pupils are required to make their own way up to 1.6 kilometres to a bus stop. Thereafter transport assistance is provided.

Transport assistance may also be given to children with serious locomotive difficulties attending ordinary classes at primary or secondary schools and children enrolled at special schools, classes or clinics. Pre-school children attending pre-school groups attached to primary schools, or special classes at pre-school centres may also qualify in certain circumstances, and limited assistance is given for children attending playcentres and kindergartens.

Use is made of public passenger services wherever possible.

Where it is justified, an education board will arrange a special bus service by way of a contract with a local bus operator, the NZR Road Services, or a bus owned by the Department of Education. However, in some cases a private transport allowance is paid on the use of private cars to convey children to school or to connect with a passenger-transport service.

[Department of Education]

### 1.9.3 Correspondence School

Pupils who cannot attend a school daily may be enrolled with the Correspondence School. All materials required are supplied, e.g. art supplies for primary school children, text books for secondary school pupils.

Travel costs incurred by pupils travelling to "school days" are met by the Correspondence School.

Any enquiries regarding assistance to school pupils living in rural areas should be made to the local education board.

[Department of Education]

#### 1.9.4 Farm Training

The Flock House and Telford Farm Training Institutes offer courses related to the Trades Certification Board examinations in farming and the Government Land Settlement Scheme.

Applicants attending either course for the first time are required to pay travel costs one way. Government reimburses course members for surface fares one way, and also provides free accommodation, meals, and tuition. A subsistence allowance is paid to married men who attend land-settlement courses.

[Ministry of Agriculture and Fisheries]

#### 1.9.5 Private-School Fees

Refer to Taxation Section.

#### 1.9.6 Farm Cadet Scheme

The farm cadet scheme provides assistance to employers of farm cadets by way of a subsidy of 60% of basic or award wages in the first year, 50% in the second year, and 40% in the third year, in respect of a maximum of 7 weeks' training in the first year, 4 weeks in the second year and 4 weeks in the third year. This wage subsidy is available instead of, but not in addition to, assistance under the Additional Apprentice Incentive Scheme in respect of any one cadet in the same year. The scheme is administered by Federated Farmers.

##### Primary Industry Cadet Induction Training Incentive

This incentive is applicable to new cadets attending basic skills training courses prior to their first job placement. Under this scheme 50% of accommodation, food, tuition and public transport costs are paid.

[Ministry of Agriculture and Fisheries]

#### 1.9.7 Assistance for Training

In order to promote the training or retraining of persons who have no work skills or whose skills are now outmoded or otherwise in need of updating, several packages are available:

## Retraining in Employment

Organisations with 'hard to fill' vacancies for skilled workers who agree to retrain an involuntarily displaced worker for that vacancy, and offer the retrainee full-time permanent employment (the trainee must be selected from those referred by the Department of Labour) will be eligible for a wage subsidy of \$75 per week. This subsidy is available for a maximum of 6 months (though 6-10 weeks should usually be sufficient).

## Young Persons Training Programme

Assistance is available for training programmes where:

- \* Emphasis is given to the training of young persons who are not equipped with any work skills which make them readily employable.
- \* Training is given in a field which will provide the trainees with reasonable job prospects on completion of the course.
- \* The training places created are additional to the applicants normal training programme.

Under the work-based section of the Programme employers are asked to provide training places for young person, either individually or in small groups, in the following categories:-

### Job Exploration

Some young people enrolled with the Department of Labour have little or no idea of the work opportunities available in various enterprises. The training offered:

- \* Should introduce the trainees to the basic skills involved in the enterprise's activities.
- \* Will be for a maximum of 3 weeks.
- \* May be in agriculture, commerce, fishing, horticulture or any other industry.

### Work-based operator training.

Where full-time instructor/supervisors are provided, a reimbursement of costs is available to firms or organisations at rates from \$24 to \$32 per trainee per week, for a maximum of 20 weeks (though 6-10 weeks should usually be sufficient). The training provided must be tailored to the needs of the trainees. Under these two schemes the



trainees will be paid a training allowance by the Department of Labour.

#### Training-in-employment

As an alternative to work-based operator training, employers may elect to train young persons in employment. Employers who agree to pay full wages to trainees will receive a wage of \$75 per week per trainee, for a maximum of 20 weeks (though 6-10 weeks should usually be sufficient).

[Department of Labour]

### 1.10 PRICE SMOOTHING AND PRICE SUPPORT SCHEMES

(Contributed by L.D. Woods, Department of Agricultural Economics and Marketing)

#### 1.10.1 Background: Industry vs Government Schemes

Industry financed price smoothing schemes have operated, in various forms, in the meat, wool and dairy industries for several years. Within-season smoothing currently operates in the dairy industry through fixed pricing of all export dairy products by the New Zealand Dairy Board. In the meat and wool industries minimum and trigger prices, plus arbitrary market intervention (purchase and resale of product) operate. Between-season smoothing is attempted through legislative limits on the extent by which guaranteed or minimum prices can move between successive seasons for these products. These industry schemes are all intended to be self-financing.

In 1978 the N.Z. Government decided "as an interim measure" to "establish and underwrite new minimum prices to supplement those set under the Stabilisation Schemes" to "provide for farmers reasonable requirements ... more adequately than the minimum prices likely to be set under existing arrangements". Such "supplementary minimum prices", guaranteed two seasons ahead, have been set each year since.

In times of low market receipts the producer boards are still responsible for supplementing producer returns up to their own "industry minima". If Government SMP minima have been set higher again, then Government funds are used in addition. In times of higher receipts producer boards build up their price-smoothing funds.

#### 1.10.2 Dairy Industry

Under the NZDB "guaranteed price" scheme the N.Z. Dairy Board, prior to each season, establishes purchase prices for dairy company output equating with basic farm-gate

prices for milkfat and solids-not-fat. Except with the permission of the Minister, prices may not vary beyond +10% and -5% of last season's price; however, permission has been granted for rises in excess of this in recent seasons and also for purchase prices to be revised retrospectively in mid-season.

At the end of the season, if either or both of the Milkfat Trading Account and the SNF Trading Account indicates a surplus, the Dairy Board may distribute a percentage (commonly 50%) of this to suppliers, the balance being credited into a reserve account. In the event of the board incurring a loss in milkfat and/or SNF products, it will be granted overdraft facilities at 1% per annum by the Reserve Bank of New Zealand if the loss exceeds the accumulated reserves in the relevant account.

Supplementary minimum prices refer to the NZDB wholemilk (SNF plus milkfat) basic price at farm-gate level plus 50% of any trading surplus declared by NZDB. Should SMP levels exceed this overall return, Government supplements are paid.

#### Price Smoothing and Support in N.Z. Dairy Industry (c/kg milkfat in wholemilk at farm-gate)

	NZDB Basic Price		Govt.	NZDB	NZ Govt
	Pre-Season	Mid-Season	SMP	Distrib- ution to Suppliers	Supple- ments
1976/77	135.7	-	-	-	-
1977/78	143.9	-	-	16.7	-
1978/79	165.7	-	180.0	7.6	6.7
1979/80	176.9	185.0	185.0	21.0	-
1980/81	218.0	230.0	230.0	(30.0)	-
1981/82	268.0	-	280.0 <sup>1</sup>	-	-
1982/83	-	-	(280.0)	-	-
1983/84	-	-	-	-	-

<sup>1</sup> Initially set at 265.0 but later revised.

Notes: Company payouts to suppliers fluctuate about the above levels for various reasons including product mix, manufacturing cost levels, and capital formation decisions.

#### 1.10.3 Meat Industry

Under the N.Z. Meat Producers Board "Meat Income Stabilisation" Scheme, the Meat Export Prices Committee estab-

lishes minimum and trigger schedule prices for benchmark grades of export meat - lamb, mutton, manufacturing beef, bull beef, and prime beef - before the start of each year. These prices are related to a moving average of market returns.

If the lowest regional exporters' schedule price for any benchmark grade is below the minimum level, the board must also establish minimum prices for other grades of that type of meat. It must then ensure that producers receive no less than the minimum prices by making supplementary payments from the Meat Income Stabilisation Account; purchasing the meat itself; or doing both.

If the Government SMP price for any benchmark grade is above the NZMPB minimum, and the lowest regional exporter's schedule price is below this SMP level, then the Board will also establish SMP's for other grades of that type of meat and make additional supplementary payments financed by Government funds.

#### Price Smoothing and Support in N.Z. Meat Industry (c/kg carcass weight)

Benchmark Grade	Season	NZMPB Minimum	NZ Govt. SMP	NZMPB Trigger	Average Market Realisation	Average Combined Supplement / (Levy)
PM	1976/77	55.0	-	72.0	70.4	(0.4)
Lamb	1977/78	59.0	-	78.0	66.9	-
13/16kg	1978/79	72.0	70.0	95.0	76.7	-
	1979/80	86.0	86.0	120.0	93.3	-
	1980/81	113.0	110.0	155.0	115.7	-
	1981/82	114.0	145.0	160.0		
	1982/83		(145.0)			
	1983/84					
ML 1	1976/77	21.0	-	30.0	44.0	(7.1)
Mutton	1977/78	30.0	-	40.0	34.6	-
to 22kg	1978/79	30.5	30.0	42.0	35.9	(0.6)
	1979/80	35.0	40.0	50.0	45.9	-
	1980/81	40.0	43.0	60.0	56.8	-
	1981/82	43.0	50.0	65.0		
	1982/83		(50.0)			
	1983/84					

P1 Steer	1976/77	55.0	-	80.0	62.1	0.3
(Prime)	1977/78	57.0	-	83.0	67.4	-
245.5/	1978/79	70.0	80.0	96.0	114.3	(9.6)
270kg	1979/80	112.0	110.0	158.0	125.8	0.9
	1980/81	120.0	120.0	170.0	123.8	0.6
	1981/82	125.0	143.0	175.0		
	1982/83		(143.0)			
	1983/84					
M Cow	1976/77	40.0	-	60.0	47.8	0.2
(manuf)	1977/78	41.0	-	63.0	56.3	(0.2)
145.5/	1978/79	58.0	70.0	80.0	110.9	(14.9)
170kg	1979/80	100.0	100.0	140.0	100.0	8.2
	1980/81	103.0	105.0	150.0	87.7	19.1
	1981/82	100.0	125.0	150.0		
	1982/83		(125.0)			
	1983/84					
Bull	1976/77	-	-	-	66.6	-
220.5/	1977/78	-	-	-	70.3	(0.2)
345kg	1978/79	-	-	-	123.5	(13.3)
	1979/80	110.0	-	160.0	134.2	0.9
	1980/81	120.0	120.0	175.0	115.2	6.9
	1981/82	124.0	(143.0)	180.0		
	1982/83		(143.0)			
	1983/84					

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Notes: Average producer receipts from selling on lowest regional schedule equals "average market realisation" plus "average combined supplement" or minus "average levy".

#### 1.10.4 Wool Industry

Under its Minimum Prices Scheme the Wool Board sets a table of minimum prices for all types of shorn wool and dead wool produced in New Zealand. Other than in exceptional circumstances, only one table of minimum prices shall be set in any one season, with movements in the target average of the table limited to a decrease of 5% and an increase of 10% on that of the previous season.

When the sale price (auction or private) of any wool falls below its appraised minimum price, the board will supplement that price up to its minimum level through a supplementary payment made from the Minimum Wool Prices Funding Account.

The board may also provide minimum price support by purchasing the wool using its own funds and any borrowing for that purpose, or by a combination of both supplementation and purchasing. Wool purchases are, however, also made

for reasons other than minimum price support under the Board's market intervention policy.

At each auction sale, the level of growers' market returns is now represented by an "adjusted weighted average sale price" (AWASP). Since these returns may have been boosted by NZWB wool purchase "intervention" and may also include NZWB minimum price supplements, the AWASP quotation is not a reliable guide of free-market demand or returns. If AWASP levels at any auction are below SMP levels, then a government financed supplement equal to the percentage shortfall is paid on all wool sold on that date and up till the next auction (to cover private sales).

The minimum Price Funding Scheme provides for a minimum price funding levy (currently set at 1%) to be imposed on all shorn wool and dead wool produced in New Zealand whenever prices exceed NZWB minimum levels. The levy is paid into the minimum Wool Prices Funding Account.

Under the Individual Grower Income Levy Retention Scheme when the average price of wool at auction exceeds the trigger price set at the beginning of that season, a further levy called the Grower Retention Levy is introduced on all shorn wool and dead wool. The rate of levy is equivalent to 50% of the amount by which the AWASP at that auction exceeds the trigger price. The levy collected is paid into the Wool Income Retention Account at the Reserve Bank, held on behalf of the grower who paid it, and refunded to him under certain conditions.

#### Price Smoothing and Support in N.Z. Wool Industry (c/kg greasy)

Season	NZWB Min. (Target)	NZ Govt. SMP	NZWB Trigger	AWASP (Ann. Ave)	Average NZWB suppl.	Average SMP Suppl.	('000 bales) Net Wool Purch- ases
1976/77	136.0	-	195.0	219.6	nil	-	+ 54
1977/78	150.0	-	215.0	190.4	nil	-	+ 100
1978/79	170.0	205.0	250.0	218.8	nil	-	- 120
1979/80	200.0	235.0	300.0	265.1	nil	-	+ 40
1980/81	215.0	235.0	330.0	247.5	nil	-	+ 228
1981/82	250.0	320.0	400.0				
1982/83		(320.0)					
1983/84							

## 1.10.5 Farm Income Equalisation

Refer to Taxation Section.

## 1.11 TRANSPORT

Refer to Section 4.19 Motor Vehicles, Fuel, Licensing and Road user Charges.

## 1.12 FARM LABOUR

### 1.12.1 Farm-Employee Housing

To help alleviate the remoteness which confronts some farm workers and their families, finance is available to farmers to build or buy houses in nearby townships to accommodate their employees who prefer to live away from the farm. The farm worker and his family will in this way have better access to schooling and other social amenities. Generally, finance will be made available only to farmers engaged full-time on their own properties, who do not already have suitable accommodation on the farm for their employee. Normal terms and the existing conditions of lending will apply, and the proposed dwelling must be located within a workable distance from the farm.

[Rural Banking and Finance Corporation]

### 1.12.2 Farm Employment Scheme

This scheme is aimed at encouraging the creation of additional jobs in the farming sector and provides a wage subsidy for each person engaged through the Department of Labour. All farmers in New Zealand are eligible to participate in the scheme provided:

- \* only workers referred by the Department of Labour are engaged under the Scheme.
- \* prior approval to engage staff has been obtained.
- \* the vacancy must be for a full-time job additional to normal requirements. For seasonal activities it must be additional to the number of jobs over the corresponding period in the previous year.
- \* award wages must be paid.
- \* the vacancy must not have been created by the discharge directly or indirectly of another worker.

The amount of the subsidy is \$50 per person per week for up to 6 months starting from the date the person is engaged. In addition, a bonus of \$500 is payable in respect of an employee engaged under the scheme who is employed continuously for 12 months.

[Department of Labour]

### 1.13 GENERAL

#### 1.13.1 Estate Duty

The Rural Bank of New Zealand assists with loan finance to pay estate duty in cases of genuine need. The bank's normal lending criteria apply to such loans. Preference for the available finance is given where a beneficiary (such as a widow or a member of the family) intends to continue personally farming the property; and it has been established, to the satisfaction of the bank, that the loan is necessary for the retention of sufficient land to constitute an economic family holding.

[Rural Banking and Finance Corporation]

#### 1.13.2 Exemption of Matrimonial Homes from Estate Duty

When a matrimonial home which is also a farm homestead passes, on the death of a farmer, to the surviving spouse, the value of the home is exempt from estate duty. Because it is often not practicable for a farmer to leave the homestead to his wife, there is available an exemption of the wife's entitlement under the will or the value of the matrimonial home, whichever is the lesser. The exemption can be claimed even if the home is on land owned in partnership by the deceased and his wife (or anyone else).

[Inland Revenue Department]

#### 1.13.3 Estimation of Provisional Taxation

Refer to Section on Taxation.

#### 1.13.4 Industrial Lending

The main categories of lending to agricultural industries at present are for:

- the establishment of new types of industry and the expansion of existing industries which have potential

export and/or regional-development prospects;

- the establishment of veterinary clinics or other activities where the project will service the rural sector; or
- the provision of packing sheds, cool stores, grain dryers, storage, wool-processing facilities, and such-like.

Preference for the available funds is given to co-operative ventures and the smaller type of enterprise.

[Rural Banking and Finance Corporation]

#### 1.13.5 Rural-Export Suspensory Loan Scheme

Suspensory loans are granted to producers and processors to promote the export of agricultural and horticultural products not previously exported, or of products with limited current exports, whose markets can be further developed or expanded.

Up to 40% of the qualifying expenditure may be lent for suitable projects. On the achievement of an export target, the loan is converted to a grant, which is treated as assessable income for income-tax purposes. That income may, however, be spread to include the 2 years following the year in which the loan is converted to a grant.

Additional finance, though not eligible for the grant, may be provided under normal industrial or farm-development lending policies.

For tax purposes the amounts written off will be regarded as assessable income but spread equally over the year of remission and next 2 succeeding years.

[Rural Banking and Finance Corporation]

#### 1.13.6 Suspension of Government Inspection Fees

In order to relieve farmers from the payment of various Government service charges associated with the meat, dairy, seed and other industries, the Government has until further notice, suspended the payment of these charges.



The full list of cancelled inspection fees is:

Meat  
Farm Dairy Instruction Levy\*  
Dairy Produce Grading  
Seed Certification  
Game Inspection  
New Zealand-grown fruit and vegetables  
Fish Inspection  
Plant material for export  
Honey

- \* Although termed "instruction" this includes inspection of dairy plant, equipment and buildings to ensure hygiene standards are maintained, as well as instruction on milking techniques, milk handling and storage, cleaning and efficiencies of milking.

[Ministry of Agriculture & Fisheries]

#### 1.13.7 Agricultural Contractors Loans

Loan assistance is given to agricultural contractors who are engaged full-time in the business and who derive the bulk of their gross income from farm contracting. Loans, usually long-term, are granted for the purchase of land or buildings, or for the erection of buildings suitable as a base area of operations. Housing assistance is included.

Typical of the contractors helped so far are weed sprayers, well drillers, and harvesters. Special plant and machinery loans are also available.

[Rural Banking and Finance Corporation]

#### 1.13.8 Electricity

Two types of assistance are available through the Rural Electricity Reticulation Council:

- To Supply Authorities - Where a supply has been requested by a consumer and it would be uneconomic for the supply authority to provide a supply, despite a guaranteed minimum-revenue from the consumer, the authority may apply to the council for a subsidy. Such a subsidy, if approved by the council is based on the annual running cost of the line and is payable for a period of 10 years, extendable (on application) to a maximum of 20 years.

No subsidy is available on short extensions, that is under 1 kilometre, or where the annual subsidy is estimated to be under \$200. Full details regarding

eligibility for any subsidy can be obtained from your local Power Board.

- On Generating Plant - In cases where properties are too remote to be connected to the public supply and private generating facilities are being installed, a subsidy may be available on the capital cost of installing such facilities. As the amount and term of the subsidy may vary depending on the type of installation, intending applicants should write to:

The Rural Electrical Reticulation Council  
c/o Ministry of Energy (Electrical Division)  
Private Bag  
Wellington.

No assistance is available towards the initial financing of the plant, and both the fuel (if applicable) and maintenance costs are the responsibility of the owner. A condition is that the applicant must obtain the council's approval to a subsidy before arranging to purchase the plant.

[Ministry of Energy]

#### 1.13.9 Electricity - South Island Concession

This scheme provides for a 25% electricity rebate to manufacturing industry, some tourist accommodation facilities, and a few electricity intensive agricultural operations in the South Island. Examples of qualifying farm activities are environmentally controlled horticulture, broiler production and irrigation. Full details of the assistance available can be obtained from any South Island electrical supply authority or offices of the Ministry of Agriculture and Fisheries and the Department of Trade and Industry in Christchurch or Dunedin.

[Department of Trade and Industry:  
Ministry of Agriculture and Fisheries]

#### 1.13.10 Safety Frames on Tractors

Refer to Taxation Section.

#### 1.13.11 Intensification of Land Use on Small Holdings

The Rural Bank's development policy has been extended to enable development loans to be made available to those owners of small holdings wishing to undertake worthwhile

productive development, particularly where there is emphasis on export-orientated horticultural production.

Eligible development expenditure will, in general, be confined to improvements of a permanent and productive nature such as drainage, clearing, fencing, grassing, plantings, water supply, irrigation, essential farm buildings for protecting plant or packing facilities. Apart from bona fide farm workers, finance is not available for the initial purchase of land or for stock or the erection of a new house.

Applicants must provide land and meet immediate housing needs, be able to demonstrate their capability and expertise to competently manage the unit, and their total income from all sources must be clearly sufficient to service all commitments, after maintaining the property and meeting all living expenses.

The loan term will vary according to the type of development and ability of the proposition to repay, and will bear interest at 9%, but with a rebate of 7.5% for the first three years, generally available to bona fide farm workers.

[Rural Banking and Finance Corporation]

#### 1.13.12 Rural Landscape Protection

Farmers, with areas of native bush, wetland, and other important landscape on their farms, which they would like to see preserved, can achieve this by an Open Space Covenant.

An Open Space Covenant is an agreement between a private landowner (or leaseholder) and the QEII Trust. The owner voluntarily agrees, while still retaining title to the land, that it will be managed in the way set out in the Covenant. The agreement binds not only the existing owner, but any subsequent owners, as it is registered against the title to the land. It can be in perpetuity or for a fixed period of years.

Some advantages of the Covenant scheme are:

- \* A Covenant will ensure that the area of land is kept as the present landowner feels it should, even though ownership may change.
- \* The Trust can negotiate with the owner terms that may assist the owner maintain the land.

- \* If land is set aside for productive use, its valuation will be reviewed and this may affect the level of rates.
- \* The owner still retains title to the land.

[Queen Elizabeth II National Trust]



## SECTION 2

### FARM CAPITAL AND FINANCE



## 2. FARM CAPITAL AND FINANCE

### 2.1 CAPITAL

#### 2.1.1 Land and Buildings

Where a recent Government Valuation is available this is probably the best guide there is to the overall value of the property. If the Government Valuation is three or four years old then some adjustment of the figures may be necessary. This should be done in the light of the movement in land values since its release and include any major improvements made on the farm since the last Valuation.

For budget purposes this is split up between Land and Buildings. If varying grades of land are found on the property then the land value may be split up into several sections valued differently, the total of these summing to the overall Paddock Value. The Capital Value is usually also expressed as a figure per hectare of the farm, and per stock unit carried on the farm, or per unit of production (e.g. per kg butterfat) for comparative purposes.

#### 2.1.2 Stock

The numbers used in assessing capital tied up in stock should include only that stock which is considered basic to the running of the farm. Generally this will be the stock that is normally wintered (say on hand in July), and is usually the breeding stock plus replacements; although in a trading situation this will include that trading stock which could be replaced with breeding stock and replacements able to be carried on the farm under normal farming practice.

Value used per head should be clearing sale or ewe fair values interpreted on a reasonably conservative basis.

The overall carrying capacity in stock units can be determined from these stock numbers.

#### 2.1.3 Plant

Valuations of plant should also be made on the basis of local clearing sales interpreted conservatively. The up-to-date price list for new equipment is very useful in assisting with these assessments.



## 2.1.4 Working Capital

This is a part of the necessary capital needed to run the property but is often forgotten by people when purchasing a property. On sheep farms and certain types of horticultural properties (e.g. tobacco) income is concentrated in one part of the year but expenses must be met throughout the year and money for this purpose must either be set aside or borrowed. On dairy properties incomes are fairly evenly spread and this difficulty is not met to the same extent.

There are two sources of working capital:

- Farmer's own cash.
- Borrowed money. In this case working capital is largely provided by stock firms and banks. The amount of working capital needed for any one particular farm is a function of total expenditure and the time pattern of income.

With stock firm and bank advances interest is charged on the day to day balance of the account hence the average level of the advance is the working capital figure required for budget purposes. It should not be forgotten however that some farming enterprises reach a peak of advances at certain times of the year much greater than their average level. This may well present financial problems which are not immediately obvious when the average figure is assessed.

Working capital requirements are difficult to assess accurately. Each property and each farming type tend to have their own individual characteristics. The table below presents a rough guide only for student use. It is constructed by considering the working capital requirements as a percentage of the value of land, buildings, stock and plant.

It must be remembered that these percentages approximate the total fluctuation in working capital during the season, and do not necessarily represent the amount which must be borrowed. Neither do they represent the average requirement, but merely the maximum facility which must be available albeit only for a short time.

It must also be considered, that this type of calculation will relate the working capital requirement strongly to the value of land, which is not generally a factor in working capital at all. Therefore these percentages

should be treated as guidelines only, and adjusted for the circumstances of:

- the individual farmer and his management system.
- the locality value of the land involved.

The percentage method should only be used where NO OTHER more accurate method (such as monthly cash flow computation) is practicable.

Table 1    Working Capital Requirements of Various Farm Types

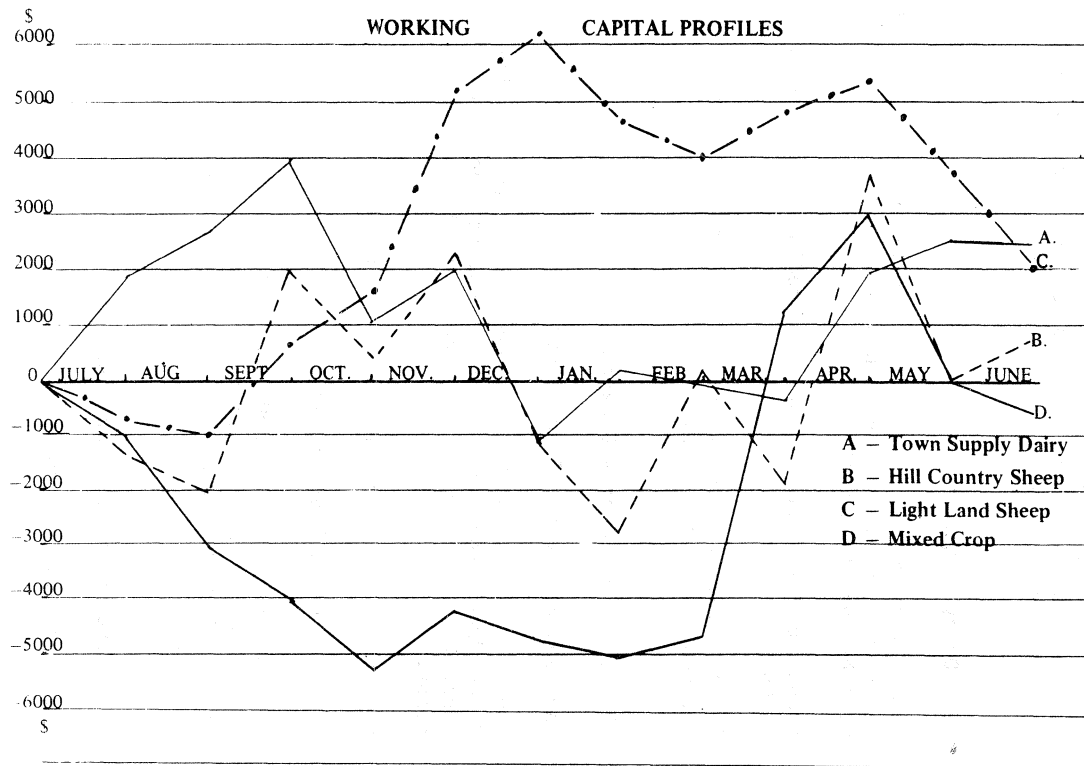
<u>Farm Types</u>	<u>Percentage of Value of Land, Building Stock and Plant</u>
Dairying (Intensive)	2%
Dairying and Mixed	2%-4% depending on comparative size of dairy enterprise
Sheep and Cropping	3%-5% depending on amount of crop and small seeds
Sheep (Intensive Fat Lamb)	4%-6%
Sheep (Hill Country Store)	5%-6%
Poultry	5%
Market Gardening	5%-10% depending on spread of sales
Orchard or Nursery	10%-15% depending on spread of sales
Tobacco and Hops, etc.	10%-15% depending on spread of sales

At the end of the set out of capital a summary is usually made showing the total capital involved in the farm. This figure is used later to assess efficiency and it is a very useful guide for later work on farm finance.

#### 2.1.5    Working Capital Profile

This is the term used to describe the way a farmer's net monthly balance of income and expenditure moves over the

period of a year. It is important for students to realise that although two farms may have the same average working capital requirements the monthly patterns of these may be entirely different. Some examples of different working capital profiles are illustrated in the Figure opposite.



## 2.2 SOURCES OF FINANCE

### 2.2.1 Building Societies

May lend to build a dwelling on a farm - policies and interest rates vary with the institution. Local example - rate 16-17%, term 10 years, first mortgage. There is a 50% lending margin and shares in the company must have been held for at least 3 years.

### 2.2.2 Dairy Companies

Some Dairy companies lend to shareholding suppliers. Security: unsecured, lein on milk fat, or I.W.S. (Instrument by Way of Security).

Loans for seasonal finance or medium term (development stock).

Term: generally on demand, occasionally up to 3 years, interest rate about 13%.

### 2.2.3 Lands and Survey Department

Land and Settlement Board Finance.

Money is available for the development and settlement of Crown Land over and above stipulated deposit or cash contribution required to take over the farm, stock and plant.

For full details, refer to Section 1.2.4.

Marginal Lands Board Finance

Government lender of last resort for properties that are not economic, but are potentially so. Concessional interest rates available. For full details, refer to Section 1.3.10.

### 2.2.4 Life Insurance Companies

Policies vary from company to company.

Two main forms of finance are:

Long term mortgage finance - generally up to 50% of val-

uation, 10-30 year table mortgage, 16%, mortgagor expected to have adequate life cover for the principal.

Loans against policies - 11%.

## 2.2.5 Rural Banking and Finance Corporation

General Policy: To consider any viable farming or fishing requirement subject to Corporation policy and availability of funds.

Specific Policies:

### (i) Farm Settlement

- |        |   |
|--------|---|
| Policy | - Refer to "Assistance and Incentives to Farmers" Section 1.2.1.  |
| Terms  | - Up to 25 year table first mortgage (and first I.W.S. over stock where necessary). Interest 9% rebated to 7.5% for first 3 years, reviewed every 3 years.  |
| Amount | - Up to 2/3 security margin within the following guidelines.<br>Sheep and cattle farms \$180,000 to \$230,000.<br>Dairy farms \$110,000 to \$140,000.<br>Mixed cropping farms \$180,000 to \$230,000.<br>Orchards, poultry, pig and other intensive enterprises \$110,000 to \$140,000. |

### (ii) Special Settlement Loans

- |                  |   |
|------------------|---|
| Policy and Terms | - Refer to "Assistance and Incentives to Farmers", Section 1.2.2. |
| Amount           | - Guideline \$250-300,000 plus current account.                   |

### (iii) Stock Loans

- |        |  |
|--------|--|
| Policy | - To lessees, sharemilkers etc. Refer to "Assistance and Incentives to Farmers", Section 1.3.5.  |
| Terms  | - 5-7 year table loan secured by I.W.S. over stock (and plant where necessary). 60% security margin. Interest rate 9% rebated to 7.5% for first 3 years. |

(iv) Development

- Policy - Medium to long term table mortgage lending to most development propositions.
- Terms - Interest normally 9%, rebated to 7.5% for first 3 years. May be 11% in some cases.

(v) Development Encouragement

- Policy - 15 year loan for initial development of unimproved or reverted land.
- Terms - Interest 9% rebated to 6% for the first five years and 7.5% for the next five years. However provided the development for which loan has been approved is carried out and maintained to the satisfaction of the Rural Bank, and ownership of property is retained, the mortgagor will not be required to pay any interest.
- Amount - Maximum of \$250 per hectare.

(vi) Refinance

- Policy - Hard core debt, and estate duty.
- Terms - Table mortgage at 11% usually medium term.

(vii) Industrial Lending

- Policy - Refer to "Assistance and Incentives to Farmers", Section 1.13.4.
- Guidelines - Up to \$500,000, 20 year table mortgage, 12-14% interest.

(viii) Fishing Loans

- Policy - Parallels to farming policy i.e. purchase, special fishing boat loans, refinance, re-conditioning, change of fishing method, with table mortgage loans up to 2/3 security value and the current interest rate charged is 8.5% (or 9.5% for the total loan if greater than \$250,000) p.a. and may be reviewed at intervals during the term of the loan.

(ix) Other

A wide range of other areas are covered. Information on these should be sought from the Rural Bank.

#### 2.2.6 Solicitors and Trust Companies

- The Trustees Act defines where and to what extent these funds can be invested (e.g. first mortgage on land up to 2/3 of a registered valuers value) unless there are special provisions in the will of Trust investment which govern investment.
- Provide medium term debt finance (3 to 5 years) often renewable or at least able to be refinanced.
- Solicitors generally lend a flat mortgage, some trust companies may include repayment provisions.
- Generally lend up to 50% of valuation on first mortgage or on second mortgage with Rural Bank guarantee.
- Interest rate varies and is currently between 15% and 18%.

#### 2.2.7 Stock and Station Agencies

These institutions have agreed to limit their lending to seasonal only. Loan facilities are very much on a personal basis, and are often unsecured although there is an increasing trend to take an I.W.S. or mortgage. As a general guide interest rates are 14.5% for arranged finance and between 15% and 18% for unarranged finance.

#### 2.2.8 Trading Banks

Policy varies from Bank to Bank but primarily the Trading Banks are not suppliers of mortgage finance and prefer to concentrate in the field of short term seasonal and fully fluctuating working capital finance. There are, of course, exceptions, and when funds permit, the savings bank subsidiaries are able to offer longer term funds for land purchase. Dependent on circumstances surrounding each case, a trading bank term loan may also be available on extended terms - i.e. beyond basic 5 year stipulation.



The following avenues are generally available:

Term Loans:

- Maximum Term 5 years minimum 3 months.
- Current minimum rural rates 14%-15%.
- Livestock, plant, land purchase.

Overdraft:

- Seasonal farm working expenditure.
- Fully fluctuating working capital expenditure.
- Renewed annually or as required.
- Current minimum rates 12.5%-14.75%.

Savings Bank Loan:

- No specific ceiling  
(But dependent on funds)
- Rates 12%-14%
- Term 15-20 years
- Land purchase.

Personal Loans:

- Maximum Term 5 years, minimum 6 months.
- Amounts: Minimum \$1,000  
Maximum \$10,000.
- Rates 17%-18%.
- Home improvement, personal expenditure, garages, pools, driveways etc.

Lease Finance:

- Term - 5 years.
- Rates 14%-17%.
- Minimum amount \$20,000.

No capital outlay, ideal for heavy plant purchase opportunity to purchase at end of term, planning and budgeting easier).

Commercial Bills:

- Minimum amount \$25,000.
- Rates 14%-15%.
- Bridging situations where fixed term is envisaged.

Isolated rural application.

Off Shore Loans:

- No specific ceiling. All negotiable as to term and rate. Only suitable for very large deals.

#### Bridging Finance:

- 18% on first mortgage.  
Generally used for in-between farm sale-purchase deals.

#### Security:

Generally in all avenues of finance security will be sought by bank. Examples are: Landed mortgage (1st, 2nd, 3rd freehold or leasehold), livestock/chattels mortgage, mortgage debenture (in case of company) assignments over life policies, scrip, shares, personal guarantees.

#### Financial Data:

Minimum requirements generally are -  
Up-to-date balance sheet and accounts (to include farm working account and details of livestock holdings), cash flow forecast and budget, personal statement of assets and liabilities. All either self or professionally prepared.

#### Some Other Considerations:

Taken into account on all applications for finance -

- Knowledge/experience in farming.
- Character and capacity.
- Age.
- Past borrowing record.
- Repayment capacity.

### 2.2.9 Trustee Savings Banks

Policy is not to earn profits for shareholders, but to provide community service under the control of local trustees. Farm lending policy varies with the institution, but one local example has as its policy:

- Loans up to 50% of valuation on first mortgage (no limit).
- Terms: 25 years reducing instalment mortgage.
- Interest: currently 16%.

Under some circumstances (for example, where a client has not previously held an account with the bank concerned) it is possible to arrange short term finance at slightly higher interest rates (generally 1% above ruling rates), with refinance for a longer term at the lower rates if the client meets his commitments.

### 2.2.10 General Insurance and Finance Consultancy Services

Independent advisory services consulting in the areas of Insurance, Estate Planning, Retirement Funding, Investment

and finance, are now available. This practice follows overseas trends, especially in the field of Insurances, with the emphasis of the service being on consultation and advice.

There have been numerous changes in "contracts" marketed by the many Fire and General Insurance companies in New Zealand. Advice is given on the insurance covers best suited to individual needs and then competitive rates of insurance are negotiated with the selected company. Very advantageous rates have been achieved, in many cases clearly reducing the former overall insurance account. This "General Agency" system also handles the claims made for the client.

Like the Fire and General Insurance market, the Life Assurance market is also undergoing change. New inflation-adjusted Life Covers, the growing use of a wide range of "Term Insurances" and the recent introduction of "Investment Linked" contracts by a number of companies, emphasise the need for people to "look around" before committing themselves to Life Cover. Again, an in-depth analysis of the individual cover needs is completed before advice is given on the right product to cover the need.

The need for Estate preservation through estate planning is often discussed by farmers - where to start is usually the first problem. In this area the consultation is initially aimed at an analysis of the need. Then the current situation is arrived at and suggestions are made for consideration. The success of this service is the consultant's ability at co-ordinating those necessary to formulate an Estate plan, such as the client, accountant and legal adviser, into a team effort and guiding the parties through to a finalised solution. Constant monitoring of a well put together and flexible estate plan ensures that the farmer achieves his objectives of stabilising the incidence of estate death tax and ensuring family inheritance of the property.

Retirement funding follows the Estate considerations. Too often a farmer reaches retirement and watches the family involvement grow only to realise that there is no direct cash benefit available for retirement. Today there are a number of excellent schemes available, allowing attractive tax concessions for both contributions to the individual's needs. In the areas of finance and investment, again the emphasis is on advice, in particular how to go about mortgage financing for younger people looking ahead to farm ownership. This is of much value to those who may have no-one to turn to for advice in such matters.

Similarly with investment, there are today some excellent opportunities for people to have secure investment, without having to face the burden of taxation, thus minimising the resultant yields. "Investment without bias" is the aim of this service.

The service is gaining in popularity because it recognises that people need to communicate with these matters on a professional basis, but without losing the personal approach.

[Contributed by O'Donoghue, Lindsay and Associates - Christchurch]

## 2.3 FEES AND COMMISSIONS

This section is designed to assist in the assessment of various fees and charges associated with the purchase and sale of land such as valuation, surveying, real estate and legal costs.

It also covers the costs or charges of various Institutes and Societies that offer services to the rural community, such as farm consultancies, rural valuers and farm accountants.

### 2.3.1 Accountancy Fees

Accountants have a scale of fees based on input of time taken in compiling returns and services required by their clients.

Some of the reasons why fees vary considerably are:

- \* The adequacy of the presentation of farm records to the accountant by the farmer.
- \* The form of ownership - individual, company or partnership, and if there is a trust account involved also.
- \* The amount of information the farmer wants: advice on management, financial advice, trial balances, etc.
- \* The degree of intensification of the farming operations.
- \* The amount of administration undertaken by the accountant. Budgeting control, receiver of all income, and payee of all expenditure for the farmer.

The fees definitely bear no relationship to the farmer's

capital or net taxable balance, or turnover.

For Lincoln College budgeting purposes, assess fees based on the total capital involved, the degree of intensification of the management, and the form of ownership.

The current range of accounting costs lie within the approximate range of \$500 to \$1,000.

### 2.3.2 Architectural Fees

- (i) New House: for a new house costing greater than \$16,000 the minimum scale is 6.6 per cent of the capital cost of the building. This includes the full range of services from sketch plan through to supervision of any final alterations.

For country work there is usually a travel disbursement usually on a 'flat rate'.

- (ii) Alteration to Existing Buildings: There is an additional fee of 2 per cent of the capital cost added to the above.

### 2.3.3 Consultancy Charges

(December 1981)

N.Z. Soc. of Farm Management Recommendation on Professional Charges.

- (i) Farm advisory services - Where professional services are based on regular consultations and visits to farm properties:

Maximum fee \$42.50 per hour.

Minimum fee \$25.00 per hour.

Actual time to be charged includes time on farm, preparing reports, and undertaking any special investigations.

- (ii) Consultations, special projects, negotiations - undertaken in a professional capacity. Includes farm inspections, investigations, preparation of reports, where no instruction for regular visits have been received.

Maximum fee \$50.00 per hour.

Minimum fee \$30.00 per hour.

- (iii) Farm supervision and administration - Where consultants take responsibility for supervising management, labour, development, and authorisation of expenditure.

Maximum fee \$50.00 per hour.

Minimum fee \$25.00 per hour.

- (iv) Appearance in Courts - or before Land Valuation Committees, special tribunals, arbitrations and umpires fees.

Maximum fee \$55.00 per hour with a minimum charge of \$150.00 for attendance.

Minimum fee \$35.00 per hour.

Travelling expenses as per Government rates.

Lincoln College operates a commercial Farm Advisory Service which provides a full consultancy, advisory, and rural valuation service to the public.

Over a number of years the Farm Advisory Service has built up a considerable number of contacts with insurance companies, trustee agencies, other lending organisations, solicitors and private individuals.

The Service includes:

- (i) regular advisory services to farmers.
- (ii) executive control and administration of properties.
- (iii) advice and preparation of reports on specific matters.
- (iv) valuations, reports and loans recommended on rural properties.

The consultancy fees are based on an average of \$250 per day, and valuation charges are according to the N.Z.I.V. scale.

Enquiries should be addressed to:

The Officer in Charge,  
Farm Advisory Service,  
Lincoln College,  
Canterbury.

The Lincoln College Council has established the Property

Management Service as an independent body to encourage and assist the formation of sound farming agreements between land owners and qualified young people. The Service will supervise the fulfillment of the contracts and the preservation of the farming assets.

Land prices have increased rapidly in recent years. Increasing land values create a formidable barrier for potential farm owners to overcome. Despite the difficulties young people continue to enter the farming industry. The Property Management Service aims to facilitate and increase the rate of farm settlement.

A number of land owners have already formed successful agreements with suitable people throughout New Zealand. There are many more situations where agreements could be beneficial to land owners and young farmers alike.

Contracts vary according to each individual situation. The standard types of contract are:

- (a) Management Contract, where the management partner has no financial interest in the stock and plant or land and buildings.
- (b) Stock and Plant Contract, in which the management partner owns part or all of the Stock and Plant.
- (c) Total Farm Contract, provides for the management partner to have a financial interest in the total farm asset.

Fees:

1.	Registration Fee	\$ 25.00
2.	Contract Placement Fee	
	(a) Management contract fee	\$250.00
	(b) Stock & Plant contract fee	\$600.00
	(c) Total farm contract fee	\$600.00
3.	Annual Supervisory Fee	\$300.00

The Contract Fee and the Supervisory Fee are standard fees which are subject to variation according to the complexity of the agreement and additional work involved over the standard contract.

All travelling and incidental costs incurred will be charged in addition to the above fees.

The Contract Placement Fee and the Supervisory Fee to be split equally between the two parties.

All fees are subject to review at the discretion of the Management Committee.

#### 2.3.4 Legal Fees

##### Vendor and Purchaser

##### (i) Purchaser's Solicitor

- where the consideration does not exceed \$5000: \$82.00.
- where the consideration exceeds \$5000 a charge of \$82.00 plus the following percentages of the balance:

	\$		\$	%
from	5,000	to	10,000	.84
over	10,000	to	38,000	.63
over	38,000	to	60,000	.52
over	60,000	to	80,000	.40
over	80,000	to	145,000	.31
over	145,000	to	300,000	.16
over	300,000	to	470,000	.13
over	470,000	to	1,000,000	.07
over	1,000,000	to	1,350,000	.06

All fees to be rounded to the nearest dollar.

For any transaction where the consideration exceeds \$1,350,000 charges shall be assessed in accordance with Schedule I but with a maximum of \$1,746.

##### (ii) Vendor's Solicitor

- where the consideration does not exceed \$5000: \$63.00.
- where the consideration exceeds \$5000 a charge of \$63.00 plus the following percentages of the balance:

	\$		\$	%
from	5,000	to	10,000	.51
over	10,000	to	38,000	.37
over	38,000	to	60,000	.32
over	60,000	to	80,000	.23
over	80,000	to	145,000	.18
over	145,000	to	300,000	.08



over	300,000	to	470,000	.05
over	470,000	to	1,000,000	.04
over	1,000,000	to	1,350,000	.035

All fees rounded to the nearest dollar.

For all transactions where the consideration exceeds \$1,350,000 charges shall be assessed in accordance with Schedule I but with a minimum of \$969.

- Where the same Solicitor acts for both vendor and purchaser, vendor's solicitor's and purchaser's solicitor's costs shall be charged to each client respectively.
- Where there are collateral transfers, costs in accordance with the scale shall be charged for each transfer, the consideration being apportioned as nearly as possible according to the respective values of the land transferred.

The following figures are examples of fees worked out from the above scales. They do not include fees for any additional professional involvement.

N.B. The purchaser's solicitor's fees also apply to mortgagee's solicitor's fees.

Consideration	Purchaser's Solicitor's Fee	Vendor's Solicitor's Fee
\$	\$	\$
5 000	82.00	63.00
10 000	124.00	89.00
20 000	187.00	126.00
30 000	250.00	163.00
40 000	311.00	199.00
50 000	363.00	231.00
60 000	415.00	263.00
70 000	455.00	286.00
80 000	495.00	309.00
90 000	526.00	327.00
100 000	557.00	345.00
120 000	619.00	381.00
130 000	650.00	399.00
140 000	681.00	417.00
150 000	704.00	430.00
160 000	720.00	438.00
170 000	736.00	446.00
180 000	752.00	454.00
190 000	768.00	462.00

200 000	784.00	470.00
250 000	864.00	510.00
300 000	944.00	550.00
350 000	1009.00	575.00
400 000	1074.00	600.00
500 000	1186.00	647.00
600 000	1256.00	687.00
700 000	1326.00	727.00
800 000	1396.00	767.00
900 000	1466.00	807.00
1 000 000	1536.00	847.00

And thereafter

at the rate / \$1000 of .60

.35

- (iii) Transfers and Assignments of Chattels (where included in the sale of a business), Goodwill, Mortgages, Profits A Prendre, Leases and Licences and all other Interests in Land.

The vendor's solicitor's scale is to apply to all the transactions under this heading but does not apply to Unit Flats and the transfers and assignments of Choses in Action not otherwise specifically mentioned, chattels not included in the sale of a business and Ships, Patents and trademarks.

- (iv) Stamp Duty

This is charged at a flat rate of 1 per cent of the purchase price of the property to the purchaser. For 'Stamp Duty Exemption on First Farms' see Section 1, 'Assistance and Incentives for Farmers'.

- (v) Formation of Farming Companies, Partnerships and Trusts.

The actual costs involved vary greatly depending on who is employed to do the formation and the complexity involved, since most company, partnership and Trust formations involve individual circumstances.

Lessor and Lessee, and Bailor and Bailee

- (i) Simple Tenancy Agreements

Lessor's Solicitor:

- Where rent does not exceed \$40.00 per week: \$32.00.
- Where rent exceeds \$40.00 per week: \$48.00.

Lessee's Solicitor:

60% of the scale costs allowed to Lessor's Solicitor.

- (ii) Memoranda of Lease, Deeds of Lease, Agreements to Lease and Bailments for any term not exceeding ten years, inclusive of any right of renewal.

Lessor's Solicitor:

- (a) Where the rent does not exceed \$2000 p.a.: \$84.00.  
(b) Where the rent exceeds \$2000 p.a.: a charge of \$84.00 plus the following percentages:

	\$		\$	%
from	2 000	to	10 000	1.37
over	10 000	to	700 000	1.25

All fees to be rounded up to the next multiple of \$500.

For any transaction where the annual rental exceeds \$700 000 charges for the whole transaction shall be assessed in accordance with above schedule but with a minimum of \$8 819.

Lessee's Solicitor:

60% of the scale costs allowed to the Lessor's Solicitor. For terms exceeding ten years, or for those with a right of renewal which would make the total term greater than ten years, the fees for both Lessor and Lessee's solicitors are as above plus 50%.

- (iii) Renewals of Leases and Agreements to Lease, and Bailments.

Lessor's or Bailor's Solicitor:

	\$
Rental not exceeding \$1000 p.a.	40.00
Rental not exceeding \$3000 p.a.	65.00
Rental not exceeding \$5000 p.a.	90.00
Rental not exceeding \$7000 p.a.	115.00
Rent exceeding \$7000 p.a.	150.00

Lessee's or Bailee's Solicitor  
60% of the above.

- (iv) Consents by Lessor or Mortgagee and Deeds of Covenant Required by Lessor or Mortgagee.

Consent	32.00
Deed of Covenant	32.00
Combined Fee for both of above	64.00
Lessee's or Mortgagor's Solicitor's Fee for perusal of the Deed of Covenant	16.00

- (v) Commission on Collection of Rent

Commission on collection of current payments of rent - 5%. The charge covers collection and accounting to clients but not general administration or management.

#### Mortgagor and Mortgagee

- (i) Memoranda of Mortgage

##### Mortgagee's Solicitor:

In accordance with the scale shown for Purchaser's Solicitor (under Vendor and Purchaser - see table of examples given) treating the sum secured as the consideration.

e.g. Total purchase price \$100 000 of which \$40,000 is to be mortgage. Purchaser pays \$557.00 on the total purchase price, plus \$311.00 on the mortgage sum.

##### Mortgagor's Solicitor:

One half of the mortgagee's Solicitor's costs.

N.B. When the same Solicitor is acting for both mortgagor and mortgagee, the only fee chargeable to either or both parties shall be the appropriate scale fee as for mortgagee's solicitor.

- (ii) Collateral Securities

For the principal mortgage full scale costs shall be charged.

For collateral securities

Lender's Solicitor:

	\$
For first \$1000 of consideration in each security	40.00
For every additional \$200 or part thereof	6.00
Maximum charge for each collateral security	142.00

Borrower's Solicitor:

One half of the Lender's Solicitor's costs.

The consideration upon which the foregoing fees shall be calculated as the lesser of:

- (i) the amount secured by principal security, or
- (ii) the amount secured by the collateral security, or
- (iii) if the collateral security is a mortgage of a life policy the amount assured by the policy.

But if the collateral security is a mortgage of a life policy or policies collateral to a Memorandum of Mortgage or other security where the collateral security can be taken on behalf of a mortgagee on a settled printed form of security supplied by the mortgagee without substantial re-drafting thereof:

Mortgagee's Solicitor:

Where the amount secured by the mortgage or assured by the policy or policies whichever is the lesser:

	\$	\$	\$
Up to	5 000		33.00
over	5 000	to 20 000	65.00
over	20 000		97.00

Mortgagor's Solicitor:

One half of the Mortgagee's Solicitor's Fees. Where it is not clear which is the "principal security" the following rules shall apply.

The principal security is the security containing land of greatest value. If only one

security is over land then such security is the principal security. If no securities are charged over land or an interest in land, the principal security is that of greatest value.

(iii) Variations of terms of Mortgages and other charges.

Mortgagee's Solicitor:

On the amount secured in the original mortgage or if any variation of mortgage has been registered, then on the amount of the principal sum shown due in the latest registered variation altering such principal sum:

	\$		\$	\$
Up to	5 000	to		28.00
over	5 000	to	20 000	56.00
over	20 000	to		84.00

Mortgagor's Solicitor:

One half of the Mortgagee's Solicitor's fee with a minimum fee of \$28.00.

Affidavit Renewing Registration of instrument: For preparation, execution and filing: \$28.00.

In the case of an increase of the principal sum the costs in respect of the amount of the increase shall be the appropriate scale fees as for Mortgages.

(iv) Releases and Discharges of Mortgages and Other Charges.

Mortgagee's Solicitor:

On the amount secured in the original mortgage or if any Variation of Mortgage has been registered then on the amount of the principal sum shown due in the latest registered Variation altering such principle sum:

	\$		\$	\$
Up to	5 000			26.00
over	5 000	to	20 000	40.00
over	20 000			51.00

Mortgagor's Solicitor:

Same as above.

If two or more mortgages are being discharged simultaneously by the same mortgagee then a release fee as above shall only be charged on one release only, and a fee of \$17.00 shall be charged of each of the other releases.

#### Partial Releases and Memoranda of Reduction:

The fee to be charged shall be as for the release of a Mortgage originally securing the sum by which the Mortgage debt is reduced, with a minimum of \$33.00. The above shall not include the fees payable for production of documents.

- (v) Commission on Collection of Mortgage Interest and Instalments.

Commission on collection of current payments of:

Interest on flat Mortgages.....5 per cent

Instalments containing principal and interest, 5 per cent on the interest (or estimated interest) content of the instalment plus a discretionary percentage up to 2.5% on the principal, according to the relative amounts of principal and interest.

The foregoing charges are to cover collection and account to clients but no general administration or management, nor preparation of statements involving calculations of principal and interest under Mortgages.

### 2.3.5 Real Estate Charges

- (i) Sales:

- On the sale of all property, freehold or leasehold, and including farms, businesses and excluding licensed hotels and licensed motels there shall be a charge on the consideration.

On the first \$3,000	5.0%
Thereafter on balance	2.5%

plus in the case of leasehold property, one half of the annual ground rental pertaining at the date of sale.

- Subdivisions. Where the agent advises the vendor from the commencement of planning for subdivision, generally assisting in all phases, subsequently selling the lots - 5 per cent of the price of each lot sold.
- Farm Stock, Implements and Farm Chattels. On live and dead stock and farm chattels sold in conjunction with real property, either the subject of a separate valuation or included in the price as a going concern, on the purchase price 2.75 per cent.

On live and dead stock and chattels sold by itself, on the purchase price 5 per cent.

(ii) Letting, Leasing and Assignment:

- Farm Properties. (Including assignment of lease), on the average annual rental 10 per cent.

(iii) Miscellaneous.

- Property Management. On receiving of rent and/or interest requiring receipting and accounting of such monies through the Trust Account, on all money received 5 per cent.

Acting under written authority or instruction where the agent supervises the property concerned including the receiving of rent/interest requiring the receipting and accounting of such monies through the Trust Account, on all monies received 7.5%.

Acting under written authority or instruction where the agent arranges and supervises repairs and renovations on a property on the cost of repairs and renovations 7.5%.

- Sharemilking Agreements. Where sharemilking contracts are arranged by members a charge of \$2.00 per cow will be made with the cost debited in equal shares to the farm owner and the sharemilker. These charges apply to both 39 per cent and 50/50 types of agreements. Portion of this charge may be deleted where a stock transaction arises directly from the arrangement of a sharemilking contract.



- Auction Sales, Mortgagee, Sheriff sales etc. Where a property is offered under instructions from the mortgagee and is brought in at the mortgagee's estimate, or where a mortgagee holds a sale other than through the Supreme Court and fails to reach the reserve price, an offering fee shall be charged on the mortgagee's estimate or on the reserve price as the case may be 1% with a minimum charge of \$35.00. The fee where the mortgagee withdraws the property within 7 days prior to the sale shall be on the mortgagee's estimate of value or on the reserve price as the case may be 1%. Where the mortgagee withdraws the property prior to seven days before the auction then the above fee shall be .5% with a minimum fee of \$35.00. When the sale is not proceeded with, an inspection fee of \$35.00 shall be paid where the auctioneer provided a description of the property for advertising purposes. When the property is sold to the mortgagee at his estimate of value the offering fee of 1% shall be charged.

#### 2.3.6 Surveyors Charges

Registered Surveyors are bound by a Scale of Charges which must be approved by the Minister of Lands before coming into operation.

The scale is complex but takes into account the area of land under survey, the length of lines measured, the number of pegs and reference marks placed or used, the number of easements shown on the plan etc. Travelling times, vehicle mileages, costs of cutting and clearing if necessary, and occupation of trig-stations if necessary are charged on a time basis. Redefinitions of boundaries as distinct from subdivisions are also generally carried out on a time basis.

Where a subdivision is proposed it is necessary to obtain the Local Authority approval and the Local Authority is required to seal the final survey plans. When the proposed subdivision creates more than 2 lots, the scheme plan of the proposed subdivision which is submitted to the Local Authority for approval, must be prepared by a Registered Surveyor and may be required to show topographical features, buildings, ground heights and title information as well as the details of the subdivision. The charges for the preparation of the scheme plan are on a time basis.

Where a subdivision or other survey work is contemplated it is suggested that a Registered Surveyor or firm of Surveyors be approached and asked to give an estimate of the costs involved. They will be quite prepared to do this and can also advise on all aspects of the subdivision.

### 2.3.7 Valuation Charges

N.Z.I.V. Scale of Charges  
(As at November 1980)

(i) Fees for the Valuation of Freeholds:

Urban - Up to \$5,000	\$25.00
\$5,001-\$100,000	\$25.00 for the first \$5,000 plus \$1.50 per \$1,000 or part thereof thereafter.

\$100,001 to \$1,000,000	\$167.50 for the first \$100,000 plus \$1.25 per \$1,000 or part thereof thereafter.
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Above \$1,000,000	\$1,292.50 for the first \$1,000,000 plus \$1.00 per \$1,000 or part thereof thereafter.
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Rural - Up to \$5,000	\$25.00
\$5,001-\$100,000	\$25.00 for the first \$5,000 plus \$1.75 per \$1,000 or part thereof thereafter.

\$1,000,001 to \$1,000,000	\$191.25 for the first \$100,000 plus \$1.50 per \$1,000 or part thereof thereafter.
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Above \$1,000,000	\$1,541.25 for the first \$1,000,000 plus \$1.25 per \$1,000 or part thereof thereafter.
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- (ii) Additional buildings - Where a property contains more than one building each of a value of at least \$10,000 an additional fee of \$10.00 may be charged for each additional building.

(iii) Block valuation of land - Where a member is required to value a block of land and subdivisional investigation is the basis of the valuation, the fee to be charged shall be as per (i) above, on the final block value plus \$1.00 per section.

(iv) Valuation of leaseholds - For valuation of leasehold properties where lessor or lessee interests require to be assessed, the charge shall be as per (i) above on the freehold capital value plus 10 per cent to the nearest dollar.

(v) Consultations - Where members are engaged on consultancy or counselling work the fee shall be based on quantum meruit. Replacement insurance valuations and certificates - the fee for the initial valuation for the replacement insurance purposes shall be calculated at 66.6% of the prescribed scale relating to the gross replacement of the building.

For annual certificates the fee shall be charged at the rate of:

\$1 million	15% of the scale in (i)
\$1 million to \$5 million	12.5 per cent
Over \$5 million	10 per cent of scale

(vi) Daily rate - Where the prescribed scale fee provides an earning rate of less than \$80 per day or \$40 per half day, the rate of a member shall be in the range of \$18 to \$30 per hour depending on the skill and experience of the member. For work calling for a special degree of skill and responsibility the rate may exceed \$30.

(vii) Court attendances - Valuation fees will be first charged and in addition the member shall charge fees in the following range depending on the skill and experience of the valuer.

- Supreme court including the Administrative Division and Special Tribunals \$80 to \$120 for the first half day plus \$15 to \$30 per hour until released by his principal.

- Magistrates Court, Land Valuation Committees and other Tribunals \$15 to \$30 per hour for the first hour or part thereof, thereafter \$10 to \$20 per hour until released by his principal.

(viii) Assessors Fees - These are the same as 'Court attendance fees' (see (vii)).

(ix) Umpire's Fees - Members agreeing to act as umpires may charge a retaining fee of \$5.00. Where a member is called to act as umpire the fee shall be based on quantum meruit.

Travelling Allowance.

Travelling time should be charged at the rate of \$18 per hour. Additional mileage is to be charged at the following rates:

Up to 1000 cc	26.20 cents per kilometre
1001 - 1350 cc	30.98 cents per kilometre
1351 - 2000 cc	32.71 cents per kilometre
Over 2001 cc	43.26 cents per kilometre

### 2.3.8 Land Transfer Fees

This fee is charged by the Lands and Deeds Office of the Justice Department on all land transactions, such as transfers, mortgages and related documents.

The land transaction registration fee will be \$20 per document as from early 1982.

## 2.4 SHAREFARMING

### 2.4.1 General

The benefits and opportunities of sharefarming agreements apply in many cases.

Farmers considering retirement or merely wishing to change the emphasis of their activities are particularly suited to farming agreements, which can provide advantages over selling or leasing their farm. They can relinquish the physical work load whilst still retaining an interest in the farm. Their capital investment continues to be well protected against inflation. It may be possible for them to continue living on the farm in the environment they enjoy.

All those who employ farm managers could well give consideration to a farming agreement. This includes farmers who own more than one property, trustees, widows and absentee owners.

Farming agreements are just as applicable to members of

the family as to anyone else. Many family relationships would benefit from being put on an appropriate business-like basis.

The sale of part or all the stock and plant or an interest in the total farm enterprise will provide the owner with capital monies which may be used for other purposes such as the purchase of a retirement home, development of the farm, off farm investment or just an overseas holiday.

Professional people wishing to invest in farming can find many advantages in taking a young farmer as a Management Partner. This type of investment in farming is much more acceptable under these circumstances. The farming industry benefits from money coming from outside the rural sector and a young farmer is given an opportunity to have a financial interest in a substantial farm.

Farm managers, farm workers, and others in supporting services, who have limited financial resources but who have experience and most important of all, the enthusiasm of youth, all form a pool of management potential that must not be neglected if we are to achieve worthwhile increases in farm production.

However, there must be a genuine desire to be involved in a farming agreement and the concept that the agreement is for the benefit of both parties must have been accepted.

It cannot be emphasised enough that the success of any farming agreement depends most of all on the existence of goodwill, mutual respect and compatibility between the parties. If this is lacking no written contract, no matter how detailed, will make the agreement work smoothly.

The farm must be an adequate size, preferably with potential for increased production and the level of indebtedness should be low. A property must be large enough to support one man and another at least partly, otherwise there will not be sufficient income for both parties unless there is an increase in the total level of production or the Owner is able to supplement his income from another source. It is apparent that if progress is to be made there must be an independent agency to introduce and bring the parties together and to assist with the drafting of a suitable agreement.

The Property Management Service run by Lincoln College (see Section 2.3.3) is such an agency.

#### Types of Agreements:

##### 50-50 Sharefarming -

The 50-50 agreement seems to be the type of sharefarming agreement best suited to the requirements of stock and cropping properties. In this type of agreement the Owner provides the land and buildings and the Sharefarmer provides the stock and plant. The gross income is shared 50-50 and the expenditure is split broadly on the basis of the Owner meeting the costs of materials and standing charges and the Sharefarmer providing the labour and meeting the costs related to his stock and plant.

The Sharefarmer is entirely responsible for the day-to-day management of the farm, but the parties mutually agree upon the farming policy and annual programme.

The Owner retains full ownership of the land and buildings. He continues to have an interest in the farming operations and shares in the fluctuating fortunes which always seem to be part of farming. The Owner normally sells the stock and plant to the Sharefarmer and the agreement may make provision for the Owner to repurchase the same at the termination of the agreement.

Some stock may be bailed and the purchase spread over several years to assist the Owner with taxation and the Sharefarmer with financing if necessary.

#### Partnerships:

In a partnership agreement the Owner gives the Management Partner the opportunity to purchase a share in the land and buildings as well as the stock and plant.

The Management Partner receives a salary and also shares in the profits and losses. The partners mutually agree upon the farming policy and annual programme, but the Management Partner is entirely responsible for the day-to-day management of the farm.

A partnership is generally more attractive to a young farmer, but under normal circumstances young people with up to \$20,000 to invest in farming must look to share-farming, whilst those with \$40,000 or more are able to consider a partnership as an alternative.

The initial period for an agreement is generally five years and the term can be renewed or extended by mutual consent.

The Rural Bank will consider applications from young farmers to assist with finance for all types of farming

agreements.

## 2.4.2 Dairying

### (1) Sharemilking

Sharemilking, which involves someone other than the owner milking the cows for a share of the profits, plays an important part in the New Zealand dairy industry. A large proportion become dairy farmers through sharemilking, and many are now themselves employing sharemilkers. Sharemilking will continue to be the means by which most young farmers eventually get their own farms.

Sharemilkers represent the greater proportion of experienced and stable farm labour available to the New Zealand dairy farmer. In recent years about 20% of all herds milked in New Zealand have been milked under a share-farming agreement of one type or another.

Because of this, it is most important that sharemilking conditions be satisfactory to both parties. It is a two-way arrangement - good working conditions will result in good employees; and a good performance by the milker will be rewarded by improved conditions.

Types of sharemilking agreements:

There are three types of sharemilking agreements commonly practised in New Zealand. They are designated according to the percentage of returns from cream or milk which accrues to the milker.

Under a 29% agreement the sharemilker is required to milk the herd and be responsible for its daily management.

Typically, the 29% agreement is entered into by farmers who have large herds, are fully committed with other farm work and require to be relieved of the tie of milking. Usually there is more than one milker and frequently agreements involve a husband and wife team.

Under a 39% agreement the milker is required to milk the herd and carry out all farm work necessary for maintenance and improvement of the farm. The relationship of the parties shall be deemed to be that of employer and independent contractor.

The main difference between the 29% and 39% agreements is that the sharemilker, for 10% more of the cream or milk cheques, agrees to carry out all farm work. The milker

must also meet some additional costs, notably half the costs of hay making and certain running costs in connection with tractor and vehicles.

The 50% agreement is by far the commonest, comprising about 70% of all agreements. It is best suited to young people of adequate experience, both in herd management and farm management, and to owners who are no longer able, or willing, to carry out the demanding job of farm management, but still wish to retain their investment and interest in land and farming.

Often the owner does not live on the farm and may visit it occasionally during the season. For this reason the milker must be more highly skilled in farm management than is the 39% milker.

The main difference between the 50% agreement and the 39% agreement, is that the milker owns the herd and all the plant and implements necessary to farm the property, other than the milking plant. A sharemilker has about \$20,000+ invested in the enterprise and for this investment, gets 50% of the cream cheque, but is faced with additional costs. When the \$20,000 or more invested in stock and plant is considered, the 50% agreement is less attractive financially than a 39% agreement.

More important than the compulsory savings aspect of building up a herd or freedom of management, is the extra potential in a 50% agreement. In the 39% agreement actual output is governed by size and kind of herd the owner is prepared to carry. In the 50% agreement increasing the size of herd and improving the quality of the herd is largely left to the milker, as are the grazing systems which might make more efficient use of grass grown and thus achieve an increase in output.

The 50% agreement is not controlled under the Sharemilkers Act and is a private contract between the two parties involved. There are however, guideline agreements existing, notably one provided by the New Zealand Co-op Dairy Company. This guideline agreement was so widely used that it has been, in some circles, regarded as an agreement under the Act.

In some new 50-50 agreements, the milker is paying all power costs, where formerly cost of the chiller was shared.

More recently, the New Zealand Sharemilkers' Association (Inc.), have produced a guideline agreement described as a 50-50 basis for negotiation. Young people considering



entering a 50% agreement, should make themselves familiar with the conditions of both these guideline agreements. However, they should be aware that the agreement they are required to sign may differ in some respect.

For further information and details of the obligations of the parties involved in each of the agreements see M.A.F. AgLinks, FPP 434, 435, 436, 437.

## (2) Contract Milking

The primary purpose of a contract milking arrangement is to free the farmer from the actual milking and feeding of his stock, so that other farm work can be done.

It is strongly recommended that a formal agreement be made, signed and held by both parties.

The contract duties of the milker should include all activities associated with the milking, feeding and general care of the milking herd, e.g.

- \* Milking and washing up.
- \* Shed and machines.
- \* Breakfeeding and feeding hay and silage.
- \* Feeding crops and supplements.
- \* Controlling bloat and eczema.
- \* Mating the herd.
- \* Keeping records.
- \* Observation of cows for veterinary treatment.
- \* Calving cows.

Other duties (responsibility of the farmer) include all activities associated with farm maintenance and improvement and young stock rearing, e.g.

- \* Fencing
- \* Drainage
- \* Rooding
- \* Water supply
- \* Machinery maintenance
- \* Hay and silage making
- \* Ground cultivation
- \* Crop harvesting
- \* Weed control
- \* Rearing calves
- \* Drenching young stock

These duties could be performed by contract milkers, or their labour, at a reasonable wage or salary. Such payments should be clearly separated from the milking contract.

All extra labour required for contract duties should be employed and paid for by the contract milker. All extra labour required for other duties should be employed and paid for by the farmer. The contract milker should provide all relief labour.

Guidelines for contract wages have been set up by the Waikato Sharemilkers Association. However, anything can be written into the Agreement, provided both parties are agreeable. Many different contract milking agreements are operating at present.

A wage rate per 1,000 kg of milkfat should be negotiated. A minimum production figure which becomes the basic and minimum payment to the milker should be set. This figure should be divided into 12 equal monthly advance payments. At the end of the season, any production over the agreed minimum should be paid, at the agreed rate, to the contract milker.

A system which some farmers may prefer is one in which the contract milker is paid for all farm work between the morning and evening milking. This system is generally much simpler and easier to operate. The contract milker is paid a slightly lower figure per 1,000 kg of milkfat, but is paid at an hourly rate for all work between milkings.

However, there are some problems with the contract milking agreements unless there is a written contract covering all aspects of the case. Verbal agreements should be discouraged, as the milker may milk for the flush months and then move on, the farmer may find it difficult to get someone to milk the herd for the remaining unprofitable months.

Another aspect which must be watched in this type of sharefarming is insurance. Where the milker employs labour it is essential that the farmer and milker between them ensure that all are properly covered by insurance.

### (3) Leasing of Dairy Cows

A new animal seems to be emerging in the New Zealand dairy industry. It is called the "leased cow". The response to some advertisements in local newspapers offering leased cows suggests this practice is going to become increasingly popular.

The owner of the cows, not wishing to milk them himself and also not wishing to sell them at that stage, decides

to offer them for lease, for one or more seasons. He is the lessor. The person who takes him up on the offer is the lessee. He may get all the return from those cows - milkfat and calves - depending on the payment system, but of course he has to pay the leasing fee on a per-cow basis. Likely lessors are not only farm owners. A sharemilker might see the system as a means of building up stock numbers on the road to farm ownership.

This would give him tax savings because capital stock do not have to be sold until the time of farm purchase. These leased out stock are eligible for the \$30-head sharemilkers' suspensory loan on first farm purchase.

Lending institutions will lend money to sharemilkers to buy cows to lease, providing the debt can be serviced.

Farm owners lease cows as a means of building up capital or delaying tax liabilities. For any owner considering an increase in the size of the farm, leasing cows is a way of increasing the herd size before getting the extra land. This avoids a need to outlay or borrow additional capital for stock when the extra land is bought.

Young farm workers or contract milkers can use the leasing system to build up an asset to go sharemilking. They would get any capital gain in the stock, and so their savings would be relative to the total cost of going sharemilking.

Retiring farmers could lease their cows and sell them in stages to spread the tax liability, due to low book values. This also offers the chance of a good extra income in retirement.

A farmer who may wish to leave dairying temporarily for a season or two could lease the cows. This not only retains the herd but saves a tax liability on the difference between the sale value and the book value.

For a farm owner employing a sharemilker, leasing a few cows to the sharemilker might help both parties from an increase in total production and a reduction in the amount of capital needed by the sharemilker.

Likely lessees are:

- (a) Sharemilkers, who may be able to take on a larger sharemilking job than funds would allow otherwise.
- (b) For a farm owner who has bought a farm, borrowing extra money to stock it adequately may not be easy,

especially if there is little security to offer.  
Leasing cows in the short term is a means to an end.

- (c) For a farmer who is building up stock numbers fast and has in the past season reared a lot of young stock, leasing cows for one season until the young stock come into profit could be good business. It saves the capital outlay on those extra 10-20 cows, and by the following season his young stock will bring the herd numbers up to the required level.

#### Types of Leases:

The most common type of lease is where the lessee pays the lessor \$X per cow per season. Last season the range in prices paid was \$30-\$70. It is usually 20 per cent of the value of the cow.

Another method is where the lessor rears dairy beef. Then he may take the calf as part-payment for the lease, as well as \$Y per cow.

Other types vary depending on the lessor's requirements.

An example of an arrangement is as follows:

In general the lease charge is related to the capital value of the cow and a common figure yields a 20% return on capital.

Arrangements to make payment in stock are increasing - usually a heifer replacement at weaning for each cow leased.

The Lessor undertakes in all cases to pay most of the costs involved and to return one sound cow at the end of the contract although the actual cows are not always identified.

#### Returns from Leasing

##### Lessor

Assume: 80% live calf rate  
3% death in cows  
94% in calf rate  
Farm can carry extra stock

<u>Return</u>		\$
140 kg MF/cow @ 280c/kg		392
.80 Bobby calf @ \$12/head		9.60

Total Income	<u>\$401.60</u>
--------------	-----------------

Costs -

Deaths 3% @ 400	12
Empty cow 6% of \$400-\$180	13
Animal health	15
AB/herd testing	11
Feed	11
Shed costs	6

\$72

	<u>Farm Owner</u>	<u>Sharemilker</u>
Extra Income	402	202
less Extra Costs	72	66
Lease	80	80
Net Profit/Cow	<u>          </u>	<u>          </u>
- Return on Labour	<u>\$250</u>	<u>\$ 56</u>

Cost of Heifer Replacement: To a farm owner or sharemilker, including bobby calf value only - a total cost of \$60/head is realistic cost of rearing extra calves to weaning.

**Lessee**

Return on invested capital usually arranged at 20%.

Other advantages depend on personal situation but include:

- : Tax Savings - allowable standard values are \$70/cow, therefore tax write off of \$230/cow.
- : Increase in livestock - i.e. payment as heifer replacement.

	Value	Cost of Grazing
Weaner	\$ 70-\$ 80	
to yearling	\$200-\$250	\$ 90
to in calf	\$300-\$400	\$170

Total cost of heifer (in calf) \$250/head (plus tax advantage).

: Capital gain of livestock.

Assume purchase of in calf rising 2 year old heifer at \$300 to lease. As a rising 3 year old in calf cow the current market value is approximately \$400 for sale - therefore gain of \$100/head, but this becomes taxable on sale.

### Leasing Situations

#### **Lessor**

##### Investment (Short Term)

- : Tax deferral over too short a period.
- : Stock prices may drop.
- : Purchased cows may be low quality therefore cull value only at end.
- : Mistreatment of stock or return of poorer type animals would reduce value of investment.
- : Must be by legal contract with stock specified in schedule.
- : Purchase of in-calf rising 2 year old heifers best stock class but choice of lessee very important.

##### Sharemilker/Farm Owner Increasing Stock Capital

- : High return/low risk.
- : Problem of retraining animals if brought back into own herd after lease situation.
- : Sale of lease stock and convert to younger cows worthwhile unless can guarantee quality/breeding of cows leased.

#### **Lessee**

##### Sharemilker

- : Can enable bigger sharemilking position.
- : No short term advantage in cash.
- : Allow stock replacement without principle repayments.
- : Often quality of stock leased is a restrictive factor.
- : Important to lease young good quality stock to prevent wastage and ensure breeding potential used.
- : Bailment a better opportunity.

## Farm Owners

- : Reason if under-capitalised no security margin left.
- : Big tax advantages and high return on extra effort.
- : Important that farm can carry extra stock without increasing marginal feed cost, i.e. meal supplement.

[Information from J. Bluett, "Leasing cows makes sense", N.Z. Dairy Exporter, May 1980, and R. Whyte, Farm Advisory Officer, M.A.F., Rotorua.]

## SECTION 3

### FARM REVENUE





### 3. FARM REVENUE

#### 3.1 SHEEP

##### 3.1.1 Export Meat Schedule

Meat which is destined for export is graded by the New Zealand Meat Producers' Board. The various grades are paid for according to a schedule which is set every week during the killing season. Three main factors influence the prices offered:

- (i) Changes in meat prices due to supply and demand on overseas markets, especially Smithfield.
- (ii) Changes in prices for by-products, and
- (iii) Changes in killing charges.

The payout for ewes, lambs and wethers is based on a separate assessment for meat and another for pelt and wool payment (see Section 3.3). The basis for calculating future lamb schedules has been altered. Exporters derive the schedule price by deducting all known costs (on a per head basis initially) from the estimated selling price. The costs have to be converted from a per head basis to a per kilogram basis. Previously, the costs were divided by an average weight for all lambs, but a new formula uses the average weight for each particular grade. This method reflects the true processing costs of various grades and weight ranges, but does not reflect market differentials in the schedule.

Below is a copy of an export schedule as set by the N.Z. Meat Producers' Board.

# MEAT EXPORTERS' SCHEDULE PRICES TO PRODUCERS

## Sheep and Lamb

The following export schedule prices will operate for the week commencing Monday 4 January 1982.

Grade	Weight Range (kg)	Hawkes Bay c/kg	Rest of N.I. c/kg	South Island c/kg	Supplement c/kg
<b>Lambs</b>					
PL	8.0-12.5	138.0	133.0	136.0	24.0
PM	13.0-16.0	149.0	145.0	146.0	24.0
PX	16.5-19.5	155.0	152.0	152.0	24.0
PH	16.5-19.5	145.0	142.0	141.0	24.0
PHH	20.0-25.5	145.0	142.0	140.0	24.0
OL	8.0-12.5	131.0	126.0	129.0	24.0
OM	13.0-16.0	145.0	141.0	142.0	24.0
YL	8.0-12.5	127.0	122.0	125.0	24.0
YM	13.0-16.0	142.0	138.0	139.0	24.0
A	To 12.5	119.0	112.0	120.0	24.0
F	8.0-12.5	98.0	95.0	95.0	24.0
C1	8.0-12.5	87.0	82.0	85.0	24.0
C1	13.0 & over	116.0	112.0	113.0	24.0
C2	All weights	85.0	80.0	82.0	24.0
M	All weights	25.0	25.0	25.0	24.0

## Mutton

ML1	To 22.0	54.0	50.0	55.0	7.0
ML2	22.5-26.0	60.0	57.0	58.0	7.0
MH1	26.5-30.0	59.0	56.0	57.0	7.0
MH2	30.5-36.0	31.0	25.0	33.0	7.0
MX	To 26.0	42.0	38.0	43.0	7.0
MM	All weights	30.0	25.0	33.0	7.0
MF	All weights	25.0	23.0	23.0	7.0
MP1	To 26.0	17.0	13.0	16.0	7.0
MP2	All weights	14.0	10.0	13.0	7.0

## Rams

RAM	All weights	14.0	11.0	12.0	7.0
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Buffer Account Deduction Percentage: NIL.

Federated Farmers' Levy of 0.5 cents/head is to be shown as a deduction on each weight note.

### 3.1.2 Local Meat Prices

There is a large amount of meat sold on the hoof from farms to wholesale buyers, but the weekly sales at Addington and Burnside still set the market in the South Island, as do sales at Stortford Lodge and Papakura in the North Island. The current situation can be determined from the weekly stock reports in the newspapers. The prices at the Addington sales on Tuesday 5th and Wednesday 13th January 1982 are shown below.

#### Prime Lambs

Heavy lambs - \$23.60 to \$24.50.

Medium lambs - \$19.00 to \$23.20.

Light lambs - down to \$16.80.

#### Store Lambs

Romney and Romney cross wethers - \$10.40 - \$17.60.

Corriedale and Halfbred wethers - \$8.00 - \$15.60 (some to \$18.10).

Coopworth wethers \$7.80 - \$11.80 (some to \$14.20).

Perendale ewes \$14.40 - \$17.40.

Perendale wethers \$10.40 - \$17.10.

Corriedale and halfbred ewes \$12.00 - \$14.60.

#### Prime Sheep

Best hoggets - \$18.90 to \$21.30.

Medium hoggets - \$17.50 to \$18.70.

Best old ewes - \$10.30 to \$12.10

Medium old ewes - \$9.30 to \$10.10.

Light old ewes - down to \$7.20.

#### Store Ewes

Border Leicester 2ths - \$20.50 - \$23.80.

Corriedale 2th - to \$25.20.

Border Leicester cross 2ths \$20.20 - \$22.80.

Older ewes - up to \$9 (some down to \$2).

### 3.1.3 London Wholesale Prices

The following are prices for New Zealand lambs sold to retailers 'ex-hooks' on the Smithfield Market in London during the week ending 17th December 1981.

Description	Weight Range (kilograms)	New Zealand cents per kilogram
PL	8.0 - 12.5	321.4
PM	13.0 - 16.0	321.4
PX	16.5 - 19.5	310.2
PH	16.5 - 19.5	302.8

PHH	20.0 - 25.5	296.6
YL	8.0 - 12.5	300.3
YM	13.0 - 16.0	310.2

### 3.1.4 Store and Breeding Stock Prices

Store sheep prices were down on the 1979/80 season, especially in Canterbury, reflecting the lower price for wool and the drought conditions.

#### 1981 Autumn Ewe Prices by District, Good and Medium Grades.

District	2th Ewes		4 year ewes		5 year ewes	
	Good	Medium	Good	Medium	Good	Medium
Auckland						
(Jan)	27.00	18.00	22.00	17.00	19.00	15.00
Te Kuiti						
(Jan)	29.00	22.00	22.00	19.00	20.00	16.00
Hawkes Bay						
(Jan)	36.00	28.00	29.00	18.00	33.00	22.00
Canterbury						
(Feb)	22.00	16.00	18.50	15.00	12.25	10.00
Dunedin						
(Feb)	26.00	21.00	21.50	17.00	17.00	14.00
Invercargill						
(Feb)	34.00	25.00	24.00	18.00	20.00	15.00

**Source:** "Annual Review of the Sheep and Beef Industry, 1980/81", New Zealand Meat and Wool Boards' Economic Service.

The prices for stock can vary quite a lot during a season. The table below has been drawn up to allow the reader to amend the prices for the different classes of sheep as the season progresses. If all sales reports published in the newspapers are noted, any marked changes will become apparent.

#### Class of Stock

2 tooth ewes	Fine wool	Good
		Average
		Small

	Medium wool	Good Average Small
	Strong wool	Good Average Small
4 year old ewes	Fine wool	Good Average Small
	Medium wool	Good Average Small
	Strong wool	Good Average Small
5 year old ewes	Fine wool	Good Average Small
	Medium wool	Good Average Small
	Strong wool	Good Average Small
Aged works ewes		
Ewe hoggets	Fine wool	Good Average Small
	Medium wool	Good Average Small
	Strong wool	Good Average Small

Store lambs	Fine wool	Good Average Small
	Medium wool	Good Average Small
	Strong wool	Good Average Small

#### Rams

The following figures are the approximate values for flock rams.

Southdown	\$50-\$ 75
Dorset Down	\$60-\$100
South Dorset Down	\$60-\$100
Hampshire	\$60-\$110
South Suffolk	\$60-\$ 90
Suffolk	\$60-\$ 90
Romney	\$60-\$100
Corriedale	\$80-\$120
Perendale	\$90-\$130
Border Leicester	\$90-\$140
Borderdale	\$90-\$120
Coopworth	\$80-\$150

These values are only useful as a guide for budgeting purposes. Up to date figures should be obtained wherever possible.

The values of stock sold through Addington in late January are given in Section 3.1.2. These can be used as a starting point for the completion of the above table.

#### 3.1.5 Minimum Price Schemes

The Meat Export Prices Committee has set the following minimum and trigger prices for benchmark grades for the 1981/82 season commencing on October 1, 1981.

The prices were set as follows, with those for 1980/81 in parentheses:

Benchmark grades	Minimum Price	Trigger Price (cents/kg)
Lamb - PM (13.0-16.0 kg)	145 (133)	160 (155)
Mutton - ML (22.0 kg & under)	50 (40)	65 (60)
Beef - Cow M (145.5-170 kg)	125 (103)	150 (150)
- Bull (220.5-245 kg)	143 (120)	175 (175)
- Steer PL (245.5-270 kg)	143 (120)	175 (170)

The Board's scheme will continue to be administered as it has in the past. If the schedule price for the benchmark grade exceeds the trigger, levies will be applied at the rate of 50 per cent of the difference between the schedule price and the trigger price for all grades of that meat. The funds derived from these levies, if any, will be deposited in the Meat Income Stabilisation Account at the Reserve Bank.

If the schedule price for the benchmark grade falls below the minimum, the Board has the option of paying supplements up to the minimum price or taking over the product at the minimum price and marketing it on its own behalf.

In addition to the price smoothing scheme, the Board acts as administrating agent of the Government's Supplementary Minimum Prices Scheme. This scheme applies only to export carcass meat from sheep and cattle, excluding bobby calves. The minimum prices relate to the same benchmark grades as listed above and are as follows (last season's prices in parentheses):

#### Supplementary Minimum Price

	(cents/kg)
Lamb - PM (13.0-16.0 kg)	145 (133)
Mutton - ML (22kg & over)	50 (40)
Prime Beef - PL Steer (220.5-270 kg)	143 (120)
Manufacturing Beef - M Cow (140 kg & over)	125 (103)

The Supplementary Minimum Prices Scheme will be run alongside the Board's scheme with similar administration, but separate identification and accounting procedures.

In the possible event of the schedule price for a benchmark grade falling below the supplementary minimum price, the Board will determine the supplementary minimum price for all the other relevant non-benchmark grades of meat and instruct exporting companies to pay those prices to producers. Therefore the prices received by farmers for benchmark grades in the announced schedule will never be below the announced S.M.P. The supplementary minimum prices for other grades and in differing regions of the



country could be either above or below that for the benchmark grade. For the purposes of this operation, as well as with the Board's price smoothing scheme, the benchmark price will relate to the lowest-priced region.

Stock sold on an owner account or company pool basis will receive supplements equal to the difference between the exporters' schedule and the supplementary minimum prices, which will be payable in the week in which the stock are slaughtered.

If the S.M.P. scheme is operative, the Board, acting as the Government agent, will arrange for supplementation only. It does not have the option of purchase and marketing, but this possibility will continue to be available under its own scheme.

#### **Payments procedure**

Payments of the supplementary minimum prices to producers, if required, will be made by the exporting companies as denoted on the individual killing sheets. Companies will be reimbursed by the board, as the Government's agent, using funds drawn from the "Supplementary Minimum Meat Prices (S.M.M.P.) Account", established at the Reserve Bank.

The operation of the two schemes (i.e. price smoothing and S.M.P.) may result in some combined actions:

- (i) Where the Government's Supplementary Minimum Prices (S.M.P.) are above the price smoothing minimum prices:
  - (a) If the schedule for a benchmark grade falls below both the S.M.P. and the price smoothing minimum, the producer would receive the relevant S.M.P.

The Board may choose to intervene and purchase at its minimum price in which case producers would still receive the S.M.P. and companies would be reimbursed with a Government supplement of the difference between the Board's buying-in price and the S.M.P.

- (b) If the schedule is above the price smoothing minimum but below the S.M.P., then the S.M.P. would be payable to producers, and companies would receive the Government supplement for the difference.
  - (c) If the schedule is above the S.M.P. then producers

will receive these schedule prices in the normal manner.

- (ii) Where the price smoothing minimum prices are set above the S.M.P.:
- (a) If the schedule price for a benchmark grade is lower than both minimum prices, then producers would receive the price smoothing minimum price. In this instance, however, the Board would have the option of intervening and purchasing at the relevant minimum prices.
- (b) A similar procedure to (a) above would follow if the schedule fell between the S.M.P. and the higher price smoothing minimum price.
- (c) If the schedule is above the price smoothing minimum, producers will receive these schedule prices in the usual way.

In either case, where the schedule for the benchmark grade is above the price smoothing trigger price, producers' returns will be levied at the rate of 50 per cent of the difference between the schedule and the trigger price.

Note: The sources for section 3.1.5 were "The New Zealand Meat Producer:", Vol. 7, No. 1 Oct. 1978 and Vol. 7, No. 10 Sept. 1979 published by the New Zealand Meat Producers Board.

## 3.2 WOOL PRODUCTION

### 3.2.1 Wool Production Statistics

- (i) AUCTION SALE PRICES 1980/1981 SEASON  
(cents per kilogram clean on floor)

Selling Centre	October		December		March		May	
	46/48's Coarse Crossbred B Fleece (37F2D)							
	46/48's Coarse Crossbred 2nd Shear (37F2L)							
	Fl.	2 Sh.	Fl.	2 Sh.	Fl.	2 Sh	Fl.	2 Sh.
Dunedin	351	352	354	338	346	339	372	351
Timaru	356	355	351	343	347	337	366	353
Inv'gill	369	340	346	337	343	332***	371	342
Auckland	356	348	343**	341	N/A	334	N/A	338
Napier	366	351	351	340	346	342	376	344

Chch	353	350	358	346	348	337	378	357
Well'ton	363	353	352	340	341	333	N/A	354*****
Wanganui	349*	346*	355	345	349****	338	N/A	342

56's Strong Halfbred B Fleece (28F2W)

Timaru	393	398	399	421
Chch	392	395	399	426
Dunedin	395	392	412	420
Napier	399*	394**	N/A	N/A

NOTE:

Sales were not held successively in the order as shown, so that this table does not reflect the progressive movement of prices. Sales held in November, January, February, April and June have been omitted unless otherwise indicated.

*	November
**	January
***	February
****	April
*****	June

SOURCE:

N.Z. Meat and Wool Boards' Economic Service "Annual Review of the Sheep and Beef Industry, 1980/81".

(ii) AVERAGE PRICE FOR GREASY WOOL AT NEW ZEALAND AUCTION SALES

Micro-meters SEASON	All Styles and Types				All Qualities Greasy Auction Sale Value (\$ m)	Total Greasy Auction Value of Wool Prod. (\$ m)
	19-22**	25-27**	35***			
	(cents per kg greasy)					
1965/66	95.7	82.7	69.4	76.5	176.6	241.0
1970/71	74.3	56.1	44.8	53.4	116.6	178.4
1971/72	75.6	60.9	58.7	66.5	139.0	214.3
1972/73	200.0	157.2	125.0	144.0	282.2	44.7
1973/74	212.5	154.0	122.5	139.2	271.6	396.4
1974/75	138.2	89.6	82.6	91.7	192.9	269.7
1975/76	185.6	139.9	148.1	157.1	333.9	489.8
1976/77	229.9	216.8	209.9	219.5	441.2	664.0
1977/78	218.9	193.0	180.3	190.4	378.1	591.8
1978/79	226.0	217.4	209.3	218.8	447.2	701.5

1979/80	302.2	263.9	246.3	265.1	624.8	945.1
1980/81	350.5	261.2	222.4	247.5	638.6	942.2

SOURCE:

N.Z. Meat and Wool Boards' Economic Service "Annual Review of the Sheep and Beef Industry, 1980/81".

\* = 60/64's and up.

\*\* = 58/60's, 58's and 56/58's.

\*\*\* = 46/50's and 48's.

(iii) STATISTICAL REPORT ON THE 1980/81 WOOL SELLING  
SEASON (July-June)

DISPOSALS:

	1979/80	1980/81
1. Sales		
(a) At Auction		
(i) Greasy : tonnes actual	236,997	258,575
: av. price (c/kg)	265.09	247.48
(ii) Scoured : tonnes actual	4,397	3,561
av. price (c/kg)	353.62	327.90
TOTAL CLEAN TONNES SOLD AT AUCTION	180,153	197,699
(b) Privately (clean tonnes)		
(i) Brokers	3,784	2,098
(ii) Private buyers & WMA	52,252	53,962
(iii) Extra Choice	2,241	213
TOTAL SOLD PRIVATELY		
- clean tonnes	58,277	56,273
- value \$	193,554,478	169,699,456
2. Growers' Shipments (clean tonnes equivalent)		
(a) Greasy	659	539
(b) Scoured	5,412	5,176
TOTAL GROWERS' SHIPMENTS		
- clean tonnes	6,071	5,715
- value \$	22,201,949	18,655,532

### 3. Slupe Disposals

Freezing companies and fellmongers

- clean tonnes	26,642	30,008
- value \$	93,407,197	89,344,019

#### TOTAL DISPOSALS

(a) clean tonnes	217,143	289,695
(b) value \$	940,144,274	928,146,149

#### SCOURING: (clean tonnes)

(a) On account growers	9,320	7,916
(b) On account buyers	127,376	137,114

TOTAL SCOURED	136,696	158,884
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#### EXPORTS; (clean tonnes equivalent)

(a) Greasy	98,922	96,737
(b) Scoured	141,316	133,641
(c) Slupe	13,521	15,100

TOTAL EXPORTS	253,769	245,478
FOB Value \$	827,286,940	766,382,316

#### LOCAL MILL PURCHASES:

(clean tonnes)	15,626	16,423
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#### BOARD MARKET ACTIVITIES (N.Z. & U.K.)

(a) Purchases - Bales		
(i) Intervention	137,209	314,090
(ii) Extra Choice	19,880	1,868
(iii) Other	764	37
- Value all purchases \$	59,608,129	111,147,653
(b) Sales - all		
(i) Bales	115,342	91,958
(ii) Value (realisation)\$	39,914,800	34,335,278

SOURCE: New Zealand Wool Board, 'WOOLNEWS',  
Vol. 9, No. 2, August 1981.

### 3.2.2 Wool Prices

(N.Z. Meat & Wool Boards' Economic Service)

The 1981/82 wool selling season opened at Napier on August 7th with prices slightly below the closing level of the 1980/81 season. The opening A.W.A.S.P. (adjusted weighted average sale price) of 266.93c/kg was 1.6% below the closing level of 271.15c/kg for the 1980/81 season.

Prices firmed at Christchurch on August 14th and stayed around the 273c/kg level for the rest of the month. The Wellington sale on September 10th saw prices sag but at Dunedin on September 17th the market improved to be very close to 275c/kg. However this strength waned at Napier on September 24th with increased support necessary.

From early October the market continued to weaken and after a sporadic strengthening at Dunedin on November 19th reached the low point for the season at the Wellington-Auckland sale on December 10th when the A.W.A.S.P. was 254.94c/kg. Government supplementation reached its peak at that sale at a level of 25.5 per cent.

The high point for the first half of the season was reached at Dunedin on September 17th when the A.W.A.S.P. was 274.48c/kg. Government supplementation at that sale was 16.5 per cent.

### 3.2.3 Wool Income Stabilisation Arrangements

- (i) Under its Minimum Prices Scheme, the Wool Board sets a table of minimum prices for all types of shorn wool and dead wool produced in New Zealand. Other than in exception circumstances, only one table of minimum prices shall be set in any one season, with movements in the target average of the table limited to a decrease of 5% and an increase of 10% on that of the previous season.

#### MINIMUM FLOOR PRICES:

1976/1977	.....	136 cents/kg
1977/1978	.....	150 cents/kg
1978/1979	.....	170 cents/kg
1979/1980	.....	200 cents/kg
1980/1981	.....	215 cents/kg
1981/1982	.....	250 cents/kg

When the sale price of any wool falls below its appraised minimum price, the Board will supplement that price up to its minimum level through a supplementary payment made from the Minimum Wool Prices Funding Account held at the Reserve Bank of New Zealand. The Board may also provide minimum price support by purchasing the wool using its own funds and borrowing for that purpose, or by a combination of both supplementation and purchasing. Should the funds in the Account become exhausted, advances can be made from the Reserve Bank at an interest rate of 1% per annum.

# PRICE MARKSHEET - Cents Per Kilogram (Clean)

		Nap.	Chch/Inv	Dun	Tim	Well/Wang	Dun	Nap/Auck
		7/8	14/8	20/8	27/8	10/9	17/9	24/9
21 F2W	Merino B Fleece						712	
22 F2W	Merino B Fleece		664N				694	
24 F2W	Quarter Bred B Fleece		572N	576N			602	
25 F2W	Ex Fine Half Bred B Fleece		544N	548	548N		560	
26 F2W	Fine Half Bred B Fleece		490	490	492		520	
27 F2W	Med. Half Bred B Fleece		442	450	460		466	
28 F2W	Med. Half Bred B Fleece		422	434	434		442	
29 F2W	Strong Half Bred B Fleece		416	420	424		424	
30 F2W	Strong Half Bred B Fleece		414	414	414		414	
31 F2W	Ex Strong Half Bred B Fleece		414	414	412		414	
32 F2E	Fine XBd-B Fleece	400N	416N	412	412	410N	414	414
34 F2D	Fine XBd-B Fleece	403N	412	412	410	410N	412	412
35 F2D	Med. XBd-B Fleece	403	408	408	406	406	408	414
37 F2D	Coarse XBd-B Fleece	403	402	402	402	404	404	412
37 G3F	Coarse XBd Av.Inf.Soft Cotts	344	344	346	356			349
35 P3G	Med. XBd Av.Inf. Pieces	330	346	354	346	346N	354	337
37 F2L	Coarse XBd B 2nd Shear	350	362	364	370	370	370	373

N = Nominal Quotation.

PRICE MARKSHEET - Cents Per Kilogram (Clean) cont'd.

		Chch	Chch	Nap	Dun	Tim	Inv	Auck
		30/9	2/10	9/10	15/10	22/10	23/10	29/10
21 F2W	Merino B Fleece	718	736		720	710		
22 F2W	Merino B Fleece	694	710		700	675		
24 F2W	Quarter Bred B Fleece	634	624		620	610		
25 F2W	Ex Fine Half Bred B Fleece	564	564		556	550		
26 F2W	Fine Half Bred B Fleece	520	498		494	474		
27 F2W	Med. Half Bred B Fleece	466	460		458	448		
28 F2W	Med. Half Bred B Fleece	442	440		430	425		
29 F2W	Strong Half Bred B Fleece	424	420		416	404		
30 F2W	Strong Half Bred B Fleece	412	408		403	396		
31 F2W	Ex Strong Half Bred B Fleece	410	408		402	396		
32 F2E	Fine XBd-B Fleece	410	408	408	402	394	386	375
34 F2D	Fine XBd-B Fleece	410	410	408	400	394	384	377
35 F2D	Med. XBd-B Fleece	404	406	406	396	392	384	380
37 F2D	Coarse XBd-B Fleece	402	403	403	396	390	384	380
37 G3F	Coarse XBd Av.Inf.Soft Cotts	350N						
35 P3G	Med. XBd Av.Inf. Pieces	352	346	330	340	330	332	
37 F2L	Coarse XBd B 2nd Shear	370	372		360	358	350	344

N = Nominal Quotation.



PRICE MARKSHEET - Cents Per Kilogram (Clean) cont'd.

	Chch	Nap	Inv/Chch	Well/Wang	Dun	Nap	Auck
	30/10	5/11	12/11	13/11	19/11	20/11	27/11
21 F2W Merino B Fleece	700		696				
22 F2W Merino B Fleece	692		682				
24 F2W Quarter Bred B Fleece	594		580		598		
25 F2W Ex Fine Half Bred B Fleece	548		544		546		
26 F2W Fine Half Bred B Fleece	468		468		484		
27 F2W Med. Half Bred B Fleece	438		438		446		
28 F2W Med. Half Bred B Fleece	418		418		430		
29 F2W Strong Half Bred B Fleece	406		406		422		
30 F2W Strong Half Bred B Fleece	392		384		390		
31 F2W Ex. Strong Half Bred B Fleece	392		388				
32 F2E Fine XBd-B Fleece	386		382	373	384	392	380N
34 F2D Fine XBd-B Fleece	384		376	373	382	386	382
35 F2D Med. XBd-B Fleece	376		372	370	376	376	374
37 F2D Goarse SBd-B Fleece	376		372	370	376	370	368
37 G3F Coarse SBd Av.Inf.Soft Cotts				343	340		
35 P3G Med. XBd Av.Inf.Pieces	322		312	304	310	316	310N
37 F2L Coarse XBd-B 2nd Shear	340		342	335		327	330

N = Nominal Quotation

The Minimum Price Funding Scheme provides for a minimum price funding levy (currently set at 1%) to be imposed on all shorn wool and dead wool produced in New Zealand. This includes all wool other than dag wool, slipe wool, fellmongered wool, and wool on the skin. The levy is paid into the Minimum Wool Prices Funding Account. Credit balances in the Account earn interest at a rate of 1% per annum.

There is provision for the Wool Board to borrow from the Funding Account for wool trading purposes approved by the Minister of Agriculture. Interest at a rate of 1% per annum is payable to the credit of the Account on such borrowings.

- (ii) At the beginning of each season, the Minister of Agriculture announces a 'trigger' price which is above the minimum price. This price is determined after consultations between the Ministry of Agriculture and Fisheries and the New Zealand Wool Board. Factors that affect the 'trigger' price are the ruling level of prices and prospects for wool as well as other farm products, the maintenance of an expanding sheep industry and the need to promote general economic stability in the economy.

The operation of the 'trigger' price is as follows:

The prices for each grade of wool at a particular sale are weighted up by the national volume of wool of each grade. As a result an Adjusted Weighted Average Sale Price (or commonly known as A.W.A.S.P.) is calculated based on the prices that were achieved at that particular sale and the New Zealand volumes of each grade. It must be stressed that this A.W.A.-S.P. value differs from the Actual Sale Average Price (or A.S.A.P.) because of the weighting using New Zealand volumes of wool.

In the event of the A.W.A.S.P. being above the predetermined 'trigger' price, a Grower Retention Levy is introduced on all shorn wool and dead wool. The levy is equivalent to 50% of the amount by which the A.W.A.S.P. exceeds the 'trigger' price, expressed as a percentage of the A.W.A.S.P. This percentage figure is then deducted from all wool sold at that particular sale and applies to all wool sold at that particular sale and applies to all wool sold privately up to the next auction. The percentage

levy will usually change at this stage in response to actual prices changing.

The proceeds levied in this way are deposited in the Wool Income Retention Account at the Reserve Bank of New Zealand in the name of the individual grower. Deposits may be withdrawn at the discretion of the Minister of Agriculture. They will be available 5 years after the date of deposit, however, under special circumstances they may be withdrawn or refunded at an earlier date. These individual grower accounts will not attract tax until the date of withdrawal, neither will they accumulate interest during the time of deposit.

The 'trigger' price that will operate during the 1981/1982 season was announced in June 1981 as 400 cents per kilogram. This is 21.2% up on last season's price of 330 cents per kilogram.

The method of calculating the Grower Retention Levy is shown in the following hypothetical example:

1. The 'trigger' price for 1981/82.....400c/kg
2. A.W.A.S.P. at a sale.....450c/kg
3. Difference.....50cents
4. 'Specified Percentage' Retention  
$$\frac{0.5 \times 50}{450} \times 100 \dots\dots\dots 5.56\%$$

Thus, the 'Specified Percentage' retention of 5.56% would be applied to the gross proceeds of all wool sold at that sale and nationally for all wool sold privately by growers until the next sale.

- (iii) Since 1976, the New Zealand Wool Board (previously the N.Z. Wool Marketing Corporation) has operated a Strata Price Control Scheme to limit the degree to which prices at any auction sale may vary from the price levels prevailing at the previous sale. To do this, the Board bids through a subsidiary (New Zealand Wools) at a fixed percentage below previous prices. In this way, steep falls in the market can be avoided, although it is inherent in the system that the Board could accumulate large stocks of wool on a falling market.

Due to the depressed state of the market the Wool Board has been active and the level of intervention buying increased as the season progressed.

To the end of December the Wool Board bid on 26.28 per cent and purchased 11.15 per cent of wool offered in New Zealand.

Purchases in North Island centres have generally been between 20 and 40 per cent of offerings while purchases at South Island centres have been substantially less at around 5 per cent.

- (iv) In addition to the stabilisation procedures operated by the wool industry, the Government has established and will underwrite a supplementary minimum price for wool for the 1981/82 wool selling season. This price is based on an average of 250 cents/kilogram (greasy) on the auction floor in New Zealand. The Minister of Agriculture has announced that the supplementary minimum price for the 1982/83 season will not be less than 320 cents per kilogram.

The Supplementary Minimum Prices Scheme for wool applies only to shorn wool and dead wool. The rate of supplement payable by the Government through the Wool Board is equivalent to the amount by which the A.W.A.S.P. for such wool is below 250 cents/kilogram expressed as a percentage of that A.W.A.S.P. When this percentage is greater than 0.5%, this rate of supplement is applied to the bulk proceeds from the sale of qualifying wools and paid to growers through brokers or directly by the Wool Board as appropriate. The Board will make these supplementary payments from the Government-financed Supplementary Minimum Wool Prices Account at the Reserve Bank of New Zealand.

After each auction sale, brokers and registered private buyers are advised of the supplement percentage. Brokers then calculate the payment, show it on the account sales and pay it to the growers. The Wool Board Levy and the stabilisation levy is deducted from the gross amount, including the supplement. The brokers then reclaim the supplement from the Board. Private buyers - but only those registered - operate the scheme. They are advised of the supplement percentage which they will use to calculate the gross proceeds and deduct the levy. They then advise the Board which pays the supplement to the grower.

Other points about the scheme are:

- \* No supplement will be paid if the percentage is

0.5 or less.

- \* Arrangements with co-operatives and pools are similar to those with private buyers.
- \* The scheme applies to shorn wool, both greasy and scoured, and to dead wool. It does not apply to dags, dag wool, slipes and sheepskins.
- \* It does not apply to parcels of less than 100 kilograms unless the wool is going through brokers' bins.

Payment of the supplement to growers who sell privately is made by direct transfer through the banking system. This means that private buyers have to obtain the account number or a cheque-book pay-in slip for each grower so that payment may be made. There is no direct payment to growers by cheque. If growers want their wool proceeds paid to a seasonal financier, e.g. stock and station agent, Rural Bank or to anyone holding security over their wool clip, then there is provision on a special form to instruct the Board accordingly, giving details of the firm and branch where payment is to be made. In these cases, the grower's signature is needed on the form to authorise the Board to make payment to another person. The form leaves space for details of the seasonal financier's account number and the client's reference number. To get these details, the private buyer or the grower should send the form to his financier to be completed and returned either directly to the Board or to the private buyer. The buyer then sends it with the monthly levy return to the Board. Booklets of forms - including an example of one correctly completed - are available from registered private buyers.

The supplementary minimum price of 250 cents/kilogram for 1981/82 is an average price. The guaranteed price to growers for any one lot of wool under the scheme will vary according to several factors including that wool's type and yield.

### 3.2.4 Summary of Levies Imposed on the Wool Grower

There are several levy charges that the wool grower faces when he sells his product. The Wool Board levy is used to finance Wool Board activities, and is equivalent to 3% of the grower's gross proceeds from wool sales, however it is sold. As mentioned above, there are the Minimum Prices Funding Levy 1% of gross proceeds) and the Grower

Retention Levy (based on the 'trigger' and A.W.A.S.P. values).

### 3.2.5 Comment on Wool Production, Prices and Consumption During the 1980/81 Season

- (i) PRODUCTION: As a result of favourable climatic conditions and increased sheep numbers total wool production in the 1980/81 season increased by 6.8% to 380.7 thousand tonnes or 24.2 thousand tonnes more than in 1979/80. (In the 1978/79 season total production was 320.6 thousand tonnes.)

The above production figures include greasy, slipe and scoured wool, together with wool on sheep skins all converted to the greasy equivalent. Production of greasy and scoured wool (on a greasy basis) increased to 333.3 thousand tonnes compared with 311.4 thousand tonnes per year earlier.

The amount of greasy wool sold at auction in 1980/81 increased by 9.5% over the previous year resulting in extra sales being held in the respective selling centres. All selling centres handled considerably more wool than in the previous season and ranged between Invercargill with a 5.2% increase, and Auckland with a 16.7% increase.

The amount of wool scoured decreased by 11.0% compared with the previous season. In the case of slipe an increase of 6.9% over the previous season was recorded but wool sold on sheep skins increased marginally by 2.8%.

Private sales of greasy wool increased by 5.2% over the 1979/80 season which in turn was 16.7% up on the 1978/79 season.

The average clean yield of wool for the 1980/81 season was recorded at 73.4%. This represented an increase on the 1979/80 season, for which a yield of 74.0% was recorded.

Wool production by regions and production per sheep, based on estimated number of sheep wintered in the hinterlands of the eight wool selling centres, in 1980/81 is shown in the following table.

# N.Z. WOOL PRODUCTION 1980/81 (Total and Per Sheep Shorn)

District	Sheep No. June 1980 (millions)	Total Prod'n (000 tonnes)	% Change	Production per head (kg)	Change (kg)
Auckland	11.712	58.39	+ 8.7	4.99	-0.09
Napier	11.886	78.99	+12.0	6.65	+0.49
Wanganui	5.494	29.56	+ 4.5	5.38	-0.23
Wellington	7.174	34.77	- 4.6	4.99	-0.66
North Island	36.267	202.72	+ 6.7	5.59	-0.05
Christchurch	9.362	49.20	+ 9.1	5.26	-0.11
Timaru	5.428	31.14	+15.7	5.74	+0.31
Dunedin	8.389	41.62	+ 1.3	4.96	-0.27
Invercargill	9.326	56.03	+ 2.8	6.01	-0.18
South Island	32.505	177.98	+ 6.9	5.48	-0.10
NEW ZEALAND	68.772	380.70	+ 6.8	5.54	-0.07

The above table shows that overall, New Zealand production increased marginally by 0.07 kg per sheep wintered in the 1980/81 season as compared to the previous year. The 6.8% increase in total production can be partly attributed to increased sheep numbers.

- (ii) WOOL PRICES: The average price of greasy wool sold at auction in New Zealand during the 1980/81 season was 247.48 cents per kilogram. This represents an increase of 6.6% on the 1979/80 season's average price of 265.09 cents per kilogram.

The 1980/81 wool selling season opened on August 8th at Napier on an unspectacular note. The A.W.A.S.P. was 249.63c/kg compared with that of 246.56c/kg at the closing sale of the 1979/80 season. The market remained steady through until the end of December with the A.W.A.S.P. fluctuating in the narrow range between 247c/kg and 256c/kg. Early in the new year prices declined to reach the season's low point of 243.18c/kg at Invercargill on April 1st. Wool Board intervention buying from February to April was substantial.

From April 1st prices increased and the season closed at Christchurch on June 30th with the A.W.A.S.P. at 271.15c/kg, the highest point for the season.

The seasonal pattern of prices reflected commodity

market activity with the overriding factors being currency fluctuation, high interest rates and high inflation. The end of season market firmness was due to a shortage of good length fleece wool coupled with increased buying by Eastern Europe and the Middle East.

- (iii) COMPETITION: The significant feature of the 1980-81 season was the growth in purchases by China to become the major buyer of New Zealand wool. Total purchases by China increased by 128 per cent compared with the previous season. The other buyer to substantially increase purchases was Iran (+22%).

Compared with the 1979/80 season substantial decreases in purchases were recorded for USSR (-34%), Western Europe (-20% overall) and Japan (-17%).

Purchases by local mills increased by 5% over the previous season in response to a slight recovery in consumer demand. Local mills in total purchased 5.7% of the season's production.

- (iv) INTERVENTION: The level of Board purchases at auction during the first half of the 1980/81 season generally ranged between 10 and 20 percent. From February 11th, 1981 the level of support buying increased dramatically and by the end of March the Board was buying 50 percent of the offerings. It wasn't until May that the level of Board purchases dropped below 10 percent and by June this had dropped to 1-2 percent. Cumulative additions to stocks during the 1980/81 season were equivalent to nearly twice the opening stocks.

- (v) MINIMUM PRICES: During the 1980/81 season the Wool Board's minimum price was set at 215c/kg compared with 200c/kg in the previous season. Prices remained above the minimum for the total season and there was no supplementation from the Minimum Prices Fund which stood at \$69.9m at June 1980 but had risen to \$78.9m by June 1981. During the 1980/81 season the levy on production was set at 1% of the gross proceeds on all wool sold for the first time.

- (vi) WOOL INCOME RETENTIONS: Throughout the 1980/81 season wool prices remained below the 330 cents per kilogram set as a 'trigger' level, as part of the Government's stabilisation measures.



NOTE: This section, 3.2.4, was adapted from Section 6: Wool Production, Prices and Consumption in "The Annual Review of the New Zealand Meat and Wool Boards' Economic Service 1980/1981".

### 3.3 SKINS

The skin payments as at 4 January 1982 were as follows:

		Auckland	Hawkes Bay	Rest of N.I.	South Island
		cents	cents	cents	cents
Lambs -	0.5kg	26.0	75.0	75.0	55.0
	0.8kg	102.0	149.0	149.0	127.0
	1.0kg	153.0	198.0	198.0	175.0
	1.2kg	204.0	247.0	247.0	225.0
	1.5kg	280.0	320.0	320.0	300.0
Sheep -	0.5kg	30.0	88.0	88.0	64.0
	1.0kg	161.0	214.0	214.0	173.0
	1.5kg	291.0	341.0	341.0	288.0

Skin payment schedules are published weekly, along with sheep and lamb meat schedules, by the Freezing Companies.

### 3.4 CROPS

#### 3.4.1 Wheat

##### (i) Prices:

The prices for milling standard wheat for the 1982 harvest are as follows:

	\$ per tonne
Aotea, Kopara and equivalent	203
Hilgendorf	238.52
Arawa	192.85
Karamu	N.I. plus Marlborough
	S.I. excluding "
	172.55

The above prices are fixed as for delivery F.O.R. grower's station and are subject to a continuation of the arrangement with growers for the retention by the Wheat Board of up to 10% of the basic price. No retention will be deducted from growers' prices for the 1982 harvest.

- (ii) **Monthly Storage Increments** - The rate of payment of storage increments is 1.5% per month of the basic price. Payment on wheat grown north of a line drawn from Waikouaiti to Queenstown, South Island, will apply as follows:

For deliveries:		\$ per tonne
April	1-15	4.57
	16-30	6.09
May	1-15	7.61
	16-31	9.14
June	1-15	10.66
	16-30	12.18
July	1-15	13.70
	16-31	15.23
August	1-15	16.75
	16-31	18.27
September	1-15	19.79
	16-30	21.32
October	1-15	22.84
	16-31	24.36
November	1-15	25.88
	16-30	27.41

Increment payments on wheat grown south of the Waikouaiti/Queenstown line will apply one month later than above. These increments reimburse growers for holding wheat up to the time of delivery.

Delivery of wheat to mills must be completed by a final closing date (30th November 1982). Delivery of South Island wheat for shipment to the North Island must be made as required to meet planned transport arrangements.

The date of delivery of the wheat to the point nominated by a mill or the Board and its acceptance as milling standard quality fixes the increment payable to the grower and it is not competent for either miller, broker or grower to enter into any arrangement for the disposal of milling standard wheat at any other price.

- (iii) **Levies** - The levies on wheat payable by growers and collected by deduction on the credit notes issued will be at the following rates:

Wheat Research Institute 18 cents per tonne  
Wheatgrowers' Compensation Fund 52c per \$100 value  
inclusive of storage increment  
United Wheatgrowers' (N.Z.) Ltd 18c per \$100 value  
exclusive of storage increment  
Federated Farmers of N.Z. Inc. 3c per tonne.

- (iv) **Premiums and Discounts** - The premium on Hilgendorf is 17.5% of the basic Aotea price; it amounts to \$35.53 per tonne and will apply only to wheat which has been positively identified as Hilgendorf by the Wheat Research Institute. This will be done in the course of the usual baking test and until the Institute is satisfied as to the authenticity of the sample, it will not issue a test report.

The grower's price for Arawa and Wri-Yielder will be 5%, or \$10.15 per tonne less than Aotea, but if sold for milling, the charge-out price to millers will be the same as for Aotea.

In the North Island and Marlborough there will be a 7.5% discount on Karamu, or \$15.23, while in the South Island, excluding Marlborough, the discount is 15%, or \$30.45.

**Price Formula** - The basic price for milling standard wheat for the 1982 season is based on a formula announced in April 1980 by the Minister of Trade and Industry. It is the 3 year moving average of the f.o.b. price for Australian standard white wheat. The prices for the three years on which the basic price is based were:

1979 - \$154.55  
1980 - \$178.75  
1981 - \$216.30 (estimated)

Under the new arrangements, the B.M.P. in 1983 will be \$182.70 per tonne, 90% of the 1982 price.

### 3.4.2 Barley

The Canterbury Malting Company contract price for No. 1 Grade Malting barley for the 1982 harvest is \$180 per tonne in the South Island (delivered Heathcote), and \$195 per tonne in the North Island delivered to the nearest depot of the malting company. If the distance is greater than 48 kilometres, the malting company will pay the

additional cost of cartage to the grower in the South Island. There are specified delivery points in the North Island - Palmerston North, Feilding, Marton, Wanganui and Woodville.

For barley with a screening percentage greater than 5%, the following penalties will apply:

\$1.00 per 1% over 5% up to and including 12% (S.I.) and 20% (N.I.).

If the barley does meet the above specifications, the malting company has the option to purchase it at \$165.00 (S.I.) and \$175.00 (N.I.) per tonne net delivered.

Where the malting company requires the contracted grower to store the barley, a storage increment will be paid at the rate of \$4.00 per tonne for delivery during the month of May and a further \$2.00 per tonne per month thereafter. Where the company requires the barley to be stored, the contract price will be paid following delivery and grading. Where the barley is delivered to the factory immediately after harvest, the farmer has the choice of being paid promptly or he can opt for the following payment scheme:

- (i) 50% of the contract price will be paid immediately.
- (ii) 25% of the contract price will be paid on the 30th June.
- (iii) 25% of the contract price will be paid on the 30th September.
- (iv) Interest at the rate of 14% per annum shall run from the date of 50% payment on the unpaid portion of the contract price to 30th September and this shall be paid with the final payment.

Contract price for seed barley in 1981/82 is about \$185 per tonne for Basic, \$170 to \$175 per tonne for first generation and \$165 per tonne for second generation. There is very little difference between cultivars. The above are South Island prices and it is likely that due to less barley being grown in the North Island that prices there would be above those quoted.

The price for feed barley grown on contract is about \$165 per tonne.

### 3.4.3 Oats

The price offered for good quality feed grade oats this season is \$200/tonne in bulk. Taiko oats (black oats) would possibly fetch a premium of \$15 per tonne.

### 3.4.4 Peas

The prices offered for field dressed peas in bulk for the 1981 harvest are:

	Contract Price	Free Price
(i) Field peas -	(per tonne)	
White Prolific	\$225	-
Huka	\$225	-
Blue (Marrowfat)	\$240-\$250	\$280-\$300
Maple (Whero)	\$230	\$280-\$300
(ii) Garden peas -		
Greenfast, Victory Freezer, D.S.P., New Victory, Patea, Pugets, Puki, Pania and Small Sieve	- Field dressed \$250/tonne - Machine " \$275/tonne	
Maro	\$255 per tonne	
Onward	\$255 per tonne	
William Massey	\$300 per tonne	

NOTE: All the above prices are for bulk seed. Growers are recompensed for sacks if the crop is sold bagged rather than bulk.

#### (iii) Freezer peas -

Grade	Tenderometer Reading	c per kg packed
0	not exceeding 90	28.0
1	over 90, not over 95	25.8
2	over 95, not over 100	23.2
3	over 100, not over 105	20.4
4	over 105, not over 110	18.2
5	over 110, not over 115	17.3
6	over 115, not over 120	15.8
7	over 120	14.1

NOTE: Freezer pea crops that are passed over are paid for at the market price for seed peas when they are harvested and dressed.

### 3.4.5 Beans

- (i) Beans grown for process freezing are paid for on the following scale.

Grade	Average Seed Length	\$ per tonne packed weight
0	not exceeding 8.5mm	\$219.80
1	over 8.5mm, not over 9mm	211.95
2	over 9mm, not over 9.5mm	205.60
3	over 9.5mm, not over 10mm	200.70
4	over 10mm, not over 10.5mm	195.85
5	over 10.5mm, not over 11mm	193.05
6	over 11mm, not over 11.5mm	191.10
7	over 11.5mm, not over 12mm	189.20
8	over 12mm, not over 12.5mm	187.35
9	over 12.5mm, not over 13mm	185.50
10	over 13mm	183.30

- (ii) Tick beans grown for seed are currently paying approximately \$280.00 per tonne.

### 3.4.6 Sprouting Broccoli

Sprouting broccoli sown in the autumn for process freezing is paid for at \$363.40 per tonne packed weight. All harvesting and cartage are paid for by the processing company.

### 3.4.7 Cauliflower

Cauliflower grown for process freezing is paid for at \$328 per tonne packed weight.

### 3.4.8 Brussel Sprouts

Brussel sprouts grown for process freezing are paid for on the following basis:

Grade No. 1 \$350 per tonne (packed weight)  
Grade No. 2 \$325 per tonne (packed weight)  
Grade No. 3 \$295 per tonne (packed weight)

#### 3.4.9 Asparagus (October 1981)

Grade 1 \$1.53/kilo  
Grade 2 \$0.96/kilo  
(Hastings prices)

#### 3.4.10 Potatoes

Prices for potatoes vary a lot during a season, due to several factors including the areas planted, the yield per hectare and weather conditions. The N.Z. Potato Board has discontinued the Guaranteed Payout Scheme for surplus potatoes and the contract growing system.

Potatoes used by process freezing companies such as Watties are paid for at \$78.00 per tonne (container supplied by company) or \$80.00 per tonne if in bulk or in grower's own bin.

Seed potato prices vary from year to year with changes in supply and demand. Depending on the harvest later in the year, the price could be higher or lower than those of 1981. There is no way of predicting the price in December.

#### 3.4.11 Lucerne

Payment of contract lucerne for the 1981/82 season is as follows:

Whole Season	\$75.00 per dry tonne
One cut	\$65.00 per dry tonne

No greenchop lucerne is purchased by Fletcher Lucerne. All lucerne is baled, yielding a "sun-cured" product.

#### 3.4.12 Linseed

The price offered during the 1980/81 season for Linseed grown on contract to Fletcher Agriculture was \$225 per tonne of 95% pure whole seed. For each 1% above 95% there was a premium of \$5.00 per tonne, while for each 1% below 95% there was a penalty of \$5.00 per tonne.

For each 1% of damaged seed (bolls, broken and sprouted seed) the price was increased by \$2.00 per tonne with a maximum payment of \$10.00 per tonne (i.e. maximum damaged seed attracting payment was 5%).

Note that these prices are based on seed moisture content being not greater than 10%. If the company purchased at a higher M.C., drying costs were borne by the grower.

No contracts were available for 1981/82.

### 3.4.13 Lupins

Very few lupin seed crops are grown at present, presumably as the result of reluctance on the part of the farmers to grow a relatively risky crop. It is estimated that good quality sweet white lupin seed would fetch in the vicinity of \$250-\$300 per tonne.

## 3.5 SMALL SEEDS

The price paid for small seeds is based on machine dressed weights which depend on the purity of the seed line. As at the middle of January 1982, many prices had not been finalised and those shown below are estimated values only, for first generation certified seed.

Grass Seed:	\$
Ruanui Ryegrass	.80
Nui Ryegrass	1.20-1.30
Ariki Ryegrass	.90-1.30
Manawa Ryegrass	1.00
Paroa Italian Ryegrass	.50- .70
Tama Ryegrass	.85-1.00
Apanui Cocksfoot	2.50-2.60
Crested Dogstail	.50- .70
Matua Prairie Grass	1.10
Browntop	2.20-3.40
Dawson's Red Fescue	3.00

Clover Seed:	
Huia White	3.00-3.60
Turoa Montgomery Red	2.20-2.40
Hamua Broad Red	1.30-1.50

Lucerne:	
Wairau	2.75-3.00
AS 13R	3.00
Rere	4.50

Kale:	
Medium Stemmed	1.70-2.50
Giant	1.70-2.50

Turnips:	2.00
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### 3.6 CATTLE

#### 3.6.1 Export Meat Schedule

The beef schedule works in the same way as does the sheep meat schedule.

An example is shown below.

#### MEAT EXPORTERS' SCHEDULE PRICES TO PRODUCER Effective from 4th January 1982

Grade	Weight Range (kg)	Hawkes Bay c/kg	Rest of N.I. & S.I. c/kg	Supplement c/kg
Steers:				
P1	160.5-220.0	132.0	127.0	20.0
	220.5-245.0	142.0	137.0	20.0
	245.5-270.0	148.0	143.0	20.0
	270.5-295.0	154.0	149.0	20.0
	295.5-320.0	156.0	151.0	20.0
	320.5-345.0	162.0	157.0	20.0
	345.5 and over	165.0	160.0	20.0
G	160.5-220.0	123.0	118.0	20.0
	220.5-245.0	133.0	128.0	20.0
	245.5-270.0	139.0	134.0	20.0
	270.5-295.0	145.0	140.0	20.0
	295.5-320.0	147.0	142.0	20.0
	320.5-345.0	153.0	148.0	20.0
	345.5 and over	156.0	151.0	20.0
L1	160.5-220.0	138.0	133.0	20.0
	220.5-245.0	142.0	137.0	20.0
	245.5-270.0	148.0	143.0	20.0
	270.5-295.0	154.0	149.0	20.0
	295.5 and over	161.0	156.0	20.0
L2	160.5-220.0	141.0	133.0	39.0
	220.5-245.0	145.0	137.0	39.0
	245.5-270.5	149.0	141.0	39.0
	270.5-295.0	155.0	147.0	39.0
	295.5 and over	162.0	154.0	39.0
T	160.5-270.0	130.0	125.0	20.0
	270.5-295.0	136.0	131.0	20.0
	295.5 and over	140.0	135.0	20.0
E	160.5-270.0	120.0	115.0	20.0
	270.5-295.0	126.0	121.0	20.0
	295.5 and over	130.0	125.0	20.0

M	145.0 and under	112.0	104.0	39.0
	145.5-170.0	133.0	125.0	39.0
	170.5-195.0	137.0	129.0	39.0
	195.5-220.0	142.0	134.0	39.0
	220.5 and over	146.0	138.0	39.0

Heifers:

P1	160.5-195.0	125.0	120.0	20.0
	195.5-220.0	132.0	127.0	20.0
	220.5-245.0	142.0	137.0	20.0
	245.5-270.0	148.0	143.0	20.0
	270.5 and over	155.0	150.0	20.0

G	160.5-195.0	116.0	111.0	20.0
	195.5-220.0	123.0	118.0	20.0
	220.5-245.0	133.0	128.0	20.0
	245.5-270.0	139.0	134.0	20.0
	270.5 and over	146.0	141.0	20.0

L1	160.5-195.0	133.0	128.0	20.0
	195.5-220.0	138.0	133.0	20.0
	220.5-245.0	142.0	137.0	20.0
	245.5-270.0	148.0	143.0	20.0
	270.5 and over	154.0	149.0	20.0

L2	160.5-195.0	136.0	128.0	39.0
	195.5-220.0	141.0	133.0	39.0
	220.5-245.0	144.0	136.0	39.0
	245.5-270.0	149.0	141.0	39.0
	270.5 and over	155.0	147.0	39.0

T	160.5-270.0	130.0	115.0	20.0
	270.5-295.0	136.0	121.0	20.0
	295.5 and over	140.0	125.0	20.0

E	160.5-270.0	120.0	104.0	20.0
	270.5-295.0	126.0	125.0	20.0
	295.5 and over	130.0	129.0	20.0

M	145.0 and under	112.0	104.0	39.0
	145.5-170.0	133.0	125.0	39.0
	170.5-195.0	137.0	129.0	39.0
	195.5-220.0	142.0	134.0	39.0
	220.5 and over	146.0	138.0	39.0

Cows:

P1	160.5-195.0	120.0	115.0	20.0
	195.5-220.0	128.0	123.0	20.0
	220.5-245.0	131.0	126.0	20.0
	245.5-270.0	138.0	133.0	20.0
	270.5 and over	144.0	139.0	20.0

G	160.5-195.0	115.0	110.0	20.0
	195.5-220.0	123.0	118.0	20.0
	220.5-245.0	126.0	121.0	20.0
	245.5-270.0	133.0	128.0	20.0
	270.5 and over	139.0	134.0	20.0
T	160.5-270.0	123.0	118.0	20.0
	270.5-295.0	130.0	125.0	20.0
	295.5 and over	134.0	129.0	20.0
E	160.5-270.0	115.0	110.0	20.0
	270.5-295.0	123.0	118.0	20.0
	295.5 and over	126.0	121.0	20.0
M	145.0 and under	112.0	104.0	39.0
	145.5-170.0	133.0	125.0	39.0
	170.5-195.0	137.0	129.0	39.0
	195.5-220.0	142.0	134.0	39.0
	220.5 and over	146.0	138.0	39.0
Bulls:				
M	195.0 and under	123.0	118.0	26.0
	195.5-220.0	140.0	135.0	26.0
	220.5-245.0	148.0	143.0	26.0
	245.5-270.0	152.0	147.0	26.0
	270.5-295.0	156.0	151.0	26.0
	295.5-320.0	159.0	154.0	26.0
	320.5-345.0	164.0	159.0	26.0
	345.5 and over	170.0	165.0	26.0
Veal:				
P	All weights	38.0	38.0	
L	All weights	28.0	28.0	
M	All weights	28.0	28.0	

### 3.2.6 Local Cattle Prices

As with sheep, the markets at Addington and Burnside tend to set the market in the South Island. Below are prices received for prime and store cattle at the Addington sales on Tuesday, 5th and Wednesday 6th January 1982.

Prime cattle had only an average sale. Light weight steers and heifers seldom reached pre-Christmas values but heavy cattle sold reasonably well.

Heifers and steers up to 220 kg sold for between 162c and 166c per kilogram, from 220 kg to 270 kg for between 165c and 170c, and over 270 kg up to 167c.

**Prime Steers:**

Heavy - \$515 to \$532, some to \$600.

Medium - \$395 to \$480.

Light - \$335 to \$375.

**Prime Heifers:**

Heavy and Medium - up to \$340.

Light - \$205 to \$280.

**Prime Cows:**

Heavy - \$310 to \$365, some to \$390.

Medium - \$270 to \$300.

Light - \$210 to \$260.

**Vealers:**

Values paid for vealers reflected the easing of the prime cattle market. Buying power was very limited. The best heifers sold to \$210, steers to \$226 and bulls to \$198.

**Store Cattle:**

The values paid for younger store cattle showed a \$20 improvement over the previous month's sale and there was a very strong demand for 18 month old animals. 18 month heifers sold from \$140 to \$228 while steers of this age group sold from \$155 to \$250 with some up to \$274. Ten Angus and Angus cross heifers sold at \$165. Adult cattle also had a strong sale. Heifers sold from \$238 to \$288 and steers from \$288 to \$358.

### 3.6.3 Minimum Price Schemes

For information on the Government's Supplementary Minimum Prices Scheme and the N.Z. Meat Board's Price Smoothing Scheme refer to Section 3.1.5 in this manual.

## 3.7 DAIRY PRODUCE

### 3.7.1 Whole Milk for Manufacture

In June, the Dairy Products Prices Authority fixes two values, one for milkfat and one for solid-not-fat (S.N.F.). When these prices are known, the New Zealand Dairy Board fixes the actual product purchase prices, i.e. the prices for butter, cheese, milk powders, etc. Costs of milk collection and manufacturing are included. The Board may adjust the prices, by up to 8 cents/kilogram of milkfat to achieve a desired product range. If the reaction of the manufacturing companies to the price is favourable, the prices are confirmed and the companies are

then committed to manufacture not less than 90% of the products as set out in their programs.

The companies are paid by the N.Z. Dairy Board on the 20th of each month. After the companies have deducted their manufacturing and administrative costs, and have possibly withheld amounts for capital development, they pay the residual amount to their suppliers on the 20th.

The advance payment is usually 80% (Tai Tapu Central Co-op Dairy Company Ltd - 82%) of the expected final payment, and the final adjustment for the year is made in August, although some companies make interim payments.

The whole milk price as set by the Prices Authority is 268 cents/kilogram milkfat for 1981/82, but there is also a Government guaranteed minimum price of 280 cents/kilogram milkfat for the season, and will be no less than this in 1982/83. This guarantee scheme means that there will be either a retrospective adjustment during the season, or an end-of-season payment, of at least 12.00 cent/kilogram milkfat. The final price paid by local companies in 1980/81 was slightly in excess of 260 cents/kilogram milkfat.

The Tai Tapu Central Co-op Dairy Company Ltd for 1981/82 payout is as follows:

The basic values for the 1981/82 season remain at 189c kg milkfat and 79c kg SNF, totalling 268c/kg milkfat in wholemilk at farm gate.

The following advance payments for cream will operate effective 1 November 1981.

Finest	156 cents per kg
First Grade	145 cents per kg
Second Grade	118 cents per kg

The penalty for low test deduction will be:

2.3 cents for 35% and a penalty of 4.5 cents for 34% test and under.

The following advance payments for milk will operate throughout the season:

Finest	222 cents per kg
First Grade	206 cents per kg
Second Grade	168 cents per kg

The penalty for antibiotics will be 54c per kg and penalty for added water 20 cents per kg.

### 3.7.2 Whole Milk for Town Supply

The national town milk producer price is linked to the average price for wholemilk used for the major manufactured products. This relationship is 1 cent/kilogram milkfat equals 0.06 cents/litre of milk. Prices to the producer are varied with the season of the year, to compensate for climatic conditions and to encourage production in the more difficult periods.

In addition, special price supplements are paid in specially difficult areas for dairying.

For example, in Canterbury there is a Special Area Production Allowance. This was set at 1.5 cents/litre (finest and first grade milk) for the 1980/81 production year. As at January 1982 the new supplement for 1981/82 had not been set but it is unlikely to be less than that of 1980/81. This is normally paid over the winter months only (March to August). The national advance town milk price, for the year ending 31st August 1982 is 18.7845 cents/litre of finest grade milk. An example of how this price is applied by a producer company is as follows:

#### CANTERBURY DAIRY FARMERS LIMITED

##### Milk Prices 1981/82

Month	Full Price Paid for: (% of quota)	Quota Milk Cents per litre			Surplus Milk Cents per litre		
		Finest	First	Second	Finest	First	Second
Sept. '81	115	18.745	18.349	16.783	10.5	10.101	8.538
October	110	15.187	14.791	13.225	10.5	10.101	8.538
November	110	15.187	14.791	13.225	10.5	10.101	8.538
December	110	15.187	14.791	13.225	10.5	10.101	8.538
Jan. '82	110	15.187	14.791	13.225	10.5	10.101	8.538
February	115	15.187	14.791	13.225	10.5	10.101	8.538
March	115	18.745	18.349	16.783	10.5	10.101	8.538
April	115	18.745	18.349	16.783	10.5	10.101	8.538
May	120	24.079	23.683	22.117	10.5	10.101	8.538
June	125	24.079	23.683	22.117	10.5	10.101	8.538
July	125	24.079	23.683	22.117	10.5	10.101	8.538
August	120	24.079	23.683	22.117	10.5	10.101	8.538

Grading (Finest, First and Second) is based on a number of factors outlined below.

#### Mandatory Tests

As from 1 September 1981 the following mandatory tests

apply to all raw milk received from suppliers:

Senses - on each consignment received.

- (i) No visible defects or odour - "Finest".
- (ii) Minor defects or flavour taints - "First".
- (iii) Obvious fat agglomeration or churning or strong odour or taint - "Second".

Sediment - frequency is random three times per month (1 per period) with daily follow up on all results lower than "Finest Grade" until three consecutive "Finest Grades" are achieved.

- (i) "A" pad or better - "Finest".
- (ii) "B" pad but better than "C" - "First".
- (iii) "C and D" pads - "Second".

Standard Plate Count - frequency as above.

- (i) Less than 100,000 colonies/ml - "Finest".
- (ii) 100,000-200,000 colonies/ml - "First".
- (iii) Over 200,000 colonies/ml - "Second".

Inhibitory Substances (including antibiotics) - frequency as above.

- (i) Less than 0.003 i.u./ml - "Finest".
  - (ii) 0.003 i.u./ml or more - "Second".
- i.e. Second grade if it fails the STAR test.

Freezing Point Depression - frequency as above.

- (i) Below  $-0.530^{\circ}\text{C}$  - "Finest".
  - (ii)  $-0.530^{\circ}\text{C}$  and above - "second".
- Plus a volume adjustment for the amount of excess water.

Total Milk Solids (M/M) - frequency as above.

- (i) 12% and over - "Finest".
- (ii) 11.75% and under 12% - "First".
- (iii) Under 11.75% - "Second".

Milkfat (M/M) - on each consignment received applied on a 10 day average basis.

- (i) 3.5% and over - "Finest".
- (ii) 3.25% and under 2.5% - "First".
- (iii) Under 3.25% - "Second".

Note that there is now a total solids test. This effectively replaces the solids-not-fat test and accordingly the

S.N.F. improvement scheme as been abolished.

### Advisory Tests

The Company also conducts the following advisory tests on which no penalties currently apply:

Thermoduric Plate Count - frequency once per month.

Not more than 5,000 colonies/ml is "Finest".

Coliform Plate Count - on request.

Not more than 100 colonies/ml is "Finest".

Sodmatic Cell Count - frequency twice per month.

No standard, but 250,000 cells/ml is regarded as the target with 500,000 being acceptable.

### Penalties

All penalties on sub standard milk applied during the 1980/81 year have been replaced by the following penalties with effect from 1 September 1981:

"Grade" penalties:

Finest grade	-	no penalty.
First grade	-	0.396 c.p.l.
Second grade	-	1.962 c.p.l. plus loss of special production allowance in winter months.

Additional penalty for persistent offenders - there will be an additional penalty of 1.962 c.p.l. on the third and subsequent second grade in each month applied on an individual test basis except for compositional tests (total milk solids and milkfat - above).

Inhibitory substances (milk which fails the STAR test) - this will be graded "second". However it is still essential that the Company is notified when milk from a cow being treated with antibiotics has inadvertently been mixed with other milk.

Excess water - providing the Company is notified prior to the milk being collected, it will only be down-graded to "first". If no prior notification is received, it will be graded "second". In either case a volume adjustment will be made for the imputed amount of water included.

For comparison between seasons, the milk prices for the 1980/81 season are shown below:



CANTERBURY DAIRY FARMERS LIMITED  
Milk Prices 1980/81

Month	Full Price Paid for: (% of quota)	Quota Milk Cents per litre			Surplus Milk Cents per litre		
		Finest	First	Second	Finest	First	Second
Sept. '80	115	15.750	15.38	14.651	8.0	7.633	6.101
October	115	12.774	12.407	11.675	8.0	7.633	6.101
November	110	12.774	12.407	11.675	8.0	7.633	6.101
December	110	12.774	12.407	11.675	8.0	7.633	6.101
January '81	110	12.774	12.407	11.675	8.0	7.633	6.101
February	115	12.774	12.407	11.675	8.0	7.633	6.101
March	115	12.774	17.250	16.883	12.151	7.633	6.101
April	115	12.774	17.250	16.883	12.151	7.633	6.101
May	115	12.716	21.349	20.617	12.151	7.633	6.101
June	115	12.716	21.349	20.617	12.151	7.633	6.101
July	115	21.716	21.349	20.617	12.151	7.633	6.101
August	115	21.716	21.349	20.617	12.151	7.633	6.101

### 3.7.3 Dairy Industry Stabilisation

At the start of each season, basic farm gate values are established for milkfat and S.N.F. (solid-not-fat). Only in exceptional circumstances, can these values be more than 10% up or 5% down on the previous season's basic values. At the end of the season, if either (or both) of the Milkfat Trading Account and the S.N.F. Trading Account indicates a surplus, the Dairy Board may distribute a percentage of this to suppliers, the balance being credited to a Reserve Account. In the event of the Board incurring a loss in milkfat and/or S.N.F. products, it will be granted overdraft facilities at an interest rate charge of 1% per annum by the Reserve Bank of New Zealand if the loss exceeds the accumulated reserves in the relevant account.

### 3.7.4 Supplementary Minimum Prices for Milkfat

In addition to the stabilisation procedures operated by the dairy industry, the Government has established, and will underwrite, a farm gate Supplementary Minimum Price for the 1981/82 season of 280 cents/kg of milkfat in wholemilk. A similar price will also be set for the subsequent season at a level not less than that set for 1981/82.

For the current season, a supplementary payment will be

made by the Government to the Dairy Board to bring the Board's total payout up to 280 cents/kg, if the combined basic price plus 50% of the 1981/82 individual trading surplus of milkfat and S.N.F. are less than 280 cents/kg. Regardless of the actual percentage payout of the Board of any trading surplus for 1981/82 the level of any supplement paid by the Government will be based on an assumed payout of 50%. The 280 cents/kg refers to the farm gate prices as paid by the Dairy Board to dairy companies. Company payments to suppliers will fluctuate around the 280 cents/kg for a number of reasons including the product mix, manufacturing cost levels, and decisions regarding the degree of capital formation to be undertaken.

### 3.7.5 1980/81 Dairy Beef Market Guarantee Scheme

To encourage the retention of dairy-beef calves, the 1980 November-December national average price for spring-born dairy-beef weaners was guaranteed at a minimum of \$80 per head. If the average price of the dairy-beef weaners sold at auction during November and December was below \$80 per head, every eligible calf attracted a supplementary payment equal to the difference between the average price and \$80. Every eligible calf attracted the same payment irrespective of the weight or the sale price of the particular animal, and of whether or not the animal was sold. The scheme covered beef calves of dairy origin born between 1 June 1980 and 31 May 1981 on a dairy farm that had supplied more than 3000 kilograms of milkfat to a milk station or a dairy factory in the 1979/80 season, or that would have supplied this amount in the 1980/81 season.

Eligible calves that were born between 1 June and 31 October 1980 had to be registered during November 1980 while those born between November 1980 and 31 May 1981 had to be registered during June 1981.

The payments were made to whoever owned the calves at midnight on 31 October 1980 with regard to the first registration period, and on 31 May 1981 with regard to the second period. The claimant did not necessarily have to be a dairy farmer, but may have purchased calves to rear them.

### 3.7.6 Dairy Cattle Prices

The differences in the prices paid for dairy cattle in the various districts of the country are not solely attributable to locality. They are dependant on the type of dairying carried out (i.e. town milk or factory supply),

the other farming systems in the district, and the time of year.

The following table shows the variation in dairy cattle during the last year.

District	North	Waikato	Canterbury
Month/Class of Stock**			
January	\$350	-	\$320
	\$280	-	-
	\$220	\$210	\$320
	\$200	\$190	-
March	-	\$360	\$285
	-	\$350	-
	-	\$300	\$285
	-	\$280	-
May	-	\$400	\$310
	-	\$370	-
	-	\$330	\$310
	-	\$300	-
July	\$470	\$370	\$330
	\$330	\$330	-
	\$320	\$310	\$330
	\$280	\$280	-
September	\$450	\$450	\$330
	\$350	\$380	-
	\$320	\$240	\$330
	\$290	\$160	-
November	-	\$430	\$310
	-	\$380	-
	-	\$240	\$310
	-	\$200	-
** Class 1	= Friesian 2nd/3rd calver		
Class 2	= Jersey 2nd/3rd calver		
Class 3	= Friesian heifer i.c. or r.w.b.		
Class 4	= Fersey heifer i.c. or r.w.b.		

SOURCE: "Marketplace" in New Zealand Farmer magazine, January, March, May, July, September and November 1981.

The dairy cattle offered at Addington saleyards, Christchurch, are few in number and not of very good quality by and large, except for some lines of yearling

heifers. Addington market prices are therefore not the best guide to dairy cattle prices. In Canterbury, with a distinct emphasis on town supply dairying, there is a considerable premium paid for autumn-calving cows and heifers over the prices paid for spring-calving cows and heifers.

### 3.8 PIG PRODUCTION

#### 3.8.1 Introduction

The majority of pigs produced in New Zealand are now all meal fed, based on grain from the South Island and the Waikato region. Prime and choice prices are up in excess of \$1.00 per kg over last year, giving some relief to rising grain prices, and enhancing profitability.

#### 3.8.2 Prices

The Pork Marketing Board has set a minimum price to maintain the viability of pig production. The Canterbury Frozen Meat Company operates at this schedule, as set out below.

##### MEAT SERVICES LIMITED

A Member of the C.F.M. Group of Companies

Pig Schedule

On Hooks at Belfast Works

Effective as from Monday 18 January 1982

Note: Weight ranges and payments based on "hot" scale weight, head and feet on.

##### Hot Weights

45.5 kg - 72 kg	PRIME	298 cents per kilogram
	CHOICE	286 cents per kilogram
	STANDARD	200 cents per kilogram
	MUTILATED	150 cents per kilogram
72.5 kg - 83 kg	PRIME	258 cents per kilogram
	CHOICE	248 cents per kilogram
	STANDARD	200 cents per kilogram
	MUTILATED	150 cents per kilogram

##### Manufacturing

All weights 150 cents per kilogram

These prices are subject to change at short notice.

**Deductions:**

Killing charge	\$12.49 per pig
Levies -	
Pork Industry Council Administration	)
Pork Marketing Board Stabilisation Levy	) \$2.01/pig
Federated Farmers Levy	)

Most pork is sold on the local fresh meat market where returns are higher. Current retail prices vary from \$3.00 to \$7.00 per kilogram. Most weaners and store pigs are sold between farmers by private contract with prices based on the schedules for slaughter pigs. Breeding stock are marketed similarly with premiums for stock with a Performance Testing background. A limited number of all classes of stock are sold at auction through sale-yards.

The following prices were obtained at the Addington sale held on 12 January 1982:

Light porkers	\$70 to \$85
Medium/Heavy porkers	\$87 to \$95
Light baconers	\$100 to \$120
Heavy baconers	\$135 to \$150
Light choppers	\$90 to \$115
Heavy choppers	\$130 to \$170

There was a big yarding of good quality store pigs, and these sold well. Two maiden sows with litters sold to \$310.

Small weaners	\$35 to \$43
Good weaners	\$45 to \$50
Slips and small stores	\$52 to \$60
Large stores	to \$70

### 3.9 GOAT PRODUCTION

(M. Winklmaier, Wool Science Department)

#### 3.9.1 Introduction

Within recent years the position of the goat as a farm animal has changed from being a noxious animal to one that can form the basis of a viable farming enterprise. Production from goats can be divided into three categories: the production of milk, meat and Mohair fibres. In conjunction to these, goats can be employed as a viable

alternative in weed control. All aspects of the goat industry are still within their infancy, but are at present experiencing a period of growth. Meat production from feral goats has the highest output but the lowest unit value, whilst milk and Mohair have respectively lower outputs but higher unit values.

### 3.9.2 Production of Chevron

Chevon differs from mutton of similar age in that it has a lower fat percentage. This issue values chevon for export to the industrial nations where consumer demands require lean meat. The majority of exported chevon is derived from the feral goat population of New Zealand. Annually around 100,000 carcasses are being processed and marketed overseas. Prices paid for feral goats vary between \$5 and \$12 a head. Preferred are animals between 10-15 kg liveweight. Goats are killed at Cambridge for most of the year and at some other meat export works during the winter period. Game meat packing houses will also accept feral but not farmed goats.

Around 3,000 farmed goats and culled angora wethers have been pooled, slaughtered and marketed in the South Island in the last season. Premium prices of \$1.15/kg carcass weight have been achieved for animals which dress at around 7.5 kg. So far there is no grading system for chevon in New Zealand, however as markets expand a system will have to be devised. Carribean, Asian and Mediterranean countries are the main importer of New Zealand chevon.

### 3.9.3 Production of goats milk

Milk is produced from specially selected breeds such as the Saanen, Toggenburg, British Alpine and Anglo Nubian. Milk produced is either processed as raw milk, dried milk powder and cheese. Raw milk is marketed privately by the producer through supermarket and delicatessen outlets. Various co-operatives have been organised which handle the selling of raw goats milk. The gross return to the producers per litre, varies as to the producer's direct or indirect distributing method, and is between 35c and 80c per litre. The 500 ml sachets through the retail shop are priced between 40c and 70c.

The production of milk powder seems to offer the most stable market for the future as the supply is far below the demand. At present milk powder is sold on forward contracts at fixed prices. The payout to producers

during the last season was 48c/litre.

Producers of goats milk in the Tasman/Nelson area have successfully been producing goats milk cheese. The return from cheese making to the producer is around 35c per litre.

#### 3.9.4 Production of Mohair

The increase of Mohair prices in the late 1970s has led to a revival of the New Zealand Mohair industry. Unfortunately the genetic pool of Angora stock within New Zealand is very limited, with not only an undersupply of purebred stock, but also a restricted number of blood lines.

Originating from a Lands and Survey flock kept at Waitangi and early imports from Tasmania the main aim of the industry today is to build up animal numbers and increase the production of Mohair. The current limited availability of Mohair greatly hampers marketing advances. Feral goats with a high proportion of Angora blood (Waipu bush goats) and other common ferals are continuously being upgraded to "pure" Angora goats. At present there are about 1,000 pure Angora does in the country. The production of Mohair per animal is demonstrated in the following table.

##### Angora Wool Production

(Source: Lands and Survey Department)

Kid bucks	1.5 kg per annum
Kid does	1.2 kg per annum
2th does	2.5 kg per annum
Dry does	3.2 kg per annum
Bucks (2 years of age)	4.0 kg per annum
M.A. does	3.0 kg per annum
Wethers	3.5 kg per annum

In an attempt to avoid the classical auction system, as this does not favour the price development for small quantities, the Mohair Breeders Association of New Zealand has pooled Mohair and Angora x Feral crossbred fibre and is selling this on a forward contract basis. Quotes for New Zealand Mohair from the 1981 clip are as follows:

Purebred Doe	\$19/kg
Purebred Buck	\$12/kg
Purebred kid	\$10/kg
Crossbred Doe	\$ 8/kg
1st & 2nd Cross	\$ 4/kg

Around 5,000 kg of Mohair has been pooled from the 1981 season.

Mohair is also sold privately at auctions in Australia and Bradford (U.K.). New Zealand Mohair sold in Melbourne in 1981 topped the auction with a price of \$11.6 (N.Z.). Mohair finds a ready market in the homecraft industry. Sales are mostly private and therefore hard to record. Mohair is offered for the homecraft industry in 1 kg lots and cost \$17/kg for kid Mohair.

Due to the lack of available animals, prices are still quite high, although prices are beginning to drop as the "speculative" interest in the Angora stock market is decreasing. A handy supply of bucks has led to a drop in the price for these. The following prices are only of indicative value:

Pure kid does	\$500
Two tooth does	\$500-\$1,000
Two tooth bucks	\$150-\$200
Mature bucks	\$200-\$1,000

### 3.10 DEER PRODUCTION

#### 3.10.1 Introduction

Deer farming in New Zealand has developed into an established enterprise with much promise as an export earner through sales of the two main products which are venison and velvet antlers. By-products such as skins, tails, eye teeth, sinews and pizzles also have a good market value.

#### 3.10.2 Velvet Prices

Prices as at 18 December 1981 were as follows:

Super A Grade	\$110.00/kg
A Grade	\$ 90.00/kg
Sub A Grade	\$ 50.00/kg
B Grade	\$ 50.00/kg
C Grade	\$ 22.00/kg
D Grade	\$ 11.00/kg

As an alternative to selling their velvet directly to a commercial buyer, farmers may opt to sell through the pool system. This is operated by three organisations, New Zealand Farmers Co-operative, Hawkes Bay Farmers Co-operative and Southland Farmers Co-operative. Prices



obtained from the first pool which closed at the end of December 1981 were as follows:

A1 (Super A)	\$122 per kg
A2 (A)	\$114 per kg
A3 (Velvet from 2 year old stags suitable for Taiwan)	\$ 90 per kg
B1	\$ 76 per kg
B2	\$ 76 per kg
C	\$ 30 per kg
D	\$ 15 per kg

The second pool for the season closed at the end of January 1982 and prices obtained were unavailable at the time of printing.

### 3.10.3 Venison

Prices paid for venison vary widely but an average price for feral venison would be in the region of 2.55 per kg. Farmed venison would probably fetch around \$3.00-\$3.50 per kg and possibly as high as \$5.00 per kg.

### 3.10.4 Deer By Products

All the following prices given are approximate as a deer carcass is usually bought as a whole rather than as the separate products.

Skins	\$4.00-\$5.00 each
Tails	5c/kg (based on weight of animal)
Sinews	Wet - 50c per set
Eye Teeth	Stag - stained \$13.00/pair
	- medium \$10.00/pair
	- white \$ 6.00/pair
	Hinds - dark \$ 8.00/pair
	- medium \$ 7.00/pair
	- white \$ 4.00/pair
Hard Antler	\$6.00 per kg
Pizzles	\$8.00

### 3.10.5 Stock Prices

Deer values estimated at December 1981.

Hinds:	C.F.A.	\$700
	Mixed age	\$1,000-\$1,200 (possibly up to \$1,500 after roar)
	Yearling	\$900-\$1,200 (possibly up to \$1,500 plus after roar)
	Weaners (June 1982)	\$700-\$800
Stags:	Breeding	\$2,000-\$3,000
	Mixed age	\$350-\$450 (increase towards velveting)
	Spiker	\$200-\$250
	Weaners	\$200-\$250

## 3.11 POULTRY PRODUCTION

### 3.11.1 Introduction

Poultry enterprises can be divided into two categories, meat and egg production. The poultry meat industry covers a range of species - chickens, ducks, and turkeys being the most common, but pheasants and geese are also raised commercially. Egg production (chickens) is estimated to be in the vicinity of 80-81 million dozen per annum.

### 3.11.2 Meat Chickens (Broiler)

Meat chicken production on a large scale is normally a contract operation in which the contracting firm pays most of the expenses such as feed, day old chicks, litter, and most medication, and deducts these costs from the payout. The price paid for the final product is obviously largely dependent on the terms of the contract but in an average situation the payout, in January 1982, was 107c per kg on a liveweight basis minus the above costs if applicable. For smaller operations (1-3,000 birds per batch as opposed to 20-30,000) it is not usual for a contract of the type mentioned above to be involved and the operator pays his own expenses including in many cases the processing costs.

### 3.11.3 Eggs

The Egg Marketing Authority was established in 1953 and its principal functions are to regulate and control the production, marketing and distribution of eggs and egg products within New Zealand and elsewhere. Entitlement

Licences are issued to all poultry farmers with more than 100 (egg type) laying birds and each holder of an entitlement licence is levied monthly on the basis of the number of birds he actually has within the confines of his licence.

Of the 81 million eggs produced annually, approximately 51 million are received, graded and sold by licensed distributors. The balance is marketed by poultry farmers direct to consumers or retailers situated outside defined Marketing Areas. Of the eggs passing through distributors in the three months ending October 1981, the prices received by farmer (Entitlement Levy deducted) was:

North Island	103.91 cents per dozen
South Island	103.03 cents per dozen

### 3.12 FRUIT PRODUCTION

The Prices paid to growers by Christchurch Markets in 1980/81 are as follows:

	<u>Apples</u> per kg	<u>Apricots</u>	<u>Avocados</u> per tray
Dec. 1980	-	\$4.50/\$10/tray	-
Jan. 1981	56c-\$2	\$4.42/tray	\$20.00
Feb.	52c-79c	\$6.00-\$7.50 (per half case)	\$30.00
Mar.	-		-
April	39c-95c		\$47.50
May	59c-99c		-
June	59c-\$1.05		\$20.00
July	46c-\$1.15		-
August	59c-\$1.04		\$23.00
Sept.	57c-\$1.04		\$22.00
Oct.	59c-\$1.29		\$21.60
Nov.	65c-\$1.85		-
	<u>Boysenberries</u> (per punnet)	<u>Cherries</u> (per kg)	<u>Grapefruit</u> (per case)
Dec. 1980	99c-\$1.89	\$4.50-\$6.60	\$8.00
Jan. 1981	\$1.39	\$2.50-\$3.00	-
Feb.			-
Mar.			-
April			-
May			\$10.40
June			\$10.00
July			\$12.00

August		\$ 9.00
Sept.		\$ 9.00
Oct.		\$ 8.00
Nov.	\$5-\$8.00	\$10.00

	<u>Grapes</u> (tray)	<u>Kiwifruit</u> (per tray)	<u>Lemons</u> (bu.)
Dec. 1980	-	-	\$16.00
Jan. 1981	-	-	\$ 8.00
Feb.	\$ 8.50	-	-
March	\$13.10	-	-
April	\$ 9.80	\$10.00	-
May	\$15.00	\$ 8.50	-
June	\$16.00	\$ 8.00	-
July	-	\$ 2.50/kg	\$ 8.00
August	-	\$ 5.16	\$ 9.00
Sept.	-	\$ 7.60	\$11.30
Oct.	-	\$ 7.70	\$ 9.30
Nov.	-	-	-

	<u>Mandarins</u>	<u>Nectarines</u>	<u>Oranges</u>
Dec. 1980	-	\$9.13 (per quarter case)	-
Jan. 1981	-	\$3.00-\$4.00 (per half case)	\$ 7.00/case
Feb.	-	\$5.00-\$7.00 (per half case)	\$ 8.00/case
March	-	-	-
April	-	\$5.00-\$7.00 (per half case)	-
May	\$20.80 bu.	-	-
June	\$18-\$20/case	-	-
July	\$21.50 bu.	-	-
August	\$22.00 bu.	-	\$16.50/bu case
Sept.	\$9.00/case	-	\$15.90 (per c/s bush)
Oct.	\$12.50/case	-	\$13.20 (per c/s bush)
Nov.	-	-	-

	<u>Peaches</u>	<u>Plums</u> (per half case)	<u>Strawberries</u> (per punnet)
Dec. 1980	\$4-\$5/tray	\$3.00-\$5.00	50c-93c
Jan. 1981	\$3.11 (per half case)	\$3.13	\$1.00-\$1.50
Feb.	\$3.75 (per half case)	\$3.70	\$1.10-\$1.25
March	\$4.54 (per half case)	\$6.39/case	60c-70c
April	\$2.42 (per half case)	-	56c-86c
May	-	-	-
June	-	-	-
July	-	-	-
August	-	-	-
Sept.	-	-	-
Oct.	-	-	\$2.00-\$2.50
Nov.	-	-	55c-\$1.20 or \$10-\$14.40/ctn

	<u>Tamarillos</u> (per case)	<u>Tangelos</u>
Dec. 1980	-	\$10.00-\$14.00 (per 4.5 kg)
Jan. 1981	-	-
Feb.	-	-
March	-	-
April	\$22.00	-
May	\$14.00	-
June	\$ 8.00	-
July	\$ 4.75	-
August	\$ 9.00	\$16.00/case
Sept.	\$ 7.00	\$14.00/case
Oct.	-	\$16.00/case
Nov.	-	-

### 3.13 VEGETABLE PRODUCTION

The Prices paid to growers by Christchurch Markets in 1980/81 are as follows:

	<u>Asparagus</u>	<u>Beans</u> (per kg)	<u>Beetroot</u> (per kg)
Dec. 1980	70c-\$1.10 (per bunch)	\$1.00-\$4.00	-
Jan. 1981	-	99c-\$3.99	49c
Feb.	-	86c-\$1.32	39c-49c
March	-	\$1.00-\$2.19	-
April	-	\$1.29-\$2.49	79c
May	-	-	-
June	-	\$1.99-\$6.65	-
July	-	-	59c-79c
August	-	-	44c-79c
Sept.	\$1.20-\$3.25 (per bunch) \$5-\$10.50/kg	-	-
Oct.	69c-\$1.69	-	-
Nov.	40c-45c/bunch	60c-\$1.89	-
	<u>Broccoli</u>	<u>Brussel Sprouts</u> (per kg)	<u>Cabbage</u> (per 8s)
Dec. 1980	\$5-\$7/4 kg	-	\$2.90-\$3.50
Jan. 1981	\$3.50/4 kg	-	\$1.60
Feb.	\$2.57/4 kg	65c-\$2.00	\$1.40
March	\$4.00/4 kg	\$1.58-\$2.95	\$3.00-\$3.50
April	\$4.13/4 kg	79c-\$2.65	\$3.00
May	\$3.01/4 kg	69c-\$1.80	\$3.70
June	\$7.00/5 kg	\$1.20-\$1.99	\$3.00
July	-	78c-\$1.79	\$3.50
August	\$7-\$8/5 kg	\$1.29-\$1.99	\$3.00
Sept.	\$4-\$6/4 kg	98c-\$2.89	\$5.10
Oct.	\$5.50/4 kg	\$1.68-\$1.69	\$6.50
Nov.	\$5-\$8/4 kg	-	\$1.50-\$3.00
	<u>Capsicum</u> (per kg)	<u>Carrots</u> (per 20 kg)	<u>Cauliflower</u> (per 8s)
Dec. 1980	\$2.65	\$1.00-\$1.50	\$4.00-\$5.50
Jan. 1981	\$1.19-\$3.29	\$2.00-\$3.00	\$3.50-\$4.00
Feb.	-	\$3.00	\$3.00
March	56c-\$3.06	\$3.50-\$4.00	\$6.00
April	99c	\$2.00-\$4.00	\$4.00-\$4.50
May	\$1.48	\$3.00	\$3.50-\$4.00
June	-	\$3.00-\$4.00	\$4.00-\$5.00
July	80c	\$4.00	\$2.50-\$3.00
August	\$3.00-\$13.00	\$2.50	\$3.00

Sept.	\$3.99-\$13.00	\$4.00-\$4.50	\$4.30
Oct.	\$5.20-\$12.00	\$11.00	\$3.20
Nov.	\$6.25-\$14.00	\$8.00-\$12.00	\$4.10-\$7.00

	<u>Celery</u> (per case)	<u>Courgettes</u> (per kg)	<u>Cucumbers</u> (per case)
Dec. 1980	\$2.00-\$2.50	\$2.99-\$5.56	\$5.00-\$5.50
Jan. 1981	\$4.50	89c-\$2.80	\$4.30
Feb.	\$3.00	63c-\$1.99	\$3.00-\$3.50
March	\$3.80	89c-\$2.00	\$2.30
April	\$3.00-\$3.50	99c-\$2.40	\$5.00-\$8.00
May	\$2.50	\$1.99-\$4.89	\$10.50
June	\$4.00	\$5.29-\$6.75	\$6.50-\$7.00
July	-	\$3.25/250g	\$5.00
August	\$5.00	\$3.99-\$7.90	\$5.50
Sept.	\$5.00	\$4.50-\$6.99	\$7.00-\$7.50
Oct.	\$5.50	\$5.99-\$9.50	\$6.00
Nov.	-	\$3.00-\$9.10	\$5.60-\$11.00

	<u>Garlic</u> (per 100g)	<u>Kumera</u> (per case)	<u>Leeks</u> (per 10s)
Dec. 1980	-	\$10.00-\$12.00	-
Jan. 1981	86c-99c	-	-
Feb.	-	\$25.00	\$4.40
March	70c	-	-
April	-	\$11.00	\$3.00
May	-	-	-
June	\$6.95-\$10.00 (per case)	-	\$2.60
July	\$6.00-\$8.00 (per case)	\$16.00-\$17.00	-
August	45c-\$1.00	\$20.00	\$2.60
Sept.	\$6.99-\$12.00 (per case)	\$30.00	\$5.00
Oct.	\$6.60-\$20.00 (per case)	\$26.00	\$3.00
Nov.	\$1.19-\$1.50	\$26.00-\$27.00	\$3.20-\$5.20

	<u>Lettuce</u> (per 8s)	<u>Marrows</u> (each)	<u>Mushrooms</u> (per tray)
Dec. 1980	\$1.40-\$1.80	64c-\$1.49	\$4.00-\$6.00
Jan. 1981	\$2.00	29c-\$1.00	-
Feb.	\$4.00	20c-99c	\$7.20
March	\$6.00	19c-79c	\$6.90
April	\$3.00-\$3.50	-	\$6.30
May	\$1.60	-	\$6.50
June	\$1.80	25c-29c	\$6.00
July	-	-	\$7.50
August	\$4.00	49c	\$8.60

Sept.	\$6.00	-	\$10.80
Oct.	\$8.00	\$1.49	\$11.50
Nov.	\$3.50-\$4.10	\$1.49	\$8.70
	<u>Onions</u> (per 20 kg)	<u>Parsley</u> (case)	<u>Parsnip</u> (per 18 kg)
Dec. 1980	\$16.00	\$1.40/kg	\$1.30
Jan. 1981	\$8.40	70c	90c
Feb.	\$3.00-\$5.00	50c	-
March	\$7.00	60c	\$4.13
April	\$7.00	75c	\$3.00
May	\$11.00	95c	\$1.50-\$2.50
June	\$15.00	\$1.05	\$4.70
July	-	95c	\$4.30
August	\$17.00	-	\$3.00
Sept.	\$17.50	-	\$4.00-\$4.50
Oct.	-	\$1.50	\$4.00
Nov.	\$17.50-\$19.00	\$1.00-\$1.20/kg	\$3.00
	<u>Peas</u> (per kg)	<u>Potatoes</u> (per 10 kg)	<u>Pumpkins</u> (per 20 kg)
Dec. 1980	\$1.49-\$2.99	\$2.20-\$5.00	\$5.00-\$8.00 (per case)
Jan. 1981	69c-99c	\$2.50-\$3.00	\$9.00/case
Feb.	-	\$2.50-\$3.00	\$4.50-\$5.00
March	-	\$2.00-\$2.80	\$3.50-\$4.00
April	-	\$1.90	\$4.00
May	-	\$2.50	\$3.00-\$4.00
June	-	\$2.50	\$2.50
July	-	\$2.50	\$3.50-\$4.00
August	-	\$2.50-\$3.00	\$3.50
Sept.	-	\$2.00	\$11.00
Oct.	-	\$2.80	\$9.00-\$10.00
Nov.	-	\$3.90-\$4.50	\$5.00-\$6.00
	<u>Radish</u> (per bunch)	<u>Rhubarb</u> (per bunch)	<u>Silverbeet</u> (per case)
Dec. 1980	25c-49c	-	\$3.00-\$4.80 (per A case)
Jan. 1981	29c-49c	-	\$3.00
Feb.	39c-75c	-	\$3.00
March	9c-49c	-	\$3.50-\$4.00
April	-	-	\$1.50-\$2.00
May	49c	-	\$1.00
June	49c	-	\$2.00
July	-	-	\$2.00-\$2.50
August	39c-69c	-	\$2.00
Sept.	49c-69c	69c	\$3.30



Oct.	59c-69c	16c-89c	\$3.20-\$4.50
Nov.	39c-79c	29c-85c	\$3.50-\$5.50

	<u>Spinach</u> (per bunch)	<u>Spring Onions</u> (per bunch)	<u>Swedes</u> (per 20 kg)
Dec. 1980	49c-89c	39c-65c	\$4.00-\$6.00
Jan. 1981	55c-79c	39c-65c	\$2.50-\$3.00
Feb.	-	39c-59c	-
March	-	29c-59c	\$4.40
April	68c-75c	-	\$4.50
May	-	45c-49c	\$3.40
June	49c-69c	-	\$3.00-\$4.00
July	69c-95c	49c-59c	\$3.00
August	-	46c-79c	\$3.00-\$3.50
Sept.	75c-\$1.45	49c-69c	\$5.00
Oct.	39c-99c	49c-89c	\$4.50
Nov.	49c-89c	49c-89c	\$4.00-\$5.00

	<u>Sweetcorn</u> (per cob)	<u>Tomatoes</u> (per 4.5 kg)	<u>Yams</u>
Dec. 1980	-	\$3.00-\$5.00	-
Jan. 1981	15c-40c	\$3.00-\$6.00	-
Feb.	10c-29c	\$2.50-\$4.00	-
March	10c-32c	\$2.60	-
April	5c-25c	\$6.50-\$7.00	-
May	-	\$8.00	\$6.80
June	-	\$7.00-\$10.00	\$5.50
July	-	\$10.00	\$5.90
August	-	\$16.00-\$17.00	\$10.00
Sept.	-	\$17.00	\$6.50
Oct.	-	\$23.00	-
		(per 7 kg)	
Nov.	-	\$5.00-\$13.00	-

## SECTION 4

### FARM EXPENDITURE



#### 4. FARM EXPENDITURE

##### 4.1 WAGES

###### 4.1.1 Farms and Stations (Dairy Farms)

(i)	Permanent	Workers with less than 12 months experience on dairy farms (per week)	Workers with greater than 12 months experience on dairy farms (per week)
	Under 17 years of age	\$ 86.10	\$ 91.27
	17 years and under 18	\$100.96	\$107.02
	18 years and under 19	\$115.79	\$122.74
	19 years and under 20	\$130.64	\$138.48
	20 years and over	\$141.03	\$149.49

The above figures are per week and found minimum rates of pay.

The ordinary hours of work shall be arranged between the employer and the employee, but shall not exceed 108 hours per fortnight. Within every 14 days, one day shall be free of work and 3 days shall be worked as part days. Free time should coincide where possible with weekends. A full day shall not exceed 9 hours and a part day shall not exceed 6 hours.

No employer shall charge any employee for board and lodging. Where the employer does not provide board or lodging, the employee shall be paid an extra \$30.00 per week.

Thus, the adult weekly wage becomes \$179.49.

$$(\$149.49 + \$30.00 = \$179.49)$$

The minimum hourly rate to be paid to permanent workers shall be 1/50th of the weekly rate.

###### (ii) Casual

The casual rate for a person not guaranteed a 40 hour week shall be 1/40th of the permanent weekly rate for a permanent worker of the same age.

###### (iii) Every worker shall, after each year's continuous employment by one employer, be entitled to 3 weeks

paid holiday consisting of 14 days taken consecutively and 7 days which may be taken for one or more days or part of a day.

After 15 years continuous service, a special holiday of 2 weeks may be taken.

After 25 years continuous service, a special holiday of 3 weeks may be taken.

After 35 years continuous service, a special holiday of 4 weeks may be taken.

After 40 years continuous service, a special holiday of 5 weeks may be taken.

- (iv) Workers requesting to attend Lands Settlement courses are allowed from 3 weeks leave without pay per annum to a maximum of 6 weeks, provided normal farming operations are not affected.

- (v) Training Incentives

Workers are entitled to additional payments if they produce suitable evidence of qualifications.

1st qualifying T.C.B. in farming OR qualifying assessment tasks ... 45 tasks	\$ 2.00/week
2nd qualifying T.C.B. in farming OR qualifying assessment tasks ... 90 tasks	\$ 4.00/week
Trade Certificate in farming OR Trade Certificate assessment tasks ... 20 tasks	\$ 7.00/week
Trade Certificate in Farm Management	\$10.00/week

N.B. These allowances do not accumulate.

- (vi) Wet Weather Gear Allowances.

For the purpose of purchasing and maintenance of adequate wet weather gear, an employee shall be paid an additional allowance of \$2.75 per week.

- (vii) Vehicle Use

Where a worker uses his/her own motor vehicle on the employer's business, he/she shall be reimbursed an allowance at the rate of not less than 22.18 cents per kilometre. In the case of a motor cycle being used, the reimbursement shall be not less than 11.45 cents per kilometre.

#### 4.1.2 Farms and Stations (Sheep Meat and Wool)

(i) Permanent	Workers with less than 12 months experience on farms (per week)	Workers with greater than 12 months experience on farms (per week)
Under 17 years of age	\$ 80.16	\$ 84.97
17 years and under 18	\$ 93.53	\$ 99.15
18 years and under 19	\$109.86	\$116.45
19 years and under 20	\$121.73	\$129.03
20 years and over	\$132.12	\$140.05

The above figures are per week and found minimum rates of pay.

Where the employer does not provide board and lodging the employee shall be paid an extra \$22.57 per week.

Thus, the adult weekly wage becomes \$162.62  
( $\$140.05 + \$22.57 = \$162.62$ )

In the case where the employee is provided with a house only, the employee shall be paid an extra \$13.68 per week.

Thus, the adult weekly wage becomes \$153.73  
( $\$140.05 + \$13.68 = \$153.73$ )

The minimum hourly rate to be paid to permanent workers shall be 1/45th of the weekly rate.

#### (ii) Casual

The rates of pay for casual workers are as follows:

	Per hour Without Rations	Per hour With Rations
Under 18 years of age	\$3.37	\$2.93
18 years and over	\$4.12	\$3.67

#### (iii) Training Incentives

Workers are entitled to additional payments if they produce suitable evidence of qualifications.

1st qualifying T.C.B. in farming OR qualifying assessment tasks ... 45 units	\$ 2.00/week
2nd qualifying T.C.B. in farming OR qualifying assessment tasks ... 90 units	\$ 4.00/week
Trade Certificate in farming OR Trade Certificate assessment task ... 20 units	\$ 7.00/week
Trade Certificate in Farm Management	\$10.00/week

N.B. The above amounts do not accumulate.

(iv) Wet Weather Gear Allowances.

For the purchases and maintenance of adequate wet weather gear, an employee shall be paid an additional allowance of \$2.75 per week.

(v) Vehicle Use

Where a worker is requested to use his own motor vehicle on the business of the employer, he shall be reimbursed an allowance of 22.18 cents per kilometre (motor cycle allowance 11.45 cents per kilometre).

#### 4.1.3 Farms and Stations (Meat (other than sheep meat) Grain, Seed and Herbage)

(i) Permanent	Workers with less than 12 months exp- erience on farms (per week)	Workers with greater than 12 months experience on farms (per week)
Under 17 years of age	\$ 80.16	\$ 84.97
17 years and under 18	\$ 93.53	\$ 99.15
18 years and under 19	\$109.86	\$116.45
19 years and under 20	\$121.73	\$129.03
20 years and over	\$132.12	\$140.05

The above figures are per week and found minimum rates of pay.

Where the employer does not provide board and lodging the employee shall be paid an extra \$22.57 per week.

Thus the adult weekly wage becomes \$162.62  
( $\$140.05 + \$22.57 = \$162.62$ )

In the case where the employee is provided with a house only the employee shall be paid an extra \$13.68 per week.

Thus the adult weekly wage becomes \$153.73  
( $\$140.05 + \$13.68 = \$153.73$ )

The minimum hourly rate to be paid to permanent workers shall be 1/45th of the weekly rate.

(ii) Casual

The rates of pay for casual workers are as follows:

	Per Hour Without Rations	Per Hour With Rations
Under 18 years of age	\$3.37	\$2.93
18 years and over	\$4.12	\$3.67

(iii) Training Incentives

On the production of suitable evidence the worker shall be entitled to the following additional payments to the minimum rate:

1st qualifying T.C.B. in farming OR qualifying assessment tasks ... 45 units	\$ 2.00/week
2nd qualifying T.C.B. in farming OR qualifying assessment tasks ... 90 units	\$ 4.00/week
Trade Certificate in farming OR Trade Certificate assessment tasks ... 20 units	\$ 7.00/week
Trade Certificate in Farm Management	\$10.00/week

N.B. The above amounts do not accumulate.

(iv) Wet Weather Gear Allowances

For the purchase and maintenance of adequate wet weather gear, an employee shall be paid an additional allowance of \$2.75 per week.

(v) Vehicle Use

Where a worker is requested to use his own motor vehicle on the business of his employer he shall be



reimbursed an allowance of 22.18 cents per kilometre (motor cycle allowance should be 11.45 cents per kilometre).

#### 4.1.4 Shearers' and Shedhands' Wages 1980/81

##### (i) Shearers Rates (minimum with rations)

Machine shearing base rate (sheep)	\$48.30/100
Machine shearing base rate (lambs)	\$43.57/100
Machine shearing with cover comb	\$54.52/100
Blade shearers	\$72.04/100

All sheep with metal ear tags, other than stud sheep, are to be shorn at a premium of \$2.21 per 100.

The shearing rate for stud sheep, stud lambs and hogget rams is 1.5 times the base rate, i.e. \$72.45 per 100.

The shearing rate for other rams is double base rate, i.e. \$96.60 per 100.

Double-fleeced sheep and rams castrated after maturity are shorn at 1.5 times the base rate.

An allowance of \$3.93 per day in lieu of rations and accommodation is to be paid to a shearer living away from the farm or contractor's quarters.

A shearer shall be reimbursed 22.18 cents/kilometre travelled if he provides his own transport on his employer's request.

Shearers who use their own hand piece must be paid a hand piece allowance of 71 cents per 100 sheep shorn.

##### (ii) Crutching Rates (minimum) per 100

Full belly, full crutch, flank and eye wig	\$24.15
Full belly, full crutch, eye wig	\$21.72
Full belly, tail crutch, eye wig	\$20.44
Full belly, full crutch	\$17.71
Full belly, tail crutch	\$16.42
Half belly, full crutch, flank and eye wig	\$21.72
Half belly, full crutch, eye wig	\$19.32
Half belly, full crutch	\$18.02

Full crutch, eye wig - sheep	\$16.10
- lamb	\$14.49
Full crutch - sheep	\$14.81
- lamb	\$13.32
Tail crutch, eye wig - sheep	\$13.35
- lamb	\$12.02
Tail crutch - sheep	\$12.06
- lamb	\$10.87
Eye wig only	\$12.06

The same allowances in lieu of rations and accommodation, and for travel as for shearers apply for crutchers.

(iii) Shedhands, Pressers, Daggers and Cooks' Rates (minimum)

Shedhands with no previous experience in the shearing industry shall be paid not less than \$3.77 per hour. Shedhands with a fortnight or more experience, shall be paid not less than \$4.35 per hour. Shedhands holding a wool handling certificate shall have their hourly rate increased by 25 cents. Daggers shall be paid not less than \$4.60 per hour, or \$14.20 per 100.

Pressers shall be paid not less than \$4.60 per hour.

For cooking for 18 persons and under, cooks shall be paid not less than \$51.98 per day. For over 18 persons a cook's assistant shall be engaged and shall be paid not less than \$3.89 per hour.

The same allowances in lieu of rations and accommodation and for travel as for shearers apply to these workers.

All workers reporting to the shed shall be paid a minimum of 4 hours pay, except where more than 4 hours are worked. This is applicable only if normal shearing commences and the sheep are not deemed too wet to shear or crutch. If the sheep are deemed to be too wet by secret ballot, a minimum payment of 2 hours will be paid except where the gang is living on the farm, and, having elected to begin work late in the day, less than 4 working hours remain.

#### 4.1.5 Market Garden Workers

(i)	Permanent Workers	Per Week	Per Hour
	Foremen/Forewomen	\$181.20	\$4.53
	Leading Hands	\$165.60	\$4.14
	Adults 20 years and over 19	\$159.20	\$3.98
	Minors 19 years and under 20	\$135.21	\$3.38
	18 years and under 19	\$114.51	\$2.86
	17 years and under 18	\$ 97.60	\$2.44
	16 years and under 17	\$ 83.20	\$2.08
	Under 16 years	\$ 70.40	\$1.76

Piecework - where workers are engaged on piecework they shall be notified. Piecework shall be paid at such rates as will enable an ordinary capable worker to earn the above rates provided for plus 10%.

A worker who produces to his employer evidence that he has obtained a certificate in Horticultural Practice in either outdoor vegetable production or glasshouse vegetable production shall receive an additional \$8 per week.

Ordinary hours of work shall not exceed 40 per week, or 8 per day to be worked within 5.5 days Monday to Saturday noon, inclusive. Time worked outside or in excess of the hours specified is overtime and is to be paid at time and a half rates for the first 3 hours and at double time thereafter.

Work on Saturdays after noon or on Sundays shall be paid at double rates.

(ii)	Casual Workers	Per Hour
	Adults	\$3.70
	Minors 19 years and under 20	\$3.15
	18 years and under 19	\$2.68
	17 years and under 18	\$2.28
	16 years and under 17	\$1.94
	Under 16 years	\$1.66

Piecework rates as above in (i).

Workers who work only on Saturdays shall be paid at ordinary rates for first 8 hours, 1.5 times ordinary rate for next 3 hours and at double rates

thereafter. Workers engaged on a Saturday who have not worked 36 hours in the preceding five days, shall be paid at ordinary rates for the first 4 hours, 1.25 times ordinary rates for the next four hours, at 1.5 times for the next 3 hours and at double rates thereafter.

Work done on Sunday or on statutory holidays shall be paid for at double rates.

(iii) Harvesters	Per Hour
Adults	\$3.86
Minors 19 years and under 20	\$3.29
18 years and under 19	\$2.79
17 years and under 18	\$2.38
16 years and under 17	\$2.04
15 years and under 16	\$1.71
14 years and under 15	\$1.46
13 years and under 14	\$1.25
Under 13 years	\$1.06

Piecework rates as above in (i).

Overtime shall be paid at 1.5 times ordinary rates for the first 4 hours and double rates thereafter for time worked in excess of:

8 hours in any day  
40 hours in any week  
5 days in any week

Time worked on Sundays is to be paid at ordinary rates unless the worker has completed 32 hours during the preceding six days in which case time worked shall be paid for at 1.5 time rates.

#### 4.1.6 Orchard and Vineyard Workers) (As at 31 January 1981)

(i) Permanent Workers	
Minimum rates of wages:	Per week
Managers	\$175.43
Foremen (persons responsible to the workers for the day to day running of establishment)	\$164.70
Adult workers 20 years and over	\$150.61
Junior workers 19 years and under 20	\$143.08
18 years and under 19	\$128.03
17 years and under 18	\$112.96

16 years and under 17	\$ 97.90
Under 16 years	\$ 82.84

Service Payment - After one year's continuous service as an adult worker with the same employer, a worker shall be paid a service allowance of 6.0 cents per hour. After 2 years this is increased to 12.0 cents per hour. After three years this is increased to 18.0 cents per hour.

(ii) Casual Workers

Minimum rates of wages per hour

	Grade 1	Grade 2
Adult workers 20 years and over	\$3.58	\$3.47
Junior workers 19 years & under 20	\$3.40	\$3.30
18 years & under 19	\$3.04	\$2.95
17 years & under 18	\$2.68	\$2.61
16 years & under 17	\$2.32	\$2.25
Under 16 years	\$1.97	\$1.91

(iii) Overtime

For permanent workers, time worked in excess of 8 hours in any one day or 40 hours in any one week, and for casual workers all time worked in excess of 10 hours per day or 44 ordinary hours per week, shall be overtime, and shall be paid at 1.5 times for the first three hours and at double time thereafter.

For permanent workers, all work performed on Sundays is paid at double time.

4.1.7 Nurserymen and Gardeners  
(as from 1st August 1980)

Minimum rates of wages.

	Per Week
(i) Nursery technicians	\$203.00
(ii) Grade 1 Workers:	\$191.00
- Landscape or garden adviser, or hire plant adviser	
- Propagation assistant, class (a)	
- Florist	
- Journeyman/nurseryman	

- (iii) Grade II Workers \$174.50
- Agricultural machine operator, class (b)
  - Landscape assistant
  - Nurseryman assistant, class (a)
  - Packer, class (a)
  - Garden centre assistant, class (a)
  - Senior Floral worker
  - School or recreational groundsman
  - Hire plant operator
- (iv) Grade III Workers: \$164.00
- Agricultural machine operator, class (b)
  - Nursery assistant, class (b)
  - Propagation assistant, class (b)
  - School and recreational groundsman's assistant
  - Garden centre assistant class (b)
  - Senior floral workers assistant
  - Grafter
  - Budder
  - Hire plants assistant, class (a)
- (v) Grade IV Workers: \$154.00
- Nursery assistant, class (c)
  - Propagation assistant, class (c)
  - Potter
  - Floral worker
  - Packer
  - Hire plant assistant class (b)
  - Workers not elsewhere specified.
- (vi) Extra rates for Qualifications Held.

A nurseryman or gardener holding a trade certificate in Horticulture or gardening shall be paid 18.3 cents extra per hour.

Workers who have completed their apprenticeship shall be paid an additional 15.3 cents per hour. Extra rates for the holder of certificates issued under the R.N.Z.I.H. Act 1953 are:

	Per Week
Junior	\$3.01
Intermediate or National Certificate	\$4.52
Full Diploma	\$6.02
Holders of the Diploma of Horticulture (Massey or Lincoln) shall be paid an extra \$5.30 per week.	

(vii) A foreman or leading hand in charge of 3 or more workers shall be paid \$6.36 per week extra.

(viii) Service allowances

For continuous service with the same employer exceeding:

	Per Week
One year	\$3.42
Two years	\$6.85
Four years	\$10.27

N.B. This award only operates throughout the Northern, Taranaki, Wellington, Marlborough, Nelson, Westland, Canterbury and Otago Industrial Districts.

## 4.2 ANIMAL HEALTH

### 4.2.1 Dog Registration and Hydatid Control Fees

These vary depending on the Local Body involved. However a typical fee would be \$23.00 per dog or bitch over 3 months of age. A dog 3 months or under on May 1st - \$20.00. A dog 3 months or under on November 1st - \$10.00.

### 4.2.2 Contract Dipping

Sheep Dipping -

Plunge: total cost, including materials -

1 to 500	27.0 cents per sheep
500 to 1,050	25.0 cents per sheep
1,050 to 2,050	23.0 cents per sheep
2,050 to 4,000	22.0 cents per sheep
Over 4,000	21.0 cents per sheep

Mobile Shower:

The basic cost is \$7 per 100 head, with materials extra. The length of wool on the sheep affects the amount of dip chemical required. The total price ranges from \$14.00-\$25.00 per 100 head.

#### 4.2.3 Sheep Dipping Guide

Cost per 100 based on 2 litres of wash per head (these costs can vary depending on wool length).

Parasite	Dip to Use	Price	Size	Method of Appl'n	Dilution	Average Cost per 100
Lice	Trigon D.F.F.	\$450.71	10 1	Plunge	1:2000	\$4.51
Ked					1:4000	\$2.25
Fly				Shower	1:2000	\$4.51
					1:4000	\$2.25
				C.R.		
				Shower	1:1280	\$7.04
					1:2560	\$3.57
Lice	Asuntol	\$286.03	20 1	Plunge	1:2000	\$1.45
Ked						
Fly				C.R.		
				Shower	1:2000	\$1.43
Lice	Diaz-O-Spray	\$447.47	10 1	Plunge	1:4000	\$2.24
Ked	D.F.F.				1:8000	\$1.12
Blowfly				Shower	1:4000	\$2.24
					1:8000	\$1.12
				C.R.		
				Shower	1:2000	\$4.47
					1:4000	\$2.24
Lice	Numix	\$72.19	5 kg	Plunge	1kg:1000 1	\$2.88
Ked				Shower	1kg:1000 1	\$2.88
				C.R.		
				Shower	1kg: 750 1	\$3.85

(C.R. shower denotes continuous replenishment)

From the above guide it can be seen that cost per 100 head on average varies from \$1.12 to \$7.04 with an average overall cost of \$2.94 per 100 head.

#### 4.2.4 Sheep and Cattle Dips, Sprays and Dressings

Trigon D.F.F. Powerpack	3 litre	\$146.97
Trigon D.F.F.	10 litre	\$450.71
Diaz-O-Spray D.F.F. Powerpack	3 litre	\$145.91
Diaz-O-Spray D.F.F.	10 litre	\$447.47
Supreme D.F.F. Powerpack	3 litre	\$184.84
Supreme D.F.F.	10 litre	\$566.85
Bacteriostat Powder	600 g	\$ 7.19
Diazotas	5 litre	\$ 69.99
	20 litre	\$275.73



Asuntol Powder	4 x 1 kg	\$101.14
Asuntol liquid	200 ml	\$ 6.12
	5 litre	\$ 89.32
	20 litre	\$286.03
Celbar 10%	100 ml	\$ 12.00
Summer Dip Powerpack	3 litre	\$145.54
Summer Dip	10 litre	\$446.34
Numix Powder	5 x 1 kg	\$ 72.19
Diazinon 80%	10 litre	\$447.47
Bash Sheep Pour-on	2.5 litre	\$ 47.80
	10 litre	\$182.08
Ridlice (cattle)	6 x 500 ml	\$176.00
Cythion (cattle)	5 litre	\$ 44.04
	20 litre	\$167.35
Warbex (cattle)	1 litre	\$ 17.55
	5 litre	\$ 83.36
Tiguvon Pour-on	5 litre	\$ 28.94
Tiguvon Spot-on	500 ml	\$ 19.73
	2.5 litre	\$ 88.76
Defiance Blowfly Dressing	5 litre	\$ 14.25
Ciodrin Animal Spray	6 x 0.5 litre	\$ 36.30
Lypor	2.5 litre	\$ 55.50
	5 litre	\$104.00
Paraban	20 litres	\$253.85
Mange and Lice Dressing	2 kg	\$ 9.05

#### 4.2.5 Sheep and Cattle Drenching Guide

##### (i) Sheep Drenching (Cost in cents per dose)

###### Nilverm

45 litres	=	\$640.34
24 litres	=	\$350.62
12 litres	=	\$178.73
5 litres	=	\$ 80.19

Weight Range	Dose	Pack Size	Cents Per Dose
Sheep up to 22.5 kg	4 ml	45 litre	5.69
Sheep up to 22.5 kg	4 ml	24 litre	5.84
Sheep up to 22.5 kg	4 ml	12 litre	5.96
Sheep up to 22.5 kg	4 ml	5 litre	6.42
Sheep 22.5-34 kg	6 ml	45 litre	8.54
Sheep 22.5-34 kg	6 ml	24 litre	8.77
Sheep 22.5-34 kg	6 ml	12 litre	8.94
Sheep 22.5-34 kg	6 ml	5 litre	9.62
Sheep 34 kg & over	8 ml	45 litre	11.34
Sheep 34 kg & over	8 ml	24 litre	11.67

Sheep 34 kg & over	8 ml	12 litre	11.91
Sheep 34 kg & over	8 ml	5 litre	12.83

#### Panacur

Type of Animal	Weight Range	Dose Rate	Pack Size & Cost of Pack		
			301	201	51
			\$439.88	\$300.77	\$78.64

Lambs	15kg	3 ml	4.40	4.51	4.72
Lambs &	21-30kg	6 ml	8.80	9.02	9.44
Hoggets	30-40kg	8 ml	11.73	12.03	12.58
Sheep	40kg & over	9 ml	13.20	13.53	14.15

#### Thibenzole

Type of Animal	Weight Range	Dose Rate	Pack Size & Cost of Pack		
			301	201	51
			\$339.00	\$240.85	\$66.20

Lamb	Up to 20kg	4 ml	4.3	4.8	5.3
Lambs &					
Hoggets	21-30kg	6 ml	6.7	7.2	7.9
Hoggets	31-40kg	8 ml	9.0	9.6	10.6
Sheep	Over 41kg	10 ml	11.3	12.0	13.2
Rams		15 ml	16.9	18.1	19.8

#### Thibenzole Plus (cost in cents per dose)

Type of Animal	Weight Range	Dose Rate	Pack Size & Cost of Pack		
				201	
				\$242.83	

Lamb	Up to 20kg	5 ml		\$6.07	
Lambs &					
Hoggets	21-30kg	7.5ml		\$9.10	
Hoggets	31-40kg	10 ml		\$12.14	
Sheep	Over 41kg	12.5ml		\$15.17	

Rintal - 2.5% suspension

Type of Animal	Weight Range	Dose Rate	Pack Size & Cost of Pack	
			201	2.51
			\$254.93	\$38.24
Lambs	Up to 25kg	5 ml	6.37	7.64
Hoggets	25-35kg	7 ml	8.92	10.71
Adults	Over 35kg	9 ml	11.47	13.80

(ii) Cattle Drenching (cost in cents per dose)

Nilverm

Weight Range	Dose	Pack Size	Cents Per Dose
Cattle up to 100 kg	20 ml	45 litre	28.46
		24 litre	29.22
		12 litre	29.79
		5 litre	32.08
Cattle 100-200 kg	40 ml	45 litre	56.92
		24 litre	58.44
		12 litre	59.58
		5 litre	64.15
Cattle 200-300 kg	60 ml	45 litre	85.38
		24 litre	87.65
		12 litre	89.36
		5 litre	96.23
Cattle over 300 kg	80 ml	45 litre	113.94
		24 litre	116.87
		12 litre	119.15
		5 litre	128.30

Thibenzole

Weight Range	Dose Rate	Pack Size & Cost of Pack		
		301	201	101
		\$339.00	\$240.85	\$66.20
Up to 50 kg	17ml	19.21	20.47	22.50
51- 75 kg	25ml	28.25	30.10	33.10
74-100 kg	35ml	39.55	42.14	46.34
101-125 kg	45ml	50.85	54.19	59.58
126-150 kg	55ml	62.15	66.23	72.82
151-175 kg	65ml	73.45	78.27	86.06
176-200 kg	75ml	84.75	90.31	99.30
201-225 kg	85ml	96.05	102.36	112.54
226-250 kg	95ml	107.35	114.40	125.78

251-275 kg	105ml	118.65	126.44	139.02
276-300 kg	115ml	129.95	138.48	152.26

Rintal 10% Suspension

20 litre pack \$116.83

	Dose	Cost per dose (cents)
Up to 40 kg	3 ml	3.50
40 to 100 kg	7.5 ml	8.76
100 to 160 kg	12 ml	14.02
160 to 200 kg	15 ml	17.52
200 to 300 kg	22.5 ml	26.31

#### 4.2.6 Bloat Control

Product	Pack Size	Price
No Bloat (N.I.)	20 litre	\$ 49.69
	200 litre	\$288.14
(S.I.)	20 litre	\$ 49.69
	200 litre	\$303.14
Bloatas	20 litre	\$ 90.13
	200 litre	P.O.A.
Bloatenz Two		
in One	20 litre	\$109.55
	200 litre	\$838.00
Bloatenz Premix		
Drench	200 litre	\$385.00
Redene Bloataid	20 litre	\$ 94.40
	200 litre	\$785.00
Bloateric Two		
in One	20 litre	\$ 92.43
	200 litre	P.O.A.
Bloateric Premix	60 litre	\$144.00
	200 litre	P.O.A.
Teric Bloatblocs	15 kg	\$ 18.75

#### 4.2.7 Facial Eczema Control

Product	Pack Size	Price	Price/Litre
Sporex	5 litre	\$ 69.25	\$13.85
	20 litre	\$274.60	\$13.73
Thibenzole			
Concentrate	30 litre	\$339.00	\$11.30
	20 litre	\$240.85	\$12.04
	5 litre	\$ 66.20	\$13.24

#### 4.2.8 Vaccines

Mannings	Size of Pack	Cost
Black leg - Malignant Oedema	100 ml	\$ 3.10
	200 ml	\$ 5.85
	250 ml	\$ 7.35
	500 ml	\$14.25
Black leg - Malignant Oedema and black disease	200 ml	\$ 9.05
	250 ml	\$11.35
	500 ml	\$16.00
Pulpy-Kidney	100 ml	\$ 3.35
	200 ml	\$ 4.25
	250 ml	\$ 5.35
	500 ml	\$10.15
	1000 ml	\$18.25
P.K. ATS	100 ml	\$ 8.95
	200 ml	\$14.95
	250 ml	\$18.10
	500 ml	\$35.20
	1000 ml	\$63.35
P.K. Tetanus	100 ml	\$ 4.45
	200 ml	\$ 7.00
	250 ml	\$ 8.65
	500 ml	\$16.00
Triple (BL-MO-PK)	100 ml	\$ 4.90
	200 ml	\$ 9.35
	250 ml	\$11.65
	500 ml	\$22.15
	1000 ml	\$39.85
Trip-Tet (BL-MO-PK-TET)	100 ml	\$ 5.25
	200 ml	\$10.15
	250 ml	\$12.65
	500 ml	\$24.00
	1000 ml	\$43.20
5-in-one (BL-MO-PK-TET-BD)	100 ml	\$ 6.00
	200 ml	\$11.75
	500 ml	\$26.65
	1000 ml	\$48.00
Foot Abscess	200 ml	\$20.00
Scabby Mouth	125 doses	\$ 2.95
	250 doses	\$ 4.50
ICI-Tasman		
PK Antitet	100 ml	\$ 8.93
	200 ml	\$15.00
	500 ml	\$35.26
Footrot Vaccine Alum	100 doses	\$17.36
	250 doses	\$36.04
Scabivax	125 doses	\$ 4.20

#### 4.2.9 Antibiotics

	Size of Pack	Price
Durapen 3 in 1	20 tubes	\$15.00
Procal 100	20 tubes	\$ 9.65
Procal 500	20 tubes	\$11.65
	40 tubes	\$21.10
Procal 1500	10 tubes	\$19.50
P.U.I. 100	20 tubes	\$ 8.25
	40 tubes	\$15.00
Adpen 100	20 tubes	\$ 9.00
Penetha-Pen 100	20 tubes	\$ 9.00

#### 4.2.10 Disinfectants

Hibitane	25 l	\$117.94
	5 l	\$ 27.03
Hibitane MCC Mastitis Control and	25 l	\$136.67
Hibitane MCC Plus (with Glycerine)	5 l	\$ 31.10
Syvel	200 l	\$400.00
	5 l	\$ 14.30
Anisep	20 l	\$ 59.25
	5 l	\$ 14.85

#### 4.2.11 Metabolics

ICI - Tasman Borophos	450 ml	\$ 3.96
Calcium Borogluconate	450 ml	\$ 3.07
Boromag Plus	450 ml	\$ 3.77
	350 ml	\$ 2.09
Sulphamag Injectable	350 ml	\$ 1.31

#### 4.2.12 Poultry Remedies

Antibiotics	Tylan 100	10 kg	\$227.00
		20 kg	\$413.00
	Tylan soluble	100 gm	\$ 27.00
Anticoccidial	Elancoban	20 kg	P.O.A.
Anthelmintic	Hygromix - 8	22.68 kg	\$139.00

#### 4.2.13 Stock Identification

##### (i) Eartags

'Allflex' Plastic      Delta Plastics Ltd

	Blank ¢ each	Stamped ¢ each
Small - male (round)	13	17
- female (round)	10	-
Medium - male	19	27
- female	16	24
Large - male	27	36
- female	24	33
Maxi (female)	33	43
Hi-Vu	50	62

All these types can be combined for use on sheep and pigs, and for beef and dairy cattle. All tags are available stamped from 1-999, individually or in sequence. Special stampings - names, codes, brands, logos, and 4 or more digits are also available. Colours are: orange, yellow, white, green, red, light blue, purple and black. Tag pen \$2.95 in black only. Applicator \$12.50. Spare applicator pins \$0.90 each.

'Kenmor' Nylon Mainspan Enterprises.

One-piece self piercing eartags available in 9 colours - red, blue, yellow, green, orange, purple, white, brown and black. Up to 18 letters, and numerals (incl. spaces) available.

Tags	\$ 9.12 per 100
Stamping - repetitive or	
consecutive numbers	\$13.12 per 100
- name and consecutive	
numbers	\$15.64 per 100
Applicator pliers	\$ 9.50

'Farm-Acy'

Brass eartags stamped with year date, consecutive numbers and station/stud name.

Stamped	\$10.00 per 100
Stamped, nickel plated	\$13.00 per 100
Ear punch	\$ 9.50
Tag Closing pliers	\$ 3.00

Aluminium 'Kurl-lock' eartags stamped with prefix or name to 12 letters or figures, and year date and consecutive numbers to 9999.

Stamped	\$ 8.00 per 100
Applicators	\$ 8.50
Farm-Acy Earmarkers - sheep	\$26.20 - \$47.00
- cattle	\$32.85 - \$53.40

(ii) Brands and Tattoos

'Farm-Acy' stainless Steel Fire Brands set 0-8	\$95.50
Tattoo Outfit - Basic outfit	\$32.50

(iii) Raddles and Markers

Ford's Raddle (Blue, Red, Green, Yellow, Black) each	\$ 2.40
'Sprayline' Aerosol Markers (Red, Blue, Green, Orange, Purple, Black, Yellow)	
- 400 gm	\$ 3.57
- 170 gm	\$ 2.20
'Top-Mark' Aerosol Markers (Purple, Red, Blue, Green, Yellow, Orange, Black) - 170 gm	\$ 2.80
'Mannings' Aerosol stock-mark (red, orange, blue, green) - 225 gm	\$ 1.95
'Mannings' Aerosine (red, blue, green, orange, purple) - 142 gm	\$ 2.50

4.2.14 Mating Management Aids

ICI-Tasman Heat Detection Tail Paint - 1 litre	\$ 8.77
Ford's Ram Harness	\$13.89
Matingmark Crayons (Red, Blue, Green, Yellow, Purple)	\$ 2.95

4.2.15 Lambing and Calving Requisites

Maskit Aerosol	\$ 3.40
'Acceptron' Aerosol	\$ 4.75
Bay Lambing Instrument	\$ 3.45
'Lamb-Dry' lamb covers (roll of 100)	\$ 20.59
twin marked (numbered 1-100; pk of 4 rolls)	\$ 48.35



'Lambjel' Ewe Ointment (per tube)	\$ 2.80
'Lamblac' Ewe Milk Replacer 3 kg	\$ 11.90
Denkavit 20 kg	\$ 29.85
Ancalf 20 kg	\$ 32.75
Anlamb 10 kg	\$ 20.56
Monojet lamb feeders	\$ 2.40
Lamb teats	\$ 1.50

#### 4.2.16 Miscellaneous Animal Health Equipment

'Farm-Acy' frustrators - curved	\$ 2.75
- calf	\$ 2.50
Rockgas Searo iron	\$ 90.00
'Farm-Acy' Daroux Emasculators	\$ 39.95
NZIG 'Jason' Lambtailer	\$ 59.50
with hoses, regulators and spanner	\$ 118.00
Rubber Docking Rings (per packet of 500)	\$ 7.25
ICI-Tasman-P20 Drench Gun (Auto)	\$ 55.12
-P60 Drench Gun (Auto)	\$ 58.50
-P20 Injection Attachment	\$ 6.47
P4 Drench Gun non-auto	\$ 40.50
P14 Drench Gun non-auto	\$ 42.19
Lypor Gun (each)	\$ 52.65
P120 Auto Drenching Gun 120 ml	\$ 72.75
Nilverm Drencher/Injector 12.5 ml	\$ 37.77
Nilverm Drench Gun 12.5 ml	\$ 33.69
Flutter valve	\$ 1.54
MSD Cattle Gun 120 ml	\$ 58.00
MSD Sure-Shot Drench Gun 15 ml	\$ 40.00
Mannings Cattle Gun 56 ml	\$ 50.00
MSD Ridlice Applicator	\$ 36.00
Phillips Cattle Drencher	\$ 56.00
Bash Gun	\$ 74.06
Bash Gun (Cooper Colt)	\$ 82.00
Vaccinators ICI-Tasman P74 Auto	\$ 40.80
Vaxigun (ICI-Tasman) 5 mls	\$ 5.95
'Farm-Acy' Hoofcutters	\$ 38.20
True Freunde Footrot shears	\$ 14.97
'Farm-Acy' Calf dehorers	\$ 11.70

#### 4.2.17 Miscellaneous Animal Health Products

'Hornex' dehorning paste (per tube)	\$ 2.00
'Vigest' Predigested Tonic 2 litre	\$ 13.20
'Dexolyte' Enteritis & Diarrhoea 3 kg	\$ 10.98
Remedy	
Quixalud Scour Tablets Pkts of 20	\$ 4.40

'Zawbolyte' Diarrhoea & Scours	1 kg	\$ 11.08
Remedy	20 x 30 g	\$ 13.03
'Vetadine' P.V.P. Iodine Spray	150 g	\$ 4.87
'Vetnuvan' aerosol flea & tick control	170 g	\$ 2.96
'Seleen' Suspension non-specific dermatoses control	125 ml	\$ 4.75
Flystrike Dressing (Aerosol can)		\$ 3.50
Formalin	20 litre	\$ 44.00
	200 litre	\$302.67
'Ban Mag'	500 ml	\$ 12.25
Fleaban	110 g	\$ 3.30
Flea powder	100 g	\$ 2.52
Mange and Lice dressing	2 kg	\$ 9.05
'Lypor'	5 litres	\$104.00
'Paraban'	20 litres	\$253.85
Parasite powder	450 g	\$ 2.25
Parasite Spray	50 ml	\$ 2.01
Nilverm Pig Wormer	5 kg	\$169.23
Equine Iron tonic	5 litres	\$ 14.60
Systemex	25 l	\$366.13
Dizotas	20 l	\$275.73
Combat	20 l	\$232.69
Footrite	5 l	\$ 25.60
Nutrimol	20 l	\$135.00
Vitagran	7 kg bucket pack	\$ 13.95
	25 kg bag pellets	\$ 32.50
Vialgin	25 kg	\$ 24.50
ICI-TASMAN		
Oral & injectable iron	100 ml	\$ 9.85
Sleptosil injectable iron		\$ 21.88
Vitamin E50	500 gm	\$ 21.25
	2 kg	\$ 80.05
Vitamin K	1 kg	\$ 4.55
Carophyll Orange	1 kg	\$161.25
Carophyll Yellow	1 kg	\$127.50
Carophyll Red	1 kg	\$195.00
Biotin 2% Special	1 kg	\$250.00
Rovisol Oral	1 litre	\$ 32.50
	6 litre	\$147.35
Ephocal	3 kg	\$ 8.80
	12 kg	\$ 25.75
Equine Iron Tonic	5 litre	\$ 16.05
Furone	3 kg	\$ 25.83
Tascat	130 gm	\$ 3.20
	10 kg	\$ 45.00
Tasdog	250 gm	\$ 5.10
	1 kg	\$ 11.70

Tasvite Plus	2 litre	\$ 12.65
	5 litre	\$ 29.70
Avotan	4 kg	\$108.00
	20 kg	\$520.00
Vitamin A, B2 & D3 Supp.	25 kg	\$ 60.65
Lysine	25 kg	\$187.50
Methionine	25 kg	\$190.00

#### 4.2.18 Veterinary Club Membership

Veterinary club charges are varied, depending on the club. A typical membership fee would be \$30.00 to \$35.00.

Standard visit fee	\$ 8.00-10.00
Medium visit	\$10.00-12.00
Long visit	\$25.00
X-Ray	\$25.00
Additional plate	\$ 3.00- 5.00
Drugs and mileage fee extra.	

Annual animal health expenditure is generally in the range of 80c-\$1.00 per stock unit.

### 4.3 BREEDING EXPENSES

#### 4.3.1 Artificial Breeding Fee (Canterbury)

For the 6 week group membership, the fee is \$45.00 plus \$7.85 per cow. The seventh week, if required, is at cost. Nominated service \$2.00 reduction per cow.

Cow Numbers	Cost
5	\$ 84.25
10	\$123.50
20	\$202.00
30	\$208.50
40	\$359.00
50	\$437.50
60	\$516.00
70	\$594.50
80	\$673.00
90	\$751.50
100	\$830.00
110	\$908.50
120	\$987.00
130	\$1,065.50
140	\$1,144.00
150	\$1,222.50
160	\$1,301.00

170	\$1,379.50
180	\$1,458.00
190	\$1,536.50
200	\$1,615.00

With two free returns, and subsequent returns at \$2.50 each.

#### 4.3.2 Herd Testing Charges

With monthly testing, all cows tested twice or more are charged for. With alternate monthly testing, charges will be assessed for each cow tested once or more.

Cow No.	Monthly	Alternate Monthly	Production Ranking Test
	Herd Fee \$75 Plus \$7.20 Per Cow	Herd Fee \$50 Plus \$4.42 Per Cow	Herd Fee \$40 Plus \$2.75 Per Cow
10 (min)	\$147.00	\$ 94.20	\$ 67.50
20	\$219.00	\$138.40	\$ 95.00
30	\$291.00	\$182.60	\$122.50
40	\$363.00	\$226.80	\$150.00
50	\$435.00	\$271.00	\$177.50
60	\$507.00	\$315.20	\$205.00
70	\$579.00	\$359.40	\$232.50
80	\$651.00	\$403.60	\$260.00
90	\$723.00	\$447.80	\$287.50
100	\$795.00	\$492.00	\$315.00
110	\$867.00	\$536.20	\$342.50
120	\$939.00	\$580.40	\$370.00
130	\$1,011.00	\$624.60	\$397.50
140	\$1,083.00	\$668.80	\$425.00
150	\$1,155.00	\$713.00	\$452.50
160	\$1,227.00	\$757.20	\$480.00
170	\$1,299.00	\$801.40	\$507.50
180	\$1,371.00	\$845.60	\$535.00
190	\$1,443.00	\$889.80	\$562.50
200	\$1,515.00	\$934.00	\$590.00

#### 4.3.3 Beef Plan (National Beef Recording Service)

\$2 per cow free listed which includes the basic option, i.e. (weaning date) and yearling and rising 2 year old records.

#### 4.4 CASH CROPPING EXPENSES

##### 4.4.1 Sacks

###### (i) Prices (1981/82) (cents per sack)

New Sacks Ex Wharf	94cm	104cm	116cm	122cm
Lightweight	79	85	98	116
Standard	93	102	112	131
Ex Christchurch Plus 3c				
Once Shot Sacks				
Lightweight	78	83	95	111
Standard	91	100	108	123

###### (ii) Quantities of Sacks Required by Farmer

The farmer usually requires sacks to transport his field dressed (F/D) product to the store, and having been machine dressed (M/D) there, a heavier weight can be put into the sack. Clovers, phalaris and timothy are delivered in single sacks but after machine dressing are put into double sacks.

The sacks containing seed bought by the farmer would be used for the seconds off the header and for storing seed held onto by the farmer for future sowings, so discount them in working out a budget.

##### 4.4.2 Seed Certification Fees

All seed certification fees were cancelled by the 1978 Budget. The only exception is the 'Late Entry' Fee for all crops including potatoes.

A late entry fee of \$10.00 (covering all entries of any one crop on one farm) is payable by the grower in respect of any application for certification received and accepted after the closing date fixed for a particular crop.

##### 4.4.3 Seed Testing Fees

Seed testing charges set by the M.A.F. vary according to the type of seed being tested. To obtain the various fees contact the M.A.F. office in Palmerston North.

#### 4.4.4 Consolidated Dressing and Store Handling Charges

These rates include receiving, delivering, sampling weighing, dressing, brushing of sacks and disposal of offal.

Ryegrasses - Ruanui, Tama, Manawa, Ariki, Paroa and Nui	8.6 cents per kg
Each additional time through	4.0 cents per kg
Cocksfoot	24.0 cents per kg
Clovers - White, Red and Alsike	24.0 cents per kg
Lucerne	24.0 cents per kg
Grass seed (Fine - Browntop, Fescue, Dogstail and Timothy	24.0 cents per kg
Turnips, Chou Moellier, Kale and Mustard	23.0 cents per kg
Rape	17.0 cents per kg
Prairie Grass	37.0 cents per kg
Yarrow	48.0 cents per kg
Separating White clover and Ryegrass	\$1.25 per sack
Separating mixed oats and Ryegrass	\$1.25 per sack
Slurry treating (Captan)	\$31.60 per tonne
(Baytan)	\$80.00 per tonne
(Vitaflow 200)	\$69.00 per tonne
Blending clovers and blending grass seeds	\$ 2.24 per sack
Wheat and Rye-corn	\$32.20 per tonne
Barley	\$32.60 per tonne
Field Peas and Lupins	\$40.25 per tonne
Garden Peas and Beans	\$50.35 per tonne
Oats (dressing and clipping)	\$44.80 per tonne
Linseed	\$66.40 per tonne

Farmers usually only get their small seeds dressed and under ordinary circumstances seed goes once through the dressing machines.

Field dressed ryegrasses, clovers and timothy usually dress out approximately 25 percent offal and field dressed cocksfoot from 25 to 33 percent offal.

#### 4.4.5 Box Hire

Approximately \$6.00 per box depending on quality in box and capacity of boxes.

#### 4.4.6 Grain and Seed Drying Charges

Peas	to 17% moisture	\$16.00 per tonne
	17-18% moisture	\$18.00 per tonne
	over 18% moisture	\$19.00 per tonne
	second time over	\$ 7.00 per tonne
Wheat, Oats and Barley	to 17% moisture	\$14.50 per tonne
	17-18% moisture	\$16.50 per tonne
	over 18% moisture	\$18.50 per tonne
	second time over	\$ 6.00 per tonne
Small Seeds	to 17% moisture	9.50 cents per kg
	17-18% moisture	11.00 cents per kg
	over 18% moisture	11.00 cents per kg
	second time over	11.00 cents per kg

#### 4.5 CONTRACTING

##### 4.5.1 Contract Heading

Minimum charge in all cases where the crop runs under the specified yield per ha must not be less than \$37.00 per header metre front per hour.

2.4m header	\$ 88.80/hr
3.0m header	\$111.00/hr
3.6m header	\$133.20/hr
4.2m header	\$155.40/hr

Wheat: When the crop runs 2.35 tonnes/ha or over, \$24.80/tonne.

Barley: When the crop runs 1.95 tonnes/ha or over, \$29.75/tonne.

Oats: When the crop runs 1.55 tonnes/ha or over, \$37.20/tonne.

Peas and Lupins: When the crop runs 2.0 tonnes/ha or over, \$32.30/tonne.

Linseed and  
Clover: \$81.70/ha or hourly rates according to the size of header, whichever is the greater.

Grass Seed: \$73.70 or hourly rates according to the size of header, whichever is the greater.

In all cases where heading is carried out on hill country the rate shall be increased by 20%.

All bagging, standing time for trucks and labour requirements are to be by arrangement.

Cartage is to be at Transport Schedule Rates.

#### 4.5.2 Contract Mowing, Raking and Baling

Mowing Hay - Cutterbar	\$33.60 per hour
- Disc mowing	\$38.00 per hour
Raking, once over	\$33.00 per hour
Baling hay or straw	\$ 0.54 per bale
Half tonne bales (round)	\$ 7.50 per bale
Sledging by contractor	\$ 0.06 per bale
Picking up bales (hay or straw)	\$ 0.40 per bale

For any quantity less than 20 tonne, price is by arrangement. On hill country there is a 20% surcharge.

#### 4.5.3 Contract Windrowing

\$47.50 per ha for 10 cm and above, \$49.50 with conditioner.  
\$49.50 per ha under 10 cm, \$51.50 with conditioner.

#### 4.5.4 Potato Contracting

Planting	\$42.00/hour
Digging and Picking	\$1.20/bag in paddock (14 bags/ tonne; cartage extra).
Roguing	\$42/hour for tractor and digger
Grading (estimate)	\$26-\$28/bin (11 sacks/bin) \$28-\$30/tonne.
Harvesting	\$93.00 per hour, or \$25.40 per tonne whichever is the greater plus labour.

Note: These costs are for an average crop in reasonable conditions.

#### 4.5.5 Miscellaneous

Gorse cutting	\$28.00 per hour
Tree topping	\$58.00 to \$65.00 per hour.
Drilling	\$29.30 per ha.
Direct drilling	\$36.75 per ha.
Precision drilling	By arrangement.
Chaff cutting	\$1.00 to \$1.50 per bag depend- ing on crop.



#### 4.5.6 Cultivation Contracts

##### (i) Wheeled Tractors

P.T.O. Power kW	(H.P.)	Hourly Rate or Hire
Up to 21	(Up to 29)	\$24.50
22 - 30	( 30 - 40)	\$27.50
31 - 36	( 41 - 49)	\$29.00
37 - 44	( 50 - 59)	\$31.00
45 - 50	( 60 - 69)	\$33.00
51 - 58	( 70 - 79)	\$36.00
59 - 62	( 80 - 85)	\$39.50
63 - 73	( 86 - 99)	\$42.00
74 - 88	(100 - 110)	\$48.50
89 - 103	(102 - 140)	\$55.00
104 - 118	(141 - 160)	\$58.00

##### (ii) 4 Wheel Drive Tractors

Up to 11	(Up to 20)	\$22.00
12 - 22	( 21 - 39)	\$30.50
23 - 41	( 40 - 55)	\$31.50
42 - 48	( 56 - 65)	\$34.50
49 - 55	( 66 - 75)	\$38.50
56 - 63	( 76 - 85)	\$43.50
64 - 74	( 86 - 100)	\$44.50
75 - 88	(101 - 120)	\$48.50
89 - 103	(121 - 140)	\$59.00
104 - 118	(141 - 160)	\$65.50
119 - 136	(161 - 180)	\$70.50
Over 136	(Over 180)	\$81.50

##### (iii) Track Machines

23 - 41	( 40 - 55)	\$34.50
42 - 48	( 56 - 65)	\$42.50
Over 48	(Over 65)	\$57.00

##### (iv) Extra Implements

Plus the following extra charges for implements.

Up to 30	(Up to 40)	\$ 4.00
31 - 45	( 41 - 60)	\$ 4.50
46 - 60	( 61 - 80)	\$ 6.00
61 - 75	( 81 - 100)	\$ 7.50
Over 75	(Over 100)	\$10.00

- (v) Or plus the following extra charges for Rotary Hoes.

Up to 1.3 metres	\$ 5.00
1.3 - 1.5 metres	\$ 5.50
1.5 - 1.8 metres	\$ 7.00
1.8 - 2.0 metres	\$ 9.00
2.0 - 2.3 metres	\$11.50
2.2 - 2.5 metres	\$13.00
Over 2.5 metres	\$17.00

#### 4.5.7 Horticultural Contracting

Rotary Hoeing	\$100.00 per hectare
Discing	\$ 33.00 per hectare
Subsoiling	\$ 39.00 per hour
Direct drilling	\$ 30.60 per hectare
Drilling	\$ 29.30 per hectare

#### 4.6 DAIRY SHED SUPPLIES

##### 4.6.1 Milking Machines

National Dairy Association (N.D.A.)

17 Cluster Turn Style Milking System	\$10,160.00
22 Cluster	\$11,520.00
28 Cluster	\$15,480.00
36 Cluster	\$18,790.00
8 Cluster Herringbone Hiline Milking System	\$ 5,860.00
10 Cluster	\$ 6,660.00
12 Cluster	\$ 7,300.00
14 Cluster	\$ 7,940.00
16 Cluster	\$ 8,380.00
18 Cluster	\$ 9,390.00
20 Cluster	\$ 9,950.00

##### 4.6.2 Milking Shed Equipment

Inflations - Efco Monobloc No. 5	\$ 2.40 each
Monokura No. 6	\$ 2.50 each
Monobloc No. 15 (with petal mouthpiece)	\$ 2.40 each
Monokura No. 11 (with petal mouthpiece)	\$ 2.50 each

Smith No. 4 (for Smith 4-6		
cups only)		\$ 2.02 each
4-6 rubber Cup base		\$ 1.45 each
4-6 S/S Cup Shell		\$ 3.54 each
4-6 S/S Cup set		
(complete)		\$16.00 each
(All Smith inflations have		
petal mouthpiece)		
Cups and		
Claws	- Efco Monokura Cups Bare	\$39.20 set
	No. 9 Cluster Claws	\$25.50 each
	No. 10 Look-in Claw	\$42.20 each
Claw (black and white) Rubber Tubing - Blue Line		
152 mm x 7.9 mm x 4 mm		\$ 0.40c
178 mm x 7.9 mm x 4 mm		\$ 0.45c
3.6 m x 7.9 mm x 4 mm		\$ 6.36
Claw (black moulded reinforced)		
152 mm		\$ 0.55c
178 mm		\$ 0.55c
Air tubing (black and white)		
9.5 mm x 4.8 mm x 840 mm		\$ 2.20 each
9.5 mm x 4.8 mm x 1.07 m		\$ 2.70 each
9.5 mm x 4.8 mm x 1.22 m		\$ 3.25 each
9.5 mm x 4.8 mm x 1.42 m		\$ 3.90 each
9.5 mm x 4.8 mm x 1.73 m		\$ 5.00 each
9.5 mm x 4.8 mm x 4.27 m		\$11.55 each
Milk tubing (black and white)		
12.7 mm x 5.6 mm x 840 mm		\$ 3.00 each
12.7 mm x 5.6 mm x 1.07 m		\$ 3.90 each
12.7 mm x 5.6 mm x 1.22 m		\$ 4.55 each
12.7 mm x 5.6 mm x 1.42 m		\$ 5.25 each
12.7 mm x 5.6 mm x 1.73 m		\$ 6.35 each
12.7 mm x 5.6 mm x 4.27 m		\$15.35 each
Milk Pump tubing (black and white)		
Suction: 4.27 mm x 15.9 mm x 6.4 mm		\$21.80 each
Delivery: 3.66 mm x 19.1 mm x 7.9 mm		\$27.10 each
Suction: 3.66 mm x 22.2 mm x 9.5 mm		\$39.90 each
Sleeve Tubing (black)		
1.680 m x 28.6 mm x 9.5 mm		\$29.00 each
1.675 m x 35 mm x 6.4 mm		\$23.15 each

Spring Bends	
12.7 mm x 7.1 mm	\$ 1.90 each
12.7 mm x 22.2 mm x 6.4 mm	\$ 2.50 each
12.7 mm x 28.6 mm x 6.4 mm	\$ 2.60 each
12.7 mm x 35 mm x 6.4 mm	\$ 3.00 each
Longtail Bends	
12.7 mm x 7.1 mm	\$ 2.00 each
Milk Pump Diaphragms	
Efco No. 18A (for Efco 228 mm pumps - male thread - moulded insert piston plate)	\$13.35 each
Union Seals	
Efco 25.4 mm - 50.8 mm nitrile cone seals	\$ 1.15-1.30
Milking Machine Plugs	
(for 12.7 mm to 50.8 mm tubing)	\$ 0.50-1.50
Strap Plugs	
32 mm to 51 mm	\$ 2.00-2.80
Rubber Rings	
- vacuum tank	\$ 4.50
- tinned steel test bucket	\$ 4.50
- stainless steel test bucket	\$ 4.50
Sluicing Nozzles (1981 prices)	
- 25 mm, 31.7 mm with tap	\$27.62
- 25 mm, 31.7 mm, without tap	\$ 7.73
Calfeteria Equipment	
- Calf valves	\$ 1.20 each
- 15 teat calfeteria	\$126.50 each
- Calf teats, old type and self sealing	\$ 1.20 each
- Calfeteria tubing, 30m coils	\$18.00 each
Twinflex plastic shed hose	
- 25 mm x 50 m coil	\$135.00
- 32 mm x 30 m coil	\$ 99.00
- 38 mm x 30 m coil	\$120.00
Reverse flow clamps	\$ 4.50
Snap clamps	\$ 4.00
P.H.I. Jenson valves	\$ 4.00
228 mm S/S pump head (complete)	\$118.00
Stainless Steel Milk Filters (complete)	\$201.65

#### Filter Socks (100/pack)

70 mm x 585 mm	\$26.85
77 mm x 432 mm	\$31.15
76 mm x 610 mm	\$31.15
102 mm x 610 mm	\$32.10

#### Plate Coolers (N.Z. Dairy & Industrial Supplies)

Model M & MC/MM	No. of Plates	Milk Cooled litres/hr	Water Required litres/hr	Cost \$
200	18/33	900/ 900	2700/2700	\$420/ 618
250	20/39	1150/1150	3450/3450	\$447/ 668
300	24/45	1350/1350	4050/4050	\$475/ 758
350	26/51	1600/1600	4800/4800	\$503/ 850
400	30/57	1850/1850	4700/4700	\$562/ 938
500	36/67	2300/2300	5800/5800	\$658/1087
600	42/79	2750/2700	6900/6800	\$738/1267
700	48/-	3200/-	6400/-	\$830.00
800	54/95	3700/3700	7200/7400	\$920/1490

#### Zelos Energy Converters (NZDIS) for water heating.

##### Installed on-farm costs:

Model A	Stainless Steel	\$1,000
Model B	Stainless Steel with circulating pump	\$1,125

### 4.6.3 Dairy Hygiene

#### (i) Detergents and Sanitizers

Mycorinse	5 litre	\$ 8.95
	20 litre	\$ 34.20
Mycosan	5 litre	\$ 15.40
	20 litre	\$ 58.80
Klenz-Iodophor	5 litre	\$ 15.56
	20 litre	\$ 57.58
	200 litre	\$499.00
Klenzade Iodovat	5 litre	\$ 19.24
	20 litre	\$ 71.55
	200 litre	\$627.00
Q-Klenz	5 litre	\$ 16.86
	20 litre	\$ 61.77
	200 litre	\$555.00

Klenzade	5 litre	\$ 11.71
	20 litre	\$ 37.35
	200 litre	\$306.00
Klenzade Stainless Steel Detergent		
	5 kg	\$ 14.85
	6 kg	\$ 22.64
	20 kg	\$ 63.28
	25 kg	\$ 67.77
Nadasan	5 litre	\$ 14.50
	20 litre	\$ 52.80
Tri-Klenz	5 litre	\$ 11.67
	20 litre	\$ 42.89
	200 litre	\$392.00
Klenzphos Super 60	5 litre	\$ 20.36
	20 litre	\$ 78.73
A.T.C. Step 1	5 litre	\$ 11.89
	20 litre	\$ 41.73
	200 litre	\$357.00
A.C.T. Step 2	5 litre	\$ 19.55
	20 litre	\$ 68.66
	200 litre	\$631.00
(ii) Dairy Ointments, Soaps and Teat Protectants		
Elthamol Ointment	1.5 kg	\$ 6.05
	4.5 kg	\$ 15.44
	8.5 kg	\$ 26.85
	17 kg	\$ 50.45
Milkeeze Ointment	450 gm tin	\$ 3.60
	1.75 kg tin	\$ 8.95
	18 kg pail	\$ 76.55
Hibitane Antiseptic Dairy Cream	3.5 kg	\$ 14.89
	17 kg	\$ 56.93
Elthamol Soap	100 x 85 gm	\$ 23.00
Healex	4 litre	\$ 11.85
Klenzade Teat Guard	20 litre	\$ 89.76

### (iii) Dairy Sanitizers

Redene Iodophor	20 litre	\$ 53.40
Redene Milkstone Remover	5 litre	\$ 15.35
	20 litre	\$ 59.00
Redene Milkstone Remover HAF	5 litre	\$ 20.90
Redene Multiflow	200 litre	\$336.00
Redene Non-Ionic Rinse	200 litre	\$278.00
Redene Stainless Steel		
Detergent	20 kg	\$ 57.00
Redene Vat Cleanser	20 litre	\$ 63.60

### 4.6.4 Miscellaneous

Yard Broom	\$ 11.00
Rubber Scraper 300mm - 750 mm	\$13.81 - \$24.50
Scrubbing Brushes - wooden handle	\$ 4.00
- plastic handle	\$ 7.68
Gumboots - Marathon knee	\$ 35.45 per pair
- Redband short	\$ 25.45 per pair
Dairy Aprons - with pocket	\$ 13.48
- no pocket	\$ 12.92
Buckets 23 litre - plastic	\$ 10.98
- with lid	\$ 11.30
- galvanized	\$ 11.80
'Teatmaster' Teat sanitizer	
Spray Kit - including Fox	
diaphragm pump, 0.12 KW electric	
motor and 45 litre spray tank.	
Kit plus 3 spray guns, 30m	
outlet hose, wall mounting brackets	
and other necessary fittings	\$395.00
Carlyle Bloatenz Dispenser	\$367.00
AHI Mastitis Detector -	
Electronic conductivity - measuring	
apparatus	\$ 78.00

### 4.6.5 Typical Dairy Farm Expenses for Budgeting Purposes (Canterbury)

Assume 180 m.a. cows and replacements on 90 ha irrigated farm producing 158 kg milkfat per cow.

	Per kg Milkfat	Per Cow
	\$	\$
Wages	0.20	31.60
Animal health	0.12	18.96
Breeding	0.07	11.06
Herd testing	0.04	6.32

Shed expenses	0.06	9.48
Electricity (excluding irrigation)	0.11	17.38
Feed	0.15	23.70
Fertiliser	0.38	60.04
Freight	0.04	6.32
Repairs & maintenance	0.12	18.96
Vehicle running expenses	0.29	45.82
Administration and standing charges	0.09	14.22

#### 4.7 ELECTRICITY

- (i) Central Canterbury Electric Power Board Farm Tariffs.  
(N.B. These tariffs apply from 1st April 1981)

- F.1 Applicable to all farm installations.  
Up to 5 kW installed. Supply charge \$61.40 p.a.  
Plus all units at 9.240c each.

Each standard 10 Amp socket for portable appliances will be assessed at 1 kW but consumers with installed load of 5 kW may have 5 kW load limiter fitted and remain on Tariff F.1.

- F.2 Available to all permanently connected water heaters over 12 gallons capacity of the heat storage type used for culinary or ablutionary purposes. All waterheater installations on this tariff must comply with N.Z. Standard Specifications 4602 and 4603. Dairy type water heaters must comply with E.S.A.E.I. Specifications and all will be controlled off-peak at the discretion of the Board.

All units at 3.378c each.

- F.3 Available for all farm purposes except controlled water heating, between hours of 8.00 p.m. and 6.30 a.m.

All units at 2.839c each.

The Board will install and maintain an approved time switch or other means of control at a rental of \$9.80 p.a. Any device required to make the demand metering inoperative during the above night hours will be the responsibility of the consumer.

Where supply is on night rate only, fixed charge \$61.40 p.a.



When installed load is over 5 kW (refer F.1) kVA is to be measured. Demand charge 3.40 per kVA with a minimum of 2kVA plus all units at 5.184c each.

(ii) Some Examples of Electricity usage.

(N.B. These are approximate only and should only be used where no other figures are available.)

Milking machine 15-25 kWh per cow per 10 month lactation. Milk Cooler 45 kWh per annum.

Water heater (dairy shed) 60 kWh per cow per 10 month lactation.

Pressure Water supply (pump) 50 kWh per annum.

Average home 6000 kWh per annum.

Outbuildings \$150-\$200 per annum depending very much on the type and number of power tools used.

For further information see Lincoln College Budget Manual Part 1, Technical Section 22.3 - Electric Consumption Unit Performance Data.

#### 4.8 FEED

##### 4.8.1 Baler Twine

Heavy Sisal	4 spools conventional bales	\$ 98.64
Medium Sisal	6 spools large round bales	\$ 90.88
Superfilm Polypropylene	6 spools	\$110.25
Howard Big Baler		\$110.25
Hesston 4800 baler twine		\$110.25
Binder Twine (untreated sisal twine)		\$ 73.75

#### 4.8.2 Stock and Poultry Feeds

##### (i) Cattle

	Price per 40 kg bag	Price per tonne Bulk	Price per tonne Bagged
Peerless Calf Growa	\$10.96		
Dairy Ration	\$ 6.78		
Dairy Meal	\$ 6.74		
Barley Meal	\$ 9.79		
Beef Finisher	\$ 8.67		
Fleming-NRM Calf Crumbles	\$12.80		\$283.40
Dairy Crumbles	\$10.94	\$212.30	\$242.90
Cattle Pellets	\$11.66	\$228.00	\$258.60

##### Tomoana Weenemon Calf Meal

##### Suggested Prices

Ex store - 40kg bag	\$12.48 per bag*
Overline - 13 bags or more	\$11.55 per bag*
Ex store - up to 25 bags	\$29.85 per bag
Ex store - 25 bags or more	\$29.10 per bag
Overline - 25 bags or more	\$28.10 per bag

##### (ii) Sheep

Peerless Sheep Nuts	\$ 9.74
Hogget Grower Nuts	\$ 9.74
Stud Exported Nuts	\$ 9.74
Fleming-NRM Sheep Nuts	\$263.25
Sheep Nuts (Linseed)	\$295.60

##### Moose Protected Protein Sheep Nuts

Overline - 10 bags & over	\$288.60 per bag*
Tomoana Sheep Nuts	
Overline - 20 kg bags - 25 bags or more	\$255.30 per tonne*
Overline - 40 kg bags - 13 bags or more	\$250.86 per tonne*
Denkavit Lamb Milk Replacer (5 kg)	
Ex Store - per 5 kg bag	\$ 9.95 per bag

##### (iii) Pigs

Peerless Weena Growa	
Pellets	\$11.53
Porker Pellets	\$11.28
Baconer Feed	\$10.26
Fortified Pig Nuts	\$10.35
Pig Starter	\$16.17

Fleming-NRM

Pig Creep Crumble	\$21.14	\$434.10	\$464.70
Pig Weaner Pellets	\$16.03	\$322.90	\$353.50
Pig Grower Pellets	\$13.22	\$267.70	\$298.30
Pig Baconer Pellets	\$12.50	\$246.10	\$276.70
Pig Breeder Pellets	\$12.22	\$240.10	\$270.70

(iv) Deer

Peerless Deer Nuts 1	\$10.59	
Fleming-NRM Deer Nuts		\$259.40
Tomoana Deer Nuts		
Overline - 13 bags or more	\$288.60 per tonne*	

(v) Horses

	Price per 40 kg bag ex store	Price per tonne Bulk      Bagged
Peerless Horse Pellets	\$ 9.54	
Fleming-NRM		
Stud horse pellets	\$13.28	\$293.90
Horse & Pony Pellets	\$11.42	\$253.40
Pony Meal	\$ 7.03 (25kg)	\$249.80
Racehorse Pellets	\$12.13	\$268.90
Tomoana Racehorse Pellets		Suggested Price
Ex Store - 40 kg bags		\$11.67 per bag*
Overline - 13 bags or more		\$11.17 per bag*
Tomoana Hack & Hunter Pellets		
Ex Store - 40 kg bags		\$11.44 per bag*
Overline - 40 kg bags		
- 13 bags or more		\$10.95 per bag*
Ex Store - 20 kg bags		\$ 5.89 per bag*
Overline - 20 kg bags -		
25 bags or more		\$ 5.63 per bag*

\* F.O.R. Mataura (add freight)

(vi) Rabbits

Peerless Rabbit Ration	
No. 1 (40 kg)	\$11.35

(vii) Dogs

Peerless Top Dog Nuts (5 kg)	\$ 3.58
Shep Dog Biscuits (12 kg)	\$14.59
Tux Dog Biscuits (30 kg)	\$29.95

Tomoana Dog Crackers	
Ex Store - 10 kg bags	\$ 8.98 per bag
Ex Store - 20 kg bags	\$16.50 per bag
Ex Store - 40 kg bags	\$31.00 per bag
Overline - 40 kg bags	
for 13 bags or more	\$26.33 per bag
for 7 bags	\$28.08 per bag

(viii) Poultry

Peerless

Chick Pex	\$11.78
Grower Pex	\$10.36
Layer Pex	\$10.68
H.E. Layer Pex	\$10.24
Breeder Pex	\$10.60
Starter Broiler Feeders	\$14.86
Finisher No. 1	\$14.39
No. 2	\$13.95
No. 3	\$13.15
Turkey Starter Crumbles	\$16.15
Turkey Grower Pellets	\$15.95
Turkey Normal Starter	\$14.74
Turkey Breeder Pellets	\$11.77

Fleming-NRM

Chick Crumble	\$15.18	\$304.50	\$335.10
Pellet Grower Pellets	\$12.24	\$240.70	\$271.30
Hi-Lay Super Pellets	\$13.01	\$263.20	\$293.80
Hi-Lay Pellets	\$12.68	\$259.30	\$287.90
Turkey Starter		\$420.40	\$451.00
Turkey Grower		\$365.00	\$395.60
Turkey Finisher		\$346.40	\$377.00
Turkey Breeder		\$261.60	\$292.20

General Purpose (not ducks)

Starter	\$18.40
Finisher	\$15.90

(ix) Miscellaneous

Molasses 28kg pail	\$21.73
250kg drum	\$108.43
Agricultural Salt 50 kg	\$ 9.35
Bran	\$ 7.98
Summit Salt Blocks	
Magnesium	\$ 10.78
Copper Cattle	\$ 10.06
Multi-Mineral	\$ 10.60
Just Salt	\$ 9.42
Standard Blocks	\$ 9.78

Nutriex	
Seawood Standard	\$ 10.84
Nutriex Magnesium	\$ 11.65
Rumevite Mineralised Salt Block	
Ex Store	\$ 9.97/block
Overline - 25 blocks	
or more	\$ 8.80/block

I.C.I. - Tasman	
Ruminant Supp. 2.5 kg	\$ 10.45
10 kg	\$ 34.00
Chick Starter Supp. 10 kg	\$ 49.25
Dog Food Supp. 10 kg	\$ 61.20
Hi-E & Sel. 1 kg	\$ 26.45
Horse Supp. & Sel. 1 kg	\$ 11.20
2.5 kg	\$ 22.10
10 kg	\$ 75.40
Pig Breeder Supp. 10 kg	\$ 41.95
25 kg	\$101.50
Pig Creep Supp. 10 kg	\$ 35.25
Pig Grower/Fin Supp. 10 kg	\$ 43.25
Grower/Fin Supp. 25 kg	\$ 95.60
Pig Standard 2.5 kg	\$ 10.90
10 kg	\$ 29.60
25 kg	\$ 70.85
Poultry Breeder 10 kg	\$ 39.95
Poultry Broiler Supp. 10 kg	\$ 60.20
Poultry Grower Supp. 10 kg	\$ 34.80
Poultry Layer Supp. 10 kg	\$ 35.70
25 kg	\$ 79.75
Sol. Mineral Pig 20 kg	\$ 49.20
Tas. Sel. 10 kg	\$ 13.40
Turkey Supp. 10 kg	\$ 81.10

#### 4.8.3 Grazing Fees

Payment for grazing varies according to the class of livestock, the time of year, seasonal conditions and the district.

Current rates are approximately 25c-40c/head/week for sheep, and \$1.20-\$2.00/head/week for cattle.

#### 4.9 FREIGHT AND CARTAGE

##### 4.9.1 Railway Transport Rates

Railway charges are obtained from the Railways Department Tariff book and classifications book.

Type of Wagon	Stock Capacity	Freight Charge Rate
---------------	----------------	---------------------

Cattle

H wagon	8	M
HC (1/3 bigger than H)	11-12	M plus 1/3
T (Twice as big as H)	17	M double rate

Sheep

JC	80-90	M plus 1/3
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For explanation of M freight charge rate see Goods: Classified Rates below.

(i) Classification of Goods Carried.

Class B	Agricultural implements.
Class C	Tractors, Front end loaders, gates.
Class D	Binder twine, Insecticides, Clover Seed, Fencing material (not including wooden posts, stays, strainers and battens which are class E).
Class E	Bags, Grain, Seeds, Potatoes, Peas, Daggings, Wooden Posts, Stays, Strainers and Battens, Concrete products and Field tiles.
Class E + 50%	Hay, Straw, Chaff and Lime.
Class H	Wool
Class K	Timber
Class M	Livestock
Class R	Artificial Fertilisers
Class S	Fruit grown in New Zealand

(ii) Goods: Classified Rates

Distance Kilometre	B Per tonne	C Per tonne	D Per tonne	E Per tonne	E + 50% Per tonne
65	51.14	34.09	28.41	12.31	18.47
80	55.26	36.84	30.70	13.42	20.13
95	59.40	39.60	33.00	14.54	21.81
110	63.53	42.35	35.29	15.65	23.48
146	73.56	49.04	40.87	18.30	27.45
186	91.56	61.04	50.86	22.91	34.37
226	107.27	71.51	59.59	26.80	40.20
266	119.54	79.69	66.41	29.61	44.42
306	129.72	86.48	72.06	32.43	48.65
358	139.02	92.72	77.26	36.26	54.39
438	154.43	102.95	85.79	42.05	63.12
518	169.76	113.17	94.30	47.89	71.84
598	185.09	123.39	102.82	53.70	80.55
662	197.34	131.56	109.63	58.36	87.54

	H Undumped per bale	K Per cubic metre	M Per wagon	R Per tonne	S Per tonne
65	4.04	14.12	79.32	10.34	15.39
80	4.36	15.48	88.45	11.39	16.78
95	4.70	16.84	97.59	12.43	18.18
110	5.02	18.20	106.72	13.48	19.56
146	5.81	21.59	130.46	16.18	22.88
186	7.23	27.33	168.17	20.63	28.64
226	8.48	31.60	201.80	24.58	33.50
266	9.44	33.66	229.31	27.26	37.01
306	10.25	35.72	254.19	29.13	40.54
358	10.99	38.62	282.72	31.60	45.33
438	12.20	43.06	327.51	35.57	52.60
518	13.41	47.50	372.30	39.55	59.86
598	14.62	51.95	417.10	43.52	67.13
662	15.59	55.50	452.93	46.70	72.95

#### 4.9.2 Road Transport Rates

N.B.

The following figures are for the Canterbury area - in other areas the rates may differ slightly. Rates are available on application to the local branch of the New Zealand Contractors Federation (Incorporated).

Rates are as at December 1981 but changes are inevitable due to recent increases in fuel prices.

- (i) Lime (Bulk) Minimum load 4000 kg

Per Tonne		Per Tonne	
8 km	\$ 5.24	16 km	\$ 6.93
24 km	\$ 8.24	32 km	\$ 9.46
40 km	\$10.78	48 km	\$11.91
56 km	\$13.24	64 km	\$14.18
72 km	\$15.13	80 km	\$16.07

For Transport Subsidies on Fertiliser and Lime, see Subsidies Section, 1.4.3.

- (ii) Fertiliser (Bulk) Minimum load 4000 kg.

Per Tonne		Per Tonne	
8 km	\$ 5.80	16 km	\$ 7.49
24 km	\$ 9.17	32 km	\$10.78
40 km	\$12.10	48 km	\$13.24
56 km	\$14.37	64 km	\$15.51
72 km	\$16.64	80 km	\$17.78

- (iii) Fertiliser and Lime (Bagged) Minimum load 3000 kg.

Per Tonne		Per Tonne	
8 km	\$ 8.05	16 km	\$10.11
24 km	\$11.79	32 km	\$13.62
40 km	\$15.13	48 km	\$16.64
56 km	\$18.15	64 km	\$19.48
72 km	\$20.61	80 km	\$21.75

For Transport Subsidies on Fertiliser and Lime, see Subsidies Section, 1.4.3.

The subsidy is calculated on the distance from the farm to the nearest fertiliser works, or, in the case of an ordered imported line to the port of entry.



- (iv) Hay Truck and Driver only. Minimum load 120 bales. 40 bales or more per tonne - less 3c per bale.

Picking up unsledged bales or extra high stacking by arrangement.

No charges included for extra labour which is to be arranged.

	Per Bale		Per Bale
8 km	\$0.356	16 km	\$0.449
24 km	\$0.543	32 km	\$0.624
40 km	\$0.690	48 km	\$0.756
56 km	\$0.813	64 km	\$0.870
72 km	\$1.068	80 km	\$1.135

- (v) Bagged grain under 16 tonne.

	Per Bag		Per Bag
8 km	\$0.505	16 km	\$0.562
24 km	\$0.768	32 km	\$0.737
40 km	\$0.946	48 km	\$1.021
56 km	\$1.097	64 km	\$1.172
72 km	\$1.248	80 km	\$1.324

Ex paddock - schedule rate plus \$0.108 per sack, includes bag loaded and all labour. Ex heap in paddock - schedule plus \$0.05 per sack.

- (vi) Grain (Bulk) Ex acceptable silo. Minimum load 4000 kg.

	Per Tonne		Per Tonne
8 km	\$ 5.43	16 km	\$ 7.11
24 km	\$ 8.61	32 km	\$10.02
40 km	\$11.35	48 km	\$12.48
56 km	\$13.62	64 km	\$14.56
72 km	\$15.51	80 km	\$16.45

Where silos are not completely self emptying, add \$0.49 per tonne.

Auger charges \$0.76 per tonne.

Ex header \$1.89 per tonne by arrangement.

Converting bags to bulk \$1.89 per tonne.

(vii) Grass Seed Boxes over 1000 kg. Minimum 8 boxes.

Per Tonne		Per Tonne	
8 km	\$ 7.58	16 km	\$ 9.27
24 km	\$10.76	32 km	\$12.20
40 km	\$13.52	48 km	\$14.66
56 km	\$15.79	64 km	\$16.74
72 km	\$17.68	80 km	\$18.63

Boxes under 1000 kg. Minimum 16 boxes.

Per Tonne		Per Tonne	
8 km	\$ 9.75	16 km	\$11.44
24 km	\$12.94	32 km	\$14.39
40 km	\$15.71	48 km	\$16.85
56 km	\$17.98	64 km	\$18.93
72 km	\$19.87	80 km	\$20.82

If farmer loads boxes efficiently, deduct \$2.84 per box. For less than minimum loads add \$1.89 per box for first 5 boxes and \$0.95 per box thereafter.

Empty boxes.

Each		Each	
8 km	\$1.97	16 km	\$2.43
24 km	\$2.62	32 km	\$2.84
40 km	\$3.03	48 km	\$3.21
56 km	\$3.40	64 km	\$3.59
72 km	\$3.78	80 km	\$3.97

(viii) Grass Seed and other small seeds (bagged)

16 bags and over to the tonne. Minimum load 48 bags.

Per Bag		Per Bag	
8 km	\$0.449	16 km	\$0.562
24 km	\$0.655	32 km	\$0.737
40 km	\$0.804	48 km	\$0.870
56 km	\$0.936	64 km	\$1.002
72 km	\$1.068	80 km	\$1.135

Ex paddock add \$0.091 per sack.

Ex heap in paddock add \$0.051 per sack.

(ix) Wool by Road. Minimum load 14 bales.

	Per Bale (150 kg)		Per Bale (150 kg)
8 km	\$1.87	16 km	\$2.43
24 km	\$2.86	32 km	\$3.31
40 km	\$3.69	48 km	\$4.03
56 km	\$4.31	64 km	\$4.54
72 km	\$4.73	80 km	\$4.92

Add \$0.29 per bale off ground.

(x) Potatoes

	Per Bag		Per Bag
8 km	\$0.505	16 km	\$0.655
24 km	\$0.768	32 km	\$0.870
40 km	\$0.946	48 km	\$1.021
56 km	\$1.09	64 km	\$1.172
72 km	\$1.248	80 km	\$1.324

These prices are for ex shed or store.

Ex paddock add \$0.123 per bag unless farmer supplies labour in which case only add 8c per bag.

Ex heap in paddock add \$0.04 per bag unless farmer supplies labour in which case normal rates apply.

Minimum load 39 bags.

(xi) Sheep, Lambs and Hoggets by Road (all per head)

	Store Lambs	Fat Lambs	Hoggets
8 km	\$0.281	\$0.255	\$0.318
16 km	\$0.346	\$0.384	\$0.417
32 km	\$0.482	\$0.548	\$0.592
48 km	\$0.605	\$0.681	\$0.743
64 km	\$0.719	\$0.794	\$0.879
80 km	\$0.813	\$0.889	\$0.974
97 km	\$0.898	\$0.993	\$1.108
113 km	\$0.974	\$1.089	\$1.194
129 km	\$1.051	\$1.184	\$1.299
145 km	\$1.127	\$1.280	\$1.394
161 km	\$1.209	\$1.382	\$1.497
Minimum load			
Under 40 km	100	90	85
Over 40 km	120	100	100

Store Sheep    Fat Sheep

8 km	\$0.304	\$0.356
16 km	\$0.449	\$0.468
32 km	\$0.633	\$0.690
48 km	\$0.804	\$0.898
64 km	\$0.964	\$1.078
80 km	\$1.097	\$1.258
97 km	\$1.222	\$1.442
113 km	\$1.299	\$1.595
129 km	\$1.413	\$1.748
145 km	\$1.509	\$1.872
161 km	\$1.612	\$1.996

Minimum load

under 40 km	85	80
over 40 km	100	90

A lamb becomes a hogget on 1 September.    A hogget becomes a sheep on 1 January.

Penal rates for Sheep and Lambs:

These will apply where the farmer does not give the cartage contractor 24 hours notice of the job to be done.

Lambs per head \$0.055.

Sheep per head \$0.074.

Where facilities for loading are inadequate, an additional charge of \$0.019 per head shall be made for sheep and lambs.

(xii) Cattle (all per head)

	Weaners	Yearlings	18 month Cattle
8 km	\$1.54	\$1.82	\$ 2.40
16 km	\$2.08	\$2.51	\$ 3.29
32 km	\$3.08	\$3.76	\$ 4.69
48 km	\$3.93	\$4.88	\$ 6.32
64 km	\$4.77	\$5.86	\$ 7.47
80 km	\$5.52	\$6.81	\$ 8.38
97 km	\$6.28	\$7.66	\$ 9.30
113 km	\$6.88	\$8.29	\$10.07
129 km	\$7.32	\$8.86	\$10.68
145 km	\$7.70	\$9.30	\$11.21
161 km	\$8.12	\$9.73	\$11.73

Minimum load

under 40 km	14	12	10
over 40 km	20	16	14

## 2 year cattle Fat Cattle

8 km	\$ 2.85	\$ 3.07
16 km	\$ 3.39	\$ 3.86
32 km	\$ 5.64	\$ 6.32
48 km	\$ 7.18	\$ 8.21
64 km	\$ 8.64	\$10.10
80 km	\$10.00	\$11.48
97 km	\$11.06	\$13.03
113 km	\$12.38	\$14.23
129 km	\$13.10	\$15.05
145 km	\$13.75	\$15.76
161 km	\$14.40	\$16.43

Minimum load

under 40 km	8	8
over 40 km	12	10

Penal rates for cattle: \$0.55 per head where the farmer does not give 24 hours notice of job to be done.

Bulls over 2 years, an additional \$3.93 per head. Where loading ramp is not provided or is not usable, for loading and unloading, then a charge of \$2.48 per head of cattle shall be made.

(xiii) General Good. Minimum load 3000 kg.

16 km	\$11.05
32 km	\$14.75
48 km	\$17.96
64 km	\$20.80
80 km	\$23.07

### 4.9.3 Air Rates

External

Freight Rates:

	Fruit	100 kg	250 kg	500 kg	1000 kg
	(Sydney)				
to	Australia	\$1.32/kg	\$1.05/kg	82c/kg	-
to	Singapore	\$1.62/kg	-	\$1.49/kg	\$1.41/kg
to	London	-	\$3.57/kg	\$3.37/kg	\$3.10/kg

Flowers: 45 kg min. 100 k min.

to	Sydney -	\$1.18/kg, 1.05/kg
to	Singapore -	100 kg min. \$2.00/kg
to	London (commodity rate no. 1420) flowers	
	45 kg min.	\$3.45/kg, or 100 kg min. \$3.21/kg.

Nursery stock, bulbs, seeds and tubers excluding cut flowers.

No. 1400 100 kg min \$4.29  
1000 kg min \$3.82

Internal

Freightair Christchurch to Auckland 87c per kg.  
Christchurch to Wellington 52c per kg.

Jet X 50% surcharge on Freightair guaranteed delivery in morning by 9.00 a.m.

#### 4.10 FERTILISERS

##### 4.10.1 Fertiliser Subsidies

For price and freight subsidies see "Assistance and Incentives for Farmers", Section 1.3.

##### 4.10.2 Ravensdown Fertiliser Co-operative Ltd (ex Works Christchurch)

As at November 1980

N	P	K	S		Farmers Bulk Per tonne	Farmers Bags Per tonne
RATING						
0	8	0	10	Flowmaster Super	117.95	133.95
0	9	0	11	Super	120.85	136.85
0	7	0	8	Serpentine Reverted Super	113.65	129.65
0	8	0	10	Boron Super	132.35	148.35
0	8	0	10	Cobalt Super	147.20	163.20
0	8	0	10	Copper Super	139.55	155.55
0	8	0	10	Molybdate Super	129.40	145.50
0	8	0	10	Legume Establishment Fertiliser	139.85	155.85
0	7	7	9	15% Potash Super	130.70	146.70
0	6	14	7	30% Potash Super	142.40	158.40
0	6	14	7	30% Potash Boron Super	154.95	170.95
0	6	14	7	Potash Molybdate Super	152.85	168.85
0	4	24	5	50% Potash Super	158.05	174.05
0	4	24	5	50% Potash Boron Super	171.35	187.35
0	7	0	18	Sulphur Super	126.85	142.85
0	7	0	26	Sulphur Super Extra	134.70	150.70
0	6	11	14	22% Potash Sulphur Super	142.20	158.20

0	5	14	15	30% Potash Sulphur Super	150.25	166.25
0	7	0	15	Westland Pakihi Starter	147.85	163.85
6	6	0	14	Nitrogen Super	155.95	171.95
6	6	0	14	Nitrogen Super with Double Boron	178.00	194.00
6	5	5	13	Cropmix	159.10	175.10
6	5	5	13	Cropmix with Double Boron	185.80	201.80
2	7	0	11	Cropmix T & R	130.95	146.95
8	4	8	14	Orchard Regular	177.80	193.80
8	4	8	14	Orchard Regular with Boron	181.65	197.65
6	4	12	12	Orchard High K	174.40	190.40
6	4	12	12	Orchard High K with Boron	178.25	194.25
8	4	8	13	Berryfruit Fertiliser	259.50	275.50
18	20	0	10	Cropmaster DAP	449.65	465.65
46	0	0	0	Urea	-	435.00
20	0	0	1	Liquid Nitrogen	235.10	-
26	0	0	0	CAN	-	356.60
21	0	0	24	Ammonium Sulphate	237.75	253.75
0	0	48	0	Potassium Chloride	196.00	212.00
0	0	40	17	Potassium Sulphate	-	460.95

#### SPECIAL MIXTURES:

Orders for Special Mixtures will be accepted ONLY for 2 tonnes or more.

\*\*\* DO NOT SOW BORATED FERTILISERS IN CONTACT WITH SEED.

ALL PRICES ARE SUBJECT TO ALTERATION WITHOUT NOTICE.

#### 4.10.3 Yates Fertilisers October/November 1981.

Liquifos N.P.K. 9-4-8			
with Optigrowth		200 litre	\$353.00
		20 litre	\$ 42.50
		10-3-6	200 litre drum \$282.00
			20 litre drum \$ 32.88
		8-5-10	200 litre drum \$336.00
			20 litre drum \$ 39.38
Liquifos N.P.K. 0-7-14		200 litre drum	\$331.00
		20 litre drum	\$ 38.75
		16-2-4	200 litre drum \$284.00
			20 litre drum \$ 33.25
Micro Nutrient Supplement			
Optigrowth		200 litre drum	\$474.00
		20 litre drum	\$ 56.25
Sulphur Based Soil Conditioner			
Plus 5		200 litre drum	\$266.00
		20 litre drum	\$ 31.1

Liquid Seaweed Strength 5		
Concentrate for Agriculture	22 litres	\$ 79.19-
and Horticulture use		92.85
Sporumix A Trace Element Mix	45 kg	\$ 29.36-
		34.04
Sporumix B Trace Element Mix	45 kg	\$ 23.05-
		29.15
Keiserite	50 kg bags	\$314.12-
		429.90
Sulphur Flowers	34 kg bags	\$ 42.24-
		46.74
Zinc Sulphate	25 kg	\$ 23.32-
		26.44
	50 kg	\$ 36.55-
		45.89
Sulphate Ammonia 21%	50 kg	\$295.11-
		358.75
Urea 46% N ex Japan	50 kg bags	\$506.27-
		595.71
J.B.D.U. 31%	25kg bags	\$ 30.11-
		34.35
Rustica 12-5-14 + 2 mgo	50 kg bags	\$488.71-
		556.34
Acid Gro Plus Fert.	50 kg bags	\$247.83-
		362.57
	Bulk tonne	\$233.33
Bulb Gro Plus Fert.	50 kg tonne	\$259.68-
		374.34
	Bulk tonne	\$245.18
Crop Plus Fert.	50 kg bags	\$214.87-
		250.45
Crop Gro Plus	Bulk tonne	\$200.37
Grass Gro Plus Fert.	50 kg bags	\$214.87-
		250.43
	Bulk tonne	\$200.37
Grass Organic Fert.	50 kg bags	\$222.88-
		258.44
Grass Organic Groplus	Bulk tonne	\$208.38
Grass Potassic Fert.	50 kg bags	\$209.13-
		244.69
	Bulk tonne	\$194.63
Haypaddock Gro Plus	50 kg bags	\$257.09-
		292.25
	Bulk tonne	\$242.59
Lawntone Gro Plus	50 kg bags	\$262.54-
		391.70
	Bulk tonne	\$262.54
Lucerne Estab. Fert.	50 kg bags	\$249.32-
		284.99
	Bulk tonne	\$235.93
Lucerne Main Fert.	50 kg bags	\$263.02-
		303.10



Lucerne Main Fert.	Bulk tonne	\$249.52
Maize Basal Fert.	50 kg bags	\$298.84
		(Auckland)
	Bulk tonne	\$284.34
Rose Gro Plus Fert.	50 kg bags	\$357.32-
		445.09
Strawberry Gro Plus	50 kg bags	\$288.43
		(Auckland)
Strawberry Gro Plus	Bulk tonne	\$273.93
Blood and bone	50 kg bags	\$297.00
		(Auckland)
Dried blood	50 kg bags	\$541.70-
		567.14
Magnesium Sulphate	50 kg bags	\$405.99-
		523.27
Dolomite	40 kg bags	\$222.70-
		279.56
Potash Nitrate (Crystal)	50 kg bags	\$713.75-
		835.05

#### 4.10.4 Ammo-phos N.Z. Ltd

##### North Island F.O.R. Napier

Grade				Bulk (per tonne)	Bagged (per tonne)
N	P	K	S		
19	4	0	20	\$370.90	\$387.45
16	9	0	14	\$407.90	\$424.50
15	7	5	13	\$412.90	\$429.50
13	6	11	12	\$410.30	\$426.90
12	10	10	9	\$443.70	\$460.30
11	19	0	3	\$489.50	\$506.10
10	18	8	2	\$493.65	\$510.25
8	14	13	3	\$473.50	\$490.10
8	10	20	3	\$463.35	\$479.95

##### South Island - Ex Brightwater Store

N	P	K			
12	10	10		\$458.90	\$475.50
11	19	0		\$473.35	\$489.95
16	9	0		\$410.25	\$426.85
16	5	5		\$403.00	\$419.60
8	13	15		\$449.45	\$466.05
21	0	0		\$338.40	\$355.00

##### - Ex Bluff Store

12	10	10		\$458.90	\$475.50
11	21	0		\$483.35	\$499.95
16	10	0		\$415.25	\$431.85
16	5	5		\$403.00	\$419.60

8	15	15	\$456.40	\$473.00
21	0	0	\$338.40	\$355.00

#### 4.10.5 Canterbury Bye Products

Meat and Bone Meal	\$16.00 per 50 kg
Dried Blood	\$26.00 per 50 kg

#### 4.10.6 Bell-Booth

Maxicrop	5 litres	\$ 15.50
Maxicrop (Agricultural packs)		
Multiple Concentrate	20 litres	\$ 85.00
	200 litres	\$760.00

#### 4.10.7 New Zealand Farmers' Fertiliser Company Limited As at 4 July 1980 - ex Auckland Works

N	P	K	S	PRODUCT	Bulk Per tonne \$	Bagged Per tonne \$
0	10	0	11	Superphosphate	120.55	136.55
0	7	0	8	Serpentine Super.	110.80	126.80
0	7	0	8	Reverted Super	102.40	118.40
0	5	0	5	Super Lime 1/1	71.00	87.00
0	6	0	7	Super Dolomite 2/1	130.60	146.60
0	10	1	11	Cobalt Superphosphate	139.05	155.05
0	10	0	11	Copper Superphosphate	131.60	147.60
0	10	0	11	Superphosphate with Molybdenum	132.80	148.80
7	6	0	15	Ammoniated Super.	161.40	177.40
6	6	5	13	Crop Fertiliser	163.90	179.90
0	9	7	9	15% Potash Super.	134.15	150.15
0	8	7	9	15% Potash Cobalt Superphosphate	152.65	168.65
0	8	7	9	15% Potash Copper Superphosphate	145.10	161.10
0	8	7	9	15% Potash Super with Molybdenum	146.45	162.45
0	6	7	7	15% Potash Serpentine Superphosphate	126.10	142.10
0	6	10	7	20% Potash Serpentine Superphosphate	130.50	146.50
0	7	14	7	30% Potash Super.	145.90	161.90
0	7	14	7	30% Potash Copper Superphosphate	156.70	172.70
0	7	14	7	30% Potash Super with Molybdenum	158.20	174.20

0	5	14	6	30% Potash Serpentine Superphosphate	139.30	155.30
0	5	24	5	50% Potash Super.	161.80	177.80
0	4	24	4	50% Potash Serpentine Superphosphate	156.95	172.95
0	0	50	0	Free Flow Muriate of Potash	198.90	214.90
21	0	0	24	Sulphate of Ammonia	236.95	252.95
0	0	40	18	Sulphate of Potash (in bags)		481.55
46	0	0	0	Urea (in bags)		466.75
20	0	0	0	Liquid Nitrogen		211.55
8	6	20	9	Top Crop Green	341.60	357.60
8	6	20	9	Top Crop Green plus 5% Magnesium	370.85	386.85
10	9	16	6	Top Crop Blue	364.75	380.75
10	9	16	6	Top Crop Blue plus 5% Magnesium	390.15	406.15
12	12	12	5	Top Crop Red	387.80	403.80
12	12	12	5	Top Crop Red plus 5% Magnesium	411.40	427.40
14	14	8	4	Top Crop Brown	407.10	423.10
14	14	8	4	Top Crop Brown plus 5% Magnesium	433.80	449.80
16	9	0	15	Ammonium Phosphate Sulphate	342.90	358.90
18	20	0	2	Di-Ammonium Phosphate	393.70	409.70

These Hormophos lines are available only from 1st May to 31st August each year. Prices are plus railage and less transport subsidy ex New Plymouth Works.

#### 4.10.8 Fertilisers for Horticultural Use

		\$
Ammophos 12.10.10	5 kg	3.65
Blood and bone	15 kg	4.35
Dolomite	40 kg	6.85
Dried Blood	5 kg	3.85
Fruitfed Liquid Feed	32 litres	32.96
Magnesium Sulphate	5 kg	3.15
Nitrophoska foliar	20 litres	54.00
Nitrophoska permanent	25 kg	20.32
Potassium Nitrate	5 kg	4.60
Berryfruit Fertiliser NPK 8-4-8	bagged	
	tonne	275.50
	bulk tonne	259.50

Orchard Regular NPK 8-4-8	bagged tonne	193.80
	bulk tonne	177.80
Wuxal NPK 9.4.6 (plus trace elements)	5 litres	17.40

#### 4.10.9 Spreading Fertiliser and Seed

##### (i) Ground Spread Fertiliser

Average Paddock Size	Cost per Hectare
Under 4 hectares	\$5.00
4-8 hectares	\$4.50
8-16 hectares	\$4.00
Over 16 hectares	\$3.60

Minimum cartage as for 4 tonnes.

Stoney, Swampy and hill country - extra by arrangement.

##### (ii) Aerial Spreading Fertiliser

In the year to 31 March 1979 the average tonnage of lime and fertiliser applied per revenue hour flown was 11.07 tonnes, this being slightly below the average for the preceding years. However the range varies from 8 tonnes to around 16 tonnes per hour depending on the position of the airstrip, prevailing weather conditions and the nature of the country to be oversown.

Therefore it is suggested for budgeting purposes that an average figure of 12 tonnes per hour be used.

##### Airwork Agricultural Aviation

Fletcher, Beaver, Pawnee, Brave 375	\$405/hour	\$32/tonne
(1 tonne payloads)		

##### James Aviation

Agwaggon	\$301/hour
Airtruck 300 hp	\$357/hour
Fletcher 300 hp	\$329/hour
Fletcher 400 hp	\$393/hour

With some companies there are discounts for heavy sowings or large amounts and penalty rates for light sowings or small amounts.

(iii) Aerial Sowing of Seeds and Prills

All the costs listed below are on a per 100 kg basis. The costs are variable according to the application rate per hectare and the total weight of seed or prills.

Total Weight of Seed or Prills	9-14 kg/ Hectare	15-29 kg/ Hectare	Over 30 kg/ Hectare
	per 100 kg		
Under 225 kg	\$90.70	\$76.60	\$68.75
226-905 kg	\$76.60	\$58.90	\$52.10
Over 905 kg	\$68.75	\$47.10	\$39.30

Minimum charge per job \$117.30. Under 8 kg per hectare \$139.50 per 100 kg.

#### 4.11 LIME

##### 4.11.1 Cost per tonne ex quarry. (North Canterbury)

Hydrated Lime	per bag	\$4.45
Crushed Lime	per bag	\$8.61
Green Lime	per tonne	\$10.00

The cost is influenced considerably by the distance from source therefore the cost of lime also differs.

##### 4.11.2 Spreading Cost per hectare.

	Flat Grassed	Flat Worked & Rolled	Hill worked & Grassed
Under 2.5 tonnes/ha	\$4.50	\$5.00	Flat rates plus
2.5 tonnes/ha	\$5.00	\$5.60	up to 25% per
Over 2.5 tonnes/ha	\$5.60	\$6.00	hectare extra

Worked paddocks not rolled, orchards, swampy and boulder country are all subject to additional rates by arrangement.

## 4.12 SEEDS

The prices quoted in this section are as at late December 1981. All prices are inclusive of seed treating, unless stated otherwise.

### 4.12.1 Wheat

Variety	Cost of Seed per tonne Certified 2nd Generation
Kopara, Aotea, Gamenya	
Raven, Cross 7-61, Takahe	\$373.65
Hilgendorf	\$419.65
Karamu	\$350.15
Arawa	\$359.65
Extra for 1st generation	\$ 6.50

### 4.12.2 Barley

Cost of seed per tonne for Certified 2nd Generation.

Manapou, Mata	\$398.00
Zephyr	\$370.00

### 4.12.3 Oats

Mapua, Amuri, Taiko	\$350.00/tonne
	\$ 70.50 treated

### 4.12.4 Lupins

Uniwhite, Uniharvest (estimate)	\$240.00/tonne
Bitter blue, Borre (estimate)	\$245.00/tonne

### 4.12.5 Ryecorn

Rahu	\$320.00/tonne U/D
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### 4.12.6 Linseed

Redwood	\$500.00/tonne
Hinu	\$560.00/tonne

#### 4.12.7 Maize

Various hybrids (treated)	\$336 to \$470/ tonne
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#### 4.12.8 Peas

(i) Field	
Maples	\$450.00/tonne
Blue	\$450.00/tonne
White	\$450.00/tonne
(ii) Garden	
Various varieties	\$291.00/tonne

#### 4.12.9 Small Seeds

The following can only be a rough guide as the small seeds market is extremely variable, with almost daily fluctuations in prices. All prices are per kilogram of basic seed.

Rape Rangī	\$4.00
Swedes	\$4.50
Turnips	\$4.00
Kale Medium stemmed	\$3.40
Giant	\$6.00

Lucerne (certified)	
Wairau	\$6.50
Saranac	\$9.25

Ryegrasses	
Ruanui	\$1.80
Nui	\$2.25
Ariki	\$2.32
Manawa	\$1.55
Paroa	\$1.05
Tama	\$1.40

Apanui Cocksfoot	\$4.75
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Clovers	
Hamua	\$3.23
Turoa	\$4.20
Huia	\$4.00

#### 4.12.10 Seed Coating

	c/kg
Ryegrass	88
Dogstail, Timothy, Cocksfoot	105
Lucerne	99
Red, White and Sub. Clover	99

#### 4.12.11 Vegetable Seeds

##### Carrot:

Egmont Gold	\$18.96/500g
Manchester Table	\$21.48/500g
Top Weight	\$24.48/500g

##### Onion:

Californian Red	\$56.42/500g
Pukekohe Ultra	\$20.90/500g
Pukekohe Long Keeper (M & R)	\$21.95/500g
White Lisborne	\$38.05/500g

Bean: French bean	\$ 4.35/kg
Tender green	\$ 4.35/kg
Top crop	\$ 4.35/kg
Green Beauty	\$ 4.35/kg

##### Runner Bean:

Mangere pole	\$ 4.35/kg
Streamline	\$ 4.35/kg

##### Broad Bean:

Exhibition Long Pod	\$ 2.36/kg
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##### Butter Bean:

Golden Wax	\$ 4.35/kg
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##### Broccoli:

Fordhock Early	\$230.10/500g
Fordhock Late	\$251.04/500g
Fordhock Medium	\$249.68/500g

##### Cabbage:

Green Gold	\$161.72/500g
Festival	\$185.50/500g
Red Cabbage	\$ 13.23/500g



Lettuce:	
Webbs Wonderful	\$ 17.00/500g
Triumph	\$ 39.11/500g
Great Lakes	\$ 32.57/500g
Cauliflower:	
All Year Round	\$ 74.65/500g
White Acre	\$ 55.00/500g
Selection 174	\$238.20/500g
Parsnip:	
Hollow Crown	\$ 11.00/500g
V.I.P.	\$ 11.00/500g
Yates Nip	\$ 11.10/500g
Pea:	
Green Feast	\$ 1.38/1 kg
Onward	\$ 1.44/1 kg
W.F. Massey	\$ 1.43/1 kg
Sweet Corn:	
Golden Cross Bantam	\$ 3.50/500g
Miracle	\$ 6.90/500g
Makona	\$ 4.17/500g
Silver Beet:	
Dark Green	\$ 7.00/500g
Master Green	\$ 6.90/500g
Tomato:	
Moneymaker	\$ 6.61/25g
Potentate	\$ 14.80/25g
Potato:	
Chippewa	\$ 2.30/3 kg
Ilam Hardy	\$ 2.20/3 kg
Red King Edward	\$ 2.30/3 kg
Asparagus:	
Mary Washington	\$ 29.50/500g
Beet: Detroit Dark Red	\$ 7.42/500g
Broccoli (sprouting):	\$ 13.69/500g
Brussel Sprouts:	\$ 27.72/500g
Squash:	
Red Warren	\$ 13.34/500g
Swede:	\$ 3.72/500g
Turnip:	\$ 5.21/500g

Marrow:	
Black Zucchini	\$ 17.74/500g
Long Green Bush	\$ 10.29/500g
Cucumber:	\$ 16.73/500g
Leek:	
Musselborough	\$ 19.30/500g
Pumpkin:	
Whangaparoa Crown	\$ 20.65/500g
Triumbe	\$ 13.17/500g
Tri Star	\$ 32.55/500g
Radish:	
White Icicle	\$ 6.80/500g
Spinach:	
Medania	\$ 6.32/500g

#### 14.12.12 Flower Seeds

Carnations	\$ 50.32/100g
Freesia	\$ 65.78/100g
Aster	\$ 76.92/100g
Chrysanthemum	\$ 84.92/100g
Dahlia	\$ 17.22/100g
Geranium (per 100 seeds)	\$ 22.54
Gerbera (per 100 seeds)	\$198.02
Lobelia	\$121.00/100g
Marigold	\$ 20.26/100g
Gypsophyla	\$ 56.72/10g
Polyanthus	\$131.72/10g
Sweetpea	\$ 12.20/100g
Wallflower	\$ 22.02/100g
Zinnia	\$ 18.34/100g

#### BULBS

Daffodils (packs of 15)	\$ 7.00
Hyacinths (packs of 2)	\$ 3.41
Tulips (packs of 15)	\$ 8.46

### 4.13 SHEARING SHED EXPENSES

#### 4.13.1 Plant

(i) Shearing Machines	
Sunbeam Heavy Duty S.G.V.	\$682.00
Multi-purpose Farm Model	\$402.00

	Lister Golden Electric	
	Single phase	\$726.00
	Three phase	\$726.00
(ii)	Electric Grinders	
	Sunbeam Double-ended 37cm	\$795.00
	Lister Double-ended	
	Single phase	\$857.00
(iii)	Handpieces	
	Sunbeam 'Super-grip'	\$235.50
	Lister 'Gun grip'	\$264.00
(iv)	Woolpresses	
	Donald 'Sandow' Manual Vert.	
	Hoist - wood	\$1,140.00
	- steel	\$1,155.00
	Electric 0.5 KW Tipover -	
	steel	\$2,350.00
	- with castors	\$2,470.00
	Electric 1.5 KW Tipover -	
	steel	\$2,920.00
	No-tramp hydraulic	\$3,537.00
	Hayes 'Stevlyon' Auto.	
	Hydraulic Press	\$4,450.00
(v)	Wool Tables	
	Hayes 'Stevlyon' Fleece	
	Weigher Table	\$ 696.00
	Circular wool table	\$ 280.00
	Grigg Right-angled table	\$ 480.00
	Aabaas Round wool table	\$ 240.00
	Cyclone wool table	\$ 250.00
(vi)	Wool Pack Holders	
	Cyclone On Skids	\$ 47.66
	On 2 Shepherd Castors	\$ 69.93
	On 4 Shepherd Castors	\$ 86.28
	Cyclone Wool Bin Partitions	\$ 76.00
	Mobile Fleece Bin	\$ 203.00
(vii)	Dagging Plant	
	Sunbeam portable petrol	\$ 410.00
	Lister portable petrol	\$ 350.00
	Tas portable petrol	\$ 350.00
	Cam portable 12B electric	\$ 285.00
(viii)	Miscellaneous	
	Donald Woolbale barrow	\$ 80.00
	Fleece weigher	\$ 172.00
	Hand Shears - small	\$ 10.35
	- large	\$ 12.35

#### 4.13.2 Shed Expenses

Wool packs (1 per 150 kg) Jute	\$	4.68
Synthetic	\$	4.83
Twine (per hank)	\$	2.25
Bale Needles (average price)	\$	1.00
'Stendye' Aerosol Markers (Black, red, green, blue) 400 gm	\$	3.65
Wool Bale Stencils - Circular		
Numerals 75 mm	\$	14.85
- Circular Letters 75 mm	\$	31.75
- Wool store Interlocking		
75 mm 0-9	\$	10.83
A-Z	\$	27.25
Grinder Papers (each)	\$	3.30

#### 4.13.3 Wool Charges

Wool charges incurred as at 28.9.81.

Receiving on Sale by Sample	7.420c/kilo
Receiving, Warehousing, Weighing, Lotting etc.	8.206c/kilo
Reclassing and Binning Fleece	7.514c/kilo
Reclassing and Skirting	11.672c/kilo
Reclassing and Binning Oddments	11.672c/kilo
Blending All Wools	5.642c/kilo
Wool Board Levy )	4% gross proceeds
Wool Stabilisation Levy)	
Grouping	5.67/bale
Lot Building	4.10/bale
Re-Offering	4.24/bale
Straight Repacking	3.69/bale
Repacking Overweight Bales	4.24/bale
Earthquake Insurance	.5c/\$100/month
Sheepsback to Store	12.0c/\$100
Testing Clients lots	Yield \$21.0c/lot
	Yield Micron \$27.0c/lot
EC Lots under 4 bales	
Handling Charge	5.24c/kilo
CHARGES TO BUYERS	
Repacking Skin Pieces	\$9.56/bale
Renumbering	15.0c/bale
	(over 4-23 cents)
If special colour requested	15.0c/bale
Gross Weight	15.0c/bale
Net Weight	15.0c/bale
Late Rebranding (after 8 days from sale)	41.0c/bale
Sheeting on Railed Wools	40.0c/bale

Stripes	15.0c/stripe
Delivery	\$3.95/bale
	(W/B EG 3.34)
Reclassing or Blending	5.864c/kilo
Extra rebranding more than 6 characters other than Port Marks and Renumbers	41.0c/bale
7 to 9 extra	59.0c/bale
10 to 12 extra	72.0c/bale
13 to 15 extra	81.0c/bale
16 to 18 extra	89.0c/bale
19 to 21 extra	\$1.0c/bale
22 to 24 extra	\$1.12c/bale
25 to 27 extra	\$1.22c/bale
More than 1 Port Mark	41.0c/bale
To change a rebrand	41.0c/bale
Storage 29 cents per bale per week with minimum of	58.0c/bale
Samples up to 2 kilos	58.0c/sample
Samples up to 5 kilos	\$1.14c/sample
Samples up to 10 kilos	\$1.82c/sample
Rebrands permitted as follows:	
Lots of 10 bales 1 rebrand	36.0c/bale if
11 to 24 bales 2 rebrand	more brands
25 to 48 bales 3 rebrand	are used
Core Testing	
After 8 days	\$1.14c/bale up to 8 days after sale
	\$1.58c/bale
If wool not to be weighed	.75c/bale

#### 4.14 WATER CHARGES

##### 4.14.1 Irrigation

Charges for irrigation vary depending on the length of time the scheme has been in operation, the size of the scheme, the source of water and the number of farmers participating in the scheme.

With older schemes such as the Ashburton-Lyndhurst or Mayfield-Hinds, the rate for irrigation water is \$5.88 per ha of land contracted to irrigate. This may be from none to 100 percent of the farm areas.

Newer schemes such as the Valetta, Levels or Morven-Glenavy use a system where the cost of water increases over an initial period of time to a final static charge. The Morven-Glenavy scheme, which started operation in

1974, has a 10 year build up period to a final charge of \$4.50 per ha.

Where a farmer is going to sink a well for irrigation or stock water supply on his own property, the only cost for water is with his 'Water Rights' application which must be made to the local board, e.g. North Canterbury Catchment Board, \$40.00 per application.

#### 4.14.2 Stock Water Supplies

- (i) Community Water Supply Schemes: Here the cost to the farmer varies so we have taken the Malvern Hills Rural Water Supply Scheme as being reasonably representative. The charge for the Malvern Hills scheme for the rating year 1 April 1980 to 31 March 1981 was \$44.00 per unit per year where a unit equaled 1000 litres. The number of units used varies depending on the size of the farm, stocking rate and other sources of stock water. This cost per unit could be increased for the next rating year in view of increased charges for electricity.
- (ii) County Stock Water Races: The following table shows the charges made by the Paparua County Council, effective to March 31st 1982.

Area	Initial Charge	Charge per ha
0.5- 8 ha	\$ 46.83	\$0.97
8- 40 ha	\$ 65.45	\$1.95
40 -80 ha	\$ 195.96	\$1.75
80-120 ha	\$ 372.29	\$1.56
120-160 ha	\$ 529.27	\$1.36
160-200 ha	\$ 666.30	\$1.17
200-240 ha	\$ 783.90	\$0.97
240-280 ha	\$ 882.97	\$0.78
280-320 ha	\$ 960.28	\$0.58
320-360 ha	\$1,019.72	\$0.39
360-400 ha	\$1,058.27	\$0.19
400 ha and over	\$1,077.88	\$0.16

Examples of this rating system are as follows:

Farm Area = 4 ha; Charge = \$46.83 + (4 x \$0.97) = \$50.71.

Farm Area = 20 ha; Charge = \$65.45 + (20 x \$1.95) = \$104.45.

Farm Area = 287 ha; Charge = \$960.28 + (287 x \$0.58) = \$1,126.74.

Farm Area = 634 ha; Charge = \$1,077.88 = (634 x 16) = \$1,179.32.

#### 4.15 WEED AND PEST CONTROL

Many herbicides, fungicides, and insecticides are produced by the various chemical companies and these come in ranges of strengths. This Budget Manual does not endorse any particular product or company and the trade names given are to serve only as examples of the chemical concerned.

All prices are per litre or per kilogram being determined from the smallest pack size of the chemical available. The second figure in each case is a price for a large pack - 20 litres or 25 kg unless otherwise stated.

##### 4.15.1 Herbicides

For the prescribed rates of application for the various chemicals and the weeds they control, see Section 14 in the Technical Manual, "Weed and Pest Control".

Trade Name	Active Ingredient(s) (%)	Price per kg or per litre	Price of 20 litre or 25 kg pack
(i) ICI-Tasman			
Agroxone MCPA	MCPA (37.5)	\$ 5.51	\$100.60
Atlavar	2,4-D (sodium salt) (1.0), monuron (4.0), sodium chlorate (56.5)	P.O.A.	P.O.A.
Avenge 200A	difenzoquat (20.0)	\$11.85	\$237.00
Ban 750	dicamba (7.5)	\$11.69	\$229.00
Bexone MCPB	MCPB (40.0)	\$ 5.25	\$105.00
Butoxone 2,4,5-T Vol.	2,4,5-T (butylester) (72.0)	\$14.78	\$281.20
Caragard 500 FW	terbumeton (25.0) terbuthylazine (25.0)	\$11.18	\$220.00
Devrinol	napropamide (50.0)	\$30.04	\$ 76.00 (2.5 kg)

Dicambone 75D	dicamba (7.5), 2,4-D amine salt (30.0)	\$ 9.15	\$170.40
Dicambone 5G	dicamba (5.0)	\$ 4.48	\$ 60.75 (15kg)
Dicamba	dicamba (20.0)	\$10.40	\$196.40
Dinoseb	dinoseb (36.0)	\$ 4.17	\$ 83.40
Embark 2s	mefluidide (24.0)	\$45.72	\$ 91.44 (2 1)
Ethone 2,4-D Vol.	2,4-D (butylester)(36.0)	\$ 8.96	\$166.80
Frenock	sodium 2,2,3,3-tetra fluoropropionate(88.0)	\$21.03	\$177.10(10 1)
Frenokone	2,4-D (sodium salt) (80.0)	\$ 5.78	\$ 98.20
Gesagard	prometryn (50.0)	\$17.42	\$169.80 (10kg)
Gesamil	propazine (50.0)	\$13.01	\$126.80
Gesaprim 80	atrazine (80.0)	\$10.21	\$198.40
Gesatop 500 FW	simazine (50.0)	\$10.92	\$212.40
Gesatop 80	simazine 5x2kg(80.0)	\$13.84	\$138.40
Gramoxone	paraquat (20.0)	\$10.61	\$208.80
Herbex D.A.	amitrole (25.0), 2,2-dichloro- propionic acid (sodium salt) (37.0)	(P.O.A.)	
Igran 500 FW	terbutryn (50.0)	\$20.41	\$102.05
Icipon	2,2-dichloro- propionic acid (sodium salt) (74.0)	(P.O.A.)	
ICI Thistle Dust	2,4-D (sodium salt) (10.0)	\$ 1.42	\$ 14.20 (10kg)
ICI 2,4,DB	2,4,DB (10.0)	\$ 5.60	\$112.00



Nortron	ethofumesate (20.0)	\$19.06	\$368.00
Permex SDA	amitrole, 2,2-dichloro-propionic acid (25.7) (sodium salt), simazine (40.0)	\$12.60	\$118.80 (10kg)
Preeglone Extra	diquat (6.0) paraquat (12.0)	\$11.09	\$217.60
Primextra 500 W	atrazine (18.2) N-(1-methyl - 2 methoxy-ethyl) - 2 ethyl - 6 methyl - alpha-chloroacetanilide (31.8)	\$ 9.00	\$180.00
Reglone	diquat (20.0)	\$12.20	\$238.60
Semeron	desmetryn (25.0)	\$16.76	\$419.00
Tillam E	pebulate (72.0)	\$13.47	\$269.40
Trident	dicamba (1.87), dichlorprop (60.0) M.C.P.A. (15.0)	\$ 8.81	\$168.40
Tandex 80 WP	karbutilate (80.0)	\$42.90	\$757.08
(ii) Ivon Watkins-Dow			
Actazine 5A	atrazine (40.0)	\$10.32	\$202.20
Bandomine M	dicamba, (5.0) M.C.P.A. (30.0)	\$ 7.17	\$141.00
Banvine	2,4-D (amine salt) (20.0), dicamba (10.0)	\$ 9.97	\$177.60
Betanal AM II	desmedioham (8.0) phenmedipham (8.0)	\$19.90	\$ 99.50
Brominal M	bromoxynil (20.0), M.C.P.A. (20.0)	\$12.48	\$248.00
Dowpon	2,2 dichloro-propionic acid (74.0) (sodium salt)	\$ 6.55	\$105.25

Eliminex		\$ 9.44	\$184.40
Fodderkleen	chlornitrofen (20.0)		
	picloram (1.25)	\$ 6.49	\$128.20
Garlon		\$20.55	\$408.60
High-Ester	2,4-D		
2,4-D	(butylester) (72.0)	\$ 8.98	\$166.40
Lo Vair D	2,4-D		
	(butylester) (40.0)	\$ 4.59	\$918.00
MEC 40	mecoprop (40.0)	\$ 4.97	\$ 99.40
IWD Paraquat	paraquat (20.0)	\$10.61	\$208.80
Permazol SDA	amitrole (12.5),		
	2,2-dichloro-		
	propionic acid		
	(sodium salt) (25.0)		
	simazine (40.0)	\$12.69	\$109.60
Phytazol D	amitrol (13.0),		
	2,4-D, 2,2-dichloro-		
	propionic acid (47.0),		
	(sodium salt) (18.6)	\$ 8.39	\$ 97.08
Propazol 50	propazine (50.0)	\$15.08	\$144.90
Scrub Dess-			
icant TD	2,4-D (40.0),		
	2,4,5-T (40.0),	\$ 8.21	\$164.20
	(butylesters)		
Selecta			
4-CPA	M.C.P.A. (40.0)	\$ 7.09	\$140.20
Simazol 5	simazine (40.0)	\$11.05	\$ 55.25
Sinox P.E.	dinoseb (36.0)	\$ 4.43	\$ 83.86
Teedal	2,2-dichloro-		
	propionic	\$ 5.46	\$ 80.25
	acid (sodium		
	salt) (11.0),		
	T.C.A. (63.0)		
Tordon 2G	picloram	\$ 4.81	\$113.75
Tordon 50D	2,4-D (amine		
	salt) (20.0)		
	picloram (5.0)	\$10.80	\$214.60

Tordon 520	picloram (5.0) 2,4,5-T (iso octyl ester) (20.0)	\$13.12	\$259.20
Tordon 1050	picloram (2.5), 2,4,5-T (butylester) (50.0)	\$10.80	\$216.00
Turfmaster	M.C.P.A. (10.0), mecoprop (20.0)	\$ 6.00	\$107.20
Weedar 77	2,4-D (amine salt) (40.0)	\$ 5.51	\$ 99.80
Weedar M.C.P.A.	M.C.P.A. (37.5)	\$ 5.48	\$ 99.20
Weedar Butyrac M.C.P.B.	M.C.P.B. (40.0)	\$ 5.73	\$101.20
Weedar Butyrac 2,4-DB	2,4-DB (40.0)	\$ 6.40	\$121.40
Weedazol T-L	amitrole (20.0), ammonium thiocyanate (18.3)	\$ 4.09	\$ 4.09
Weedone Hi- Ester T	2,4,5-T (butylester) (72.0)	\$14.79	\$2712.00(200 lit)

(iii) May and Baker

Asulox	asulam (40.0)	\$11.78	\$224.40
Axall	bromoxynil (7.5) ioxynil (7.3) mecoprop (37.5)	\$11.80	\$229.00
Buctril M	bromoxynil (20.0) M.C.P.A. (20.0)	\$ 9.94	\$198.80
Carbetamex 70	carbetamide (70.0)	\$15.25	\$ 76.25 (5 kg)
Ronstar	oxadiazon (25.0)	\$25.87	\$127.30 (5 lit)
Totril	ioxynil (25.0)	\$18.00	\$ 90.00 (5 lit)

(iv) Redene - Rural/Ispray

Activated Amitrol	amitrole (20.0), ammonium thiocyanate (18.3)	\$ 4.53	\$ 86.60
Atrex	atrazine (80.0)	\$12.25	\$183.75 (15kg)
Banvel	dicamba (20.0)	\$10.76	\$211.60
Banweed 75-D	dicamba (7.5), 2,4-D (amine salt) (30.0)	\$ 8.74	\$170.00
Cornox CWK	benazolin (30.0)	\$35.40	\$149.25 (5 lit)
Duston 15	2,4-D (sodium salt) (15.0)	\$ 1.76	\$ 35.20
Diuron 80	diuron (80.0)	\$12.80	\$256.00
Elapon	2,2-DPA (sodium salt) (74.0)	\$ 3.74	\$ 93.50
Flowable Atrazine	atrazine (50.0)	\$ 9.55	\$187.00
Flowable Simazine	simazine (50.0)	\$ 9.90	\$193.80
SDA Longterm	simazine (40.0), 2,2-DPA, amitrole (25.7)	\$ 9.73	\$194.60
Simex	simazine (80.0)	\$13.49	\$849.10 (70kg)
Sodakem	sodium chlorate (59.0)	\$ 2.35	\$ 54.75
Tri-Cornox	dicamba (1.6), benazolin (2.5), dichlorprop (35.6)	\$ 6.63	\$117.80
Treflan	trifluralin (40.0)	\$ 9.87	\$178.00
Rural 2,4-D Ester 80	2,4-D butyl ester (72.0)	\$14.16	\$263.60
Rural 2,4-D Sodium Salt 80	2,4-D (sodium salt) (80.0)	\$ 5.28	\$132.00
Rural MCPA	M.C.P.A. (potassium salt) (37.5)	\$ 5.36	\$ 99.40

Rural MCPB	M.C.P.B. (sodium salt) (40.0)	\$ 5.87	\$104.80
Rural Paraquat	paraquat (20.0)	\$ 9.86	\$191.40
Rural 2,4,5-T Ester 80	2,4,5-T butyl ester (72.0)	\$ 8.49	\$157.40
Hoechst Linuron 50 WP	linuron (49.1)	\$15.65	\$352.25 (25kg)
Hoechst NATA	TCA (79.3)	\$ 2.85	\$ 71.25
Hoegrass 36 EC	Methyl 2[4-(2,4-dichlorophenoxy) phenoxy] propionate (37.5)	\$27.26	\$519.00
(v) Shell			
Avadex BW	tri-allate (40.0)	\$ 7.37	\$147.40
Atrazine	atrazine (80.0)	\$12.40	\$ 9.30
Atrazine 50 SC	atrazine (80.0)	\$10.54	\$205.00
Cearex 4	dicamba (94.0), M.C.P.A. (7.5), mecoprop (30.0)	\$ 6.55	\$1249.82 (209 1)
DNBP (Amine)	dinoseb (36.0)	\$ 3.75	\$ 67.00
Dicamba 2	dicamba (20.0)	\$10.10	\$1941.61 (209 1)
Double Strength 2,4,5-T	2,4,5-T (72.0)	\$14.54	\$2691.92(209 1)
Herbitrol	cyanazine (50.0)	\$ 7.12	\$ 53.40
Lasso	alachlor (50.0)	\$ 9.33	\$1812.03
Linuron 50	linuron (50.0)	\$13.49	\$337.25
Mataven	flamprop-methyl (10.5)	\$10.25	\$2002.22(209 1)
Mosskiller	pentachlorophenol (12.0)	\$ 3.03	\$486.97 (209 1)
Planavin 75	nitralin (75.0)	\$19.75	\$197.50

Prefix granules	chlorthiamid (7.5)	\$ 4.24	\$790.00(250 kg)
Ramrod 65	propachlor (65.0)	\$ 7.27	\$624.00 (90 kg)
Residex LT	amitrole (12.5), 2,2-dichloropropionic acid (sodium salt) (26.0), simazine (40.0)	\$ 9.79	\$232.50 (25 kg)
Roundup	glyphosate (36.0)	\$33.35	\$533.00
Simazine 80	simazine (80.0)	\$12.65	\$875.00
Simazine 50 SC	simazine (50.0)	\$11.28	\$219.40
Supercearex	dicamba (1.7), dichlorprop (46.5), M.C.P.A. (10.65)	\$ 5.40	\$982.30 (209 l)
Weedkiller W	oils-mineral- herbicial (23.0 to 25.0)	P.O.A.	P.O.A.
2,4-D Amine	2,4-D amine salt (45.0)	\$ 5.80	\$965.58 (209 l)
Kocide 101	cupric hydroxide (50.0)	\$ 6.90	\$ 85.00
Mancozeb 80W	mancozeb (80.0)	P.O.A.	
Syllit 40S	dodine (40.0)	\$ 7.29	\$143.20

(vi) Yates

Dalapon	2,2-dichloro- propionic acid (74.0)	2 kg 25 kg	\$ 10.40 \$ 95.00
Reglone P	diquat (20.0)	5 litre 20 litre	\$ 61.00 \$238.60
Treflan	trifluralin (40.0)	5 litre 20 litre	\$ 49.75 \$178.00

(vii) Bayer

	Active Ingredient(s) (%)	Pack Size	Per Carton	
Soltrix 70 WP		3 kg 25 kg	2 x 3 kg	\$39.75/kg \$38.75/kg
Linuron 50 WP	linuron (50.0)	2 kg 25 kg	2 x 2 kg	\$15.95/kg \$14.35/kg
Mecomix M		5 litre 20 litre 200 litre	4 x 5 l	\$ 4.59/l \$ 6.06/l \$ 5.58/l
Sencor 70 WP	metrabuzin (70.0)	500 g 1.5 kg	6 x 500 g 4 x 1.5 kg	\$62.80/kg \$61.95/kg
Tribunil 70 WP	metabenz- thiazuron (70.0)	1.5 kg 25 kg	4 x 1.5 kg	\$23.85/kg \$22.30/kg
Ustilan 70 WP	ethidimuron (70.0)	1.5 kg 18 kg	4 x 1.5 kg	\$35.95/kg \$35.15/kg

#### 4.15.2 Insecticides

For full information regarding common names, proprietary names, and percent a.i., refer to the Handbook of Agricultural Chemicals. For full information regarding rates of application and the pests controlled by the various chemicals, refer to the Technical Budget Manual, Section 14 "Weed and Pest Control" or refer to the book "New Zealand Insect Pests" edited by D. Ferro, and published by Lincoln College, 1976.

Trade-Name	Active Ingredient(s) (%)	Price per litre/kg	Price of 20 litres or 25 kg pack
(i) ICI-Tasman			
Actellic		\$27.34	\$115.30 (5 l)
Actellic SG No. 20	pirimiphos- methyl (20.0)	\$ 6.67 each	
Ambush 50 EC	permethrin (50.0)	\$79.75	500 ml
Attack	pirimiphos-methyl (47.5), permethrin (2.5)	\$31.50	\$512.60

Furadan 10G	carbofuran (10.0)	\$ 4.94	\$ 98.80 (20 kg)
Gramothion 60	fenitrothion (60.0)	\$10.15	\$181.00
Malathion 50	maldison (50.0)	\$ 5.70	\$ 98.20
Pirimor 50	pirimicarb (50.0)	\$30.00	
Sybol		\$19.95	\$ 99.75 (5 l)

(ii) Ispray

Azinphos			
Methyl	azinphos methyl (50.0)	\$15.50	\$223.50 (15 kg)
Carbaryl 80 W	carbaryl (80.0)	\$10.00	\$205.00
Dibrom 8 E		\$11.35	\$ 34.70
Furadan	carbofuran (75.0)	\$19.40	\$ 19.40
Lindane 50 W	lindane (50.0)	\$13.25	\$ 26.50
Exatin 250 EC		\$13.26	\$ 66.30 (5 lit)
Orthene 75	acephate (25.0)	\$23.20	\$232.00 (10 kg)
Phorate 10 G	phorate (10.0)	P.O.A.	
Phorate 20 G	phorate (20.0)	\$ 3.45	\$ 51.75
Thiodan 35 EC	endosulfan (35.0)	\$13.30	\$193.60

(iii) Ivon Watkins-Dow

Dyzol 80 EC	diazinon (80.0)	\$16.65	\$323.00
Dyzol 20 G	diazinon (20.0)	\$ 4.99	\$ 74.85
Lorbsan 40 EC	chlorpyrifos (40.0)	\$19.50(2)	\$ 94.40 (5 lit)
Lorsban 50 W	chlorpyrifos (50.0)	\$23.45	\$ 46.92
Nexion 40 EC	bromophos (40.0)	\$ 2.61	\$251.20
Plictran 50 W	cyhexatin (50.0)	\$25.00	\$100.00 (4 kg)
Saprol	triforine (19.0)	\$14.68	\$ 73.40 (5 lit)
Thimet 20 G	phorate (20.0)	\$ 3.96	\$ 59.40

(iv) Rural-Redene

Decig 2.5 EC		\$40.49	\$ 40.48
Malathion 50	maldison (50.0)	\$ 5.40	\$100.00
Nuvan 100 EC	dichlorvos (100.0)	500 ml	\$ 12.20
		5 litre	\$ 92.50
Silogard	maldison	\$ 1.30	\$ 34.75
Ficamz		\$ 3.19	\$ 15.95(5 pack)

(v) Shell

Aldrin 50 EC	aldrin (50.0)	\$ 5.85	\$1149.50(209 lit)
Bidrin concentrate	dicrotophos (1030 g/l)	\$ 8.00	(500 ml)



DDT			
concentrate	DDT (20.0)	\$ 3.95	\$572.66(209 lit)
Dieldrex			
50 WP	dieldrin (50.0)	\$16.00	\$160.00 (10 kg)
Dieldrite 25		\$ 6.19	\$1109.78(209 lit)
Gesapon 10			
(granular)	diazinon (10.0)	\$ 2.98	\$ 74.50
Gesapon 80 EC	diazinon (80.0)	\$15.60	\$2966.00(200 lit)
Lindane			
pellets	lindane (20.0)	\$ 4.88	\$122.00
Phosdrin			
concentrate	mevinphos (1230 g/l)	\$24.10	(500 ml)
Phosdrin 400	mevinphos	\$19.95	\$195.50
Ripcord		\$70.70	\$541.80 (10 kg)
Shellldrite			
Aerosols		\$ 4.44	(per aerosol)
Sumicidin			
Dust	fenvalerate	\$ 3.56	\$ 35.60
Sumicidin			
20 WP	fenvalerate (20.0)	\$54.18	\$541.80 (10kg)
Sumicidin 10	fenvalerate (10.0)	\$23.10	\$440.00
Torque 50	fenbutalin oxide		
	(50.0)	\$38.88	\$ 77.76
Vapona			
concentrate	dichlorvos	\$11.55	(500 ml)
	(1080 g/l)		
Verthion EC	fenitrothion (60.0)	\$10.50	\$1956.24(209 lit)
Verthion			
pellets	fenitrothion (10.0)	\$ 2.15	\$ 53.75

(vi) Yates

Maldison			
25 WP	maldison (25.0)	25 kg	\$ 81.87
Maldison			
50 EC	maldison (50.0)	5 litre	\$ 25.88
		20 litre	\$ 91.00
Rogor E	dimethoate (40.0)	5 litre	\$ 51.00
		20 litre	\$198.50
Rogor W20	dimethoate (20.0)	2.5 kg	\$ 18.38
Thiodan	endosulfan	1 litre	\$ 13.00
		5 litre	\$ 54.10
		20 litre	\$193.60

(viii) Bayer

	Active Ingredient(s) (%)	Pack Size	Per Carton
Dasanit 5G	fensulfothion	25 kg	\$ 2.60/kg
Disyston Ten G	disolfoton (10.0)	20 kg	\$ 2.75/kg

Folidol M 50	parathion-methyl (60.0)	1 litre	20 x 1 l	\$16.70/l
Folimat 50 LC	omethoate (58.0)	25 litres		\$11.50/l
Gusathion A 40 EC	azinphos-ethyl (44.0)	1 litre	20 x 1 l	\$24.20/l
		5 litres	4 x 5 l	\$16.95/l
		20 litres		\$14.40/l
Gusathion M 50 WP	azinphos-methyl (50.0)	2 kg	4 x 2 kg	\$12.90/l
		15 kg	15 x 1 kg	\$16.05/kg
		15 kg	10 x 1.5kg	\$15.15/kg
Mesuro1 75 WP	methiocarb (75.0)	2 kg	2 x 2 kg	\$49.25/kg
		25 kg		\$47.95/kg
Mesuro1 Snail Baits	methiocarb (2.0)	10 kg		\$ 5.10 kg
		25 kg		\$ 4.90/kg
Metasystox (I) 25 EC	demeton-s-methyl (25.0)	500 ml	20 x 500ml	\$14.85/l
		1 litre	20 x 1 l	\$13.75/l
		5 litres	4 x 5 l	\$11.70/l
		20 litres		\$11.00/l
Nemacur 400 EC	fenamiphos (40.0)	1 litre	20 x 1 l	\$23.30/l
		10 litres		\$22.40/l
		25 litres		\$21.20/l
Peropal 25 WP	azocyclotin (25.0)	2 kg	6 x 2 kg	\$25.95/kg
Tamaron 600 LC	methamidophos (60.0)	1 litre	20 x 1 l	\$18.40/l
		25 litres		\$17.30/l
		200 litres		\$15.75/l
Thiofor 350 EC	endosulfan (35.0)	5 litres	3 x 5 l	\$10.80/l
		20 litres		\$ 9.65/l
Tokuthion 500 EC		5 litres		\$45.00/l
		1 litre	20 x 1 l	\$46.25/l
Diazinon 800 EC	diazinon (80.0)	5 litres	4 x 5 l	\$17.31/l
		20 litres		\$16.72/l
Fenitrothion 600 EC	fenitrothion (60.0)	20 litres		\$ 8.73/l
		200 litres		\$ 8.30/l
Fenitrothion 10 G	fenitrothion (10.0)	25 kg		\$ 2.55/l
Lindane 20 G	lindane (20.0)	25 kg		\$ 4.88/kg

#### 4.15.3 Fungicides

Trade Name	Active Ingredient(s) (%)	Price Per litre/kg	Price per 20 litre/ 25 kg pack
(i) Hoechst			
Afugan 30 EC	pyrazophos (30.0)	\$33.15	\$ 33.15
Chincsol W	8-hydroxyquinoline sulphate (67.0)	\$75.90	\$189.75
Copper	copper		
Oxychloride	oxychloride (50.0)	P.O.A.	P.O.A.
Oleocop	cuprous oxide (40.0)	\$ 4.98	\$124.50
Brassicol 75	quintozine (75.0)	\$ 9.27	\$231.75
Morocide 50 WP	binapacryl (16.67) captan (53.34)	\$12.98	\$324.50

(ii) Ispray			
Difolatan 5 F	captafol (50.0)	\$10.44	\$208.80
Fungaflor 20 EC		P.O.A.	P.O.A.
Mancozeb 80 W	mancozeb (80.0)	P.O.A.	P.O.A.
Orthocide 10			
Dust	captan (10.0)	P.O.A.	P.O.A.
Orthocide 80 W	captan (80.0)	\$ 9.06	\$212.50
Phaltan 50 W	folpet (50.0)	\$10.65	\$250.50
Plantvax 75 W	oxycarboxin (75.0)	\$30.65	\$30.65
Saprol 20 EC	triforine (19.0)	\$15.90	\$290.00

(iii) ICI Tasman			
Milcurb	dimethirimol (12.5)	\$28.74/2 litre	
Nimrod	bupirimate (25.0)	\$51.45/2.5 kg	
Ridomil MZ WP	metalaxyl (72.0)	\$51.65/2.5 kg	
Sumisclax	procymidone (50.0)	\$47.80/kg	

(iv) Bayer	Active Ingredient(s)	Pack Size	Per Carton	
Antracol 70 WP	propineb (70.0)	1 kg 25 kg	16 x 1 kg	\$ 7.50/kg \$ 6.50/kg
Bayleton 5 WP	triademefon (5.0)	1.5 kg 2 kg 25 kg	4 x 1.5 kg 6 x 2 kg	\$20.75/kg \$20.75/kg \$19.85/kg
Bayleton 250 EC	triademefon (25.0)	1 litre 10 litres 25 litres	20 x 1 l	\$47.95/l \$47.95/l \$46.95/l

Baytan F17	1-(4-chloro- phenoxy)-1- (1,2,4-triazol -1-yl) butan -2-ol (15.0), fuberidazole (2.0)	10 kg		P.O.A.
Cupravit OB 21	copper oxychl- oride (50.0)	25 kg		P.O.A.
Euparen 50 WP	dichloro- fluorid (50.0)	1.5 kg 25 kg	4 x 1.5 kg	\$28.85/kg \$27.35/kg

(v) Yates

Benlate Dupont	benomyl (50.0)	1 kg		\$39.71
Bravo 75 WP	chlorothalonil (75.0)	2 kg 25 kg		\$45.88 \$481.75
Bravo 500 f	chlorothalonil (50.0)	5 litre 20 litre		\$71.60 \$277.40
Captan 50	captan (50.0)	2 kg 25 kg		\$17.00 \$160.75
Copper oxychloride 50	copper oxychloride (50.0)	2 kg		\$11.25

#### 4.15.4 Miscellaneous Chemicals

Rebwachs <sup>2</sup> WF	\$ 27.20 per 2.5 kg
Royal-MH-30	\$ 8.15 per 3.8 litre
Ispray Saprene (B)	\$ 24.35 per litre
Temik 10g (C)	\$ 7.20 per kg
Wuxal	\$ 5.00 per litre
Omite 30 W (Ispray) - Miticide	\$ 22.50 per 2 kg
Ortho Spray Sticker (Ispray) - Sticking agent	\$110.00 per 20 litres
Rural Spreader Sticker 15 - wetting agent	\$ 29.00 per 20 litres
Rural Liquid Spray Marker Dye	\$709.56 per 27 litres
Yates Sprayfix	\$ 5.70 per 2 litre \$ 11.40 per 5 litres \$ 41.60 per 20 litres
Spraymarka	\$ 13.65 per 250 gm
Syvel Disinfectant	\$ 2.86 per litre
Pinol Antiseptic Deodorant	\$ 1.83 per litre
Wuxal 9NPK 9.4.6)	\$ 3.71 per litre
Basamid Granules	\$ 17.00 per 2.5 kg \$121.00 per 20 kg
Agral LN	\$ 32.00 per 20 litre

Talon WB	\$ 21.00 per 2.5 kg
Soil Fumigants	
Shell DD (1.2 - dichloroprene 1.3 - dichloropropene)	\$ 59.80 per 20 litres
Di-Trapex (Ispray)	\$407.00 per 50 litres
Growth Regulants	
Alar 85 (Ispray)	\$147.20 per 2 kg
Caldon 50 E.L. (Ispray) - Bramble desuckering agent	\$ 56.60 per 5 litres
Fatol Super (Ispray) - Tobacco super control agent	\$102.60 per 20 litres

#### 4.15.5 Aerial Spraying

##### (i) Airwork (N.Z.) Ltd

Brush Weeds	444 l/ha	\$65.00/ha
Insecticides	111 l/ha	\$21.50/ha
Cereals	111 l/ha	\$17.50/ha
Defoliation & Blight (Potatoes)	222 l/ha	\$23.50/ha
Pasture	111 l/ha	\$14.00/ha
Nitrogen	222 l/ha	\$24.00/ha

##### (ii) James Aviation

North Auckland, South Auckland and Bay of Plenty

Area (ha)	Application Rate litres/ha						
	<30	31-60	61-120	121-160	161-220	220-330	331-450
0- 8						90.00	110.70
0- 10					55.00	78.00	91.70
0- 20	11.35	17.00	25.20	47.00	50.00	78.00	91.70
21- 40	9.40	14.46	24.00	45.00	50.00	78.00	91.70
41- 80	8.65	13.66	22.75	43.00	50.00	78.00	
81-120	8.15	13.25	22.00				
Over							
120	7.70	12.60	21.00				

Minimum charge for flying = \$200.00

### Helicopter Spraying:

Hourly rates:	Placement & Charter Per Hour	Productive Using Ancilliary Equipment
Hiller 12E	380.00	420.00
Hughes 300	320.00	360.00
Hiller Soloy	470.00	510.00
Hughes 500	450.00	500.00
Bell Jet Ranger	490.00	530.00

### Hourly rates for fixed Wing:

Agwaggon	\$301.00
Airtruk 300 H.P.	\$357.00
Fletcher 300 H.P.	\$329.00
Fletcher 400 H.P.	\$393.00

### (iii) Helicopters (N.Z.) Ltd

Litres per ha	Cost per ha
28	\$11.14
56	\$12.71
84	\$15.89
112	\$19.07
140	\$22.26
168	\$30.19
224	\$38.16
280	\$50.86
392	\$61.99
448	\$80.42
560	\$101.72

### 4.15.6 Ground Application (materials extra)

#### (i) Gun Spraying

One man plus fully equipped truck \$20.50 per hour varying in scale downwards according to the type of country.

#### (ii) Boom Spraying

Depending on the nature of the crop and situation, boom spraying costs about \$9-\$11.50 per hectare.

## 4.16 SELLING CHARGES

### 4.16.1 Yard Fees

#### Addington:

Includes loading fee of 12 c sheep  
50 c cattle  
75 c bulls

Sheep	.37	Calves	\$2.14
Fat cattle	\$2.47	Bulls	\$4.59
Store cattle	\$2.14	Porkers	.92
Vealers	\$2.57	Baconers	.92
Dairy cows	\$2.57	Store pigs	.73

#### Amberley:

All sheep 23c (includes 3c loading).

#### Coalgate:

Sheep - shareholders	.17
- non shareholders	.20
Calves - shareholders	\$1.00
- non shareholders	\$1.20

#### Culverden:

Sheep	.37	Store cattle	\$2.14
Rams	.37	Dairy cattle	\$2.57
Calves	\$2.14	Fat cattle	\$2.57

#### Hawarden:

All sheep 14 c (1981 fees)

#### Little River:

All sheep 25c.

#### Sheffield:

Sheep - shareholders	.24
- non shareholders	.25
Rams	\$1.00

#### Cheviot:

Calves	\$1.50
Adult cattle	\$2.00

#### Oxford:

Sheep	20 c	(plus loading/unloading fee of 3c per head)
Rams	35 c	(plus loading/unloading fee of 3c per head)

Fat cattle	)
Store cattle	) plus loading/unloading fee of 10c per head
Dairy cattle	)

#### 4.16.2 Commissions on Stock sold Through a Stock and Station Agent

Sale Yards		Clearing Sales	
Sheep	4.75%	Sheep	5.5%
Fat Cattle	4.75%	Store Cattle	5.5%
Store Cattle	4.75%	Pigs	7.0%
Vealers	4.75%	Dairy Cows	7.5%
Bulls	7.5%	Implements & Sundry	10.0%
Dairy Cattle	7.5%	Furniture	15.0%
Pigs	5.75%		
Horses (bloodstock)	8.0%	Special Sales	
Horses	8.0%		
Deer	7.25%	Stud Cattle	8.0%
Grazing	10.0%	Stud Sheep	4.75%

#### 4.17 PLANTS

##### 4.17.1 Farm Shelter Trees

The prices shown below are the approximate cost per 100 for trees commonly grown for farm shelter. The price does not include planting.

Pinus Radiata	\$10 per 100 or \$70 per 1,000 (18 month old trees)
Larch	\$35 (2 year trees)
Thuja	\$40 (3 year trees)
Pinus Muricata	\$25 (2 year trees)
Arizonica	\$30 (2 year trees)
Benthami	\$30 (2 year trees)
Macrocarpa	\$30 (2 year trees)
Lombardy Poplar	\$35 (small)
Douglas Fir/Oregon	\$30 (3 year trees)
Cedrus deodara	\$45 (3 year trees)
Eucalyptus	\$45 (small in tubes)

##### 4.17.2 Shelter Belts (establishment costs)

\$2.50 per metre (includes spraying and ripping ground, fencing and 2 rows of trees).



#### 4.17.3 Retail Fruit and Nut Trees

##### (i) Fruit Trees

Fig	\$11.90 each
Apple	\$ 6.50 each
Pear	\$ 6.50 each
Plum	\$ 6.50 each
Peach	\$ 6.50 each
Apricot	\$ 6.50 each
Cherry	\$ 6.50 each
Feijoa (grafted)	\$ 9.70 each

##### (ii) Berry Bushes

Cranberry	\$ 6.00 each
Blueberry	\$ 5.00 each
Gooseberry	\$ 3.50 each
Raspberry	\$ 6.00 each

##### (iii) Nut Trees

Sweet Chestnut	\$ 7.00 each
Japanese Walnut	\$ 7.00 each
Hazelnut	\$ 7.00 each

##### (iv) Citrus Fruits

Lemons (from N.I.)	\$12.00 each
Tangelos	\$12.50 each
Mandarins	\$12.50 each
Grapefruit	\$10.50 each
Oranges	\$12.50 each

#### 4.17.4 Vegetable Plants

Beetroot	\$1.00 per 6
Cauliflower	\$1.70 per 12
Sweetcorn	.30 each
Green pepper	.80 each
Celery	\$1.70 per 12
Cabbage	\$1.70 per 12
Grafted Tomato	\$1.45 each
Butternut squash	.80 each
Zucchini	.80 each
Parsley	\$1.20 each
Tomato	\$1.00 per 12
Brussel Sprouts	\$1.70 per 12
Broccoli	\$1.70 per 12
Silverbeet	\$1.70 per 12
Leeks	\$1.70 per 25

Onions \$1.70 per 25

#### 4.17.5 Fruit Plants

##### Berryfruit:

Strawberry	\$1.60 per 6
Raspberry	\$3.50 per 10
Blueberry unrooted cuttings	\$4.95 each
tissue cultured (soft tubes)	\$4.95 each
tissue cultured (hard tubes)	\$4.95 each
plants	\$3.00 each
Blackberry (thorn free)	\$600 per 1000
Boysenberry	\$4 per 10
Blackcurrant plants	\$3.50 each

##### Subtropicals:

Tamarillo (yellow)	\$6.20 each
Kiwifruit	\$6.00 each
Grapefruit (1 year)	\$5.00 each
Lemon (1 year)	\$5.00 each
Feijoas	\$9.70 each
Black passionfruit	\$3.50 each

#### 4.18 REPAIRS AND MAINTENANCE

The best way to estimate the likely expenditure on repairs and maintenance for all plant, buildings, fences, sheep and cattle yards, tracks and culverts is (1) the close scrutiny of the farm accounts and (2) questioning the farmer directly, on likely expenditure programme.

If the information is not available through such sources, the following rates may be used as an approximate guide. It should be borne in mind that expenditure on repairs and maintenance is strongly dependent upon the income for that particular year.

Dwellings	2.5- 5% ) depending upon the
Farm buildings	2.5- 5% ) age of the building
Piggeries	5 -10%
Water supply	Up to 5% depending on water type
Implements and plant	7.5-15% depending upon use
Roads, tracks & culverts	5 -10% depending on locality
Yards and dip	2.5- 5%

## 4.19 MOTOR VEHICLE - FUEL, LICENCING AND ROAD USER CHARGES

### 4.19.1 Motor Vehicle Fuel Taxes

#### Motor Spirits Duty (Petrol Tax)

Motor spirits are now taxed as follows:

- \* A motor spirits duty of 6.0 cents per litre is paid into the National Roads Fund.
- \* A motor spirits duty of 6.70 cents per litre is paid into the Consolidated Revenue Account.
- \* A local authority tax of .66 cents per litre and an equivalent tax on diesel fuel, are not rebated for motor vehicles under any circumstances.

#### Exempted Vehicles

These are vehicles which are not subject to road user charges taxation. Where farmers are concerned they fall into three categories:

- \* Vehicles with E class A licence labels which are only permitted to use the public highway in connection with their inspection, servicing, or repair, or for the purposes of a drivers licence test; and
- \* Vehicles with E class B licence labels which are largely limited to gate-to-gate operations, or to laden journeys with a 21 km round-trip limit between separate farms owned or managed by the vehicle owner. There are some exemptions to these restrictions - e.g. there is no limit to the distance for which dogs can be carried to a hydatids dosing centre; there is no limit to the distance which a farmer may cart milk, cream or whey to or from a dairy factory by means of a tractor and trailer; and there is also no limit to the distance which any Class B vehicle may be taken in an unladen condition.
- \* Unregistered motor vehicles.

A refund of 11.7 cents per litre can be claimed for petrol used in an Exempted Vehicle.

#### Licensed Vehicles

These are vehicles which are subject to road user charges taxation. The Second Schedule to the Motor Spirits Duty Refund Regulations 1978 contains a table of Standard Motor

Spirits Consumption Rates. A refund of 9.7 cents per litre can be claimed either on the actual quantity of fuel used in a Licensed Vehicle, or on the quantity arrived at by applying the table of Standard Consumption Rates, whichever is the smaller. This is to offset the tax paid in road user charges.

#### Stationary Engines and Machinery Such as Chainsaws.

Provided these are used solely for commercial purposes (i.e. for the owner's own agricultural operations), a refund of 9.7 cents per litre can be claimed on the petrol they use.

#### Boats

Farmers in some remote areas use boats to transport their produce, stock etc.

A refund of 11.7 cents per litre can be claimed on these commercial vessels.

[Ministry of Transport and  
New Zealand Post Office]

### 4.19.2 Road User Charges

All vehicles other than exempted vehicles used on the public highway (except for petrol-powered vehicles and trailers with a manufacturer's gross vehicle weight rating of 3.5 tonnes or less), are liable for road user charges.

Where the farmer is concerned, this will generally apply to farm trucks which are licensed for unlimited road use. All vehicles with Class A or Class B licence labels are exempt.

#### Road User Licences

There are two types of road user licence -

- \* Time licences are available for vehicles described as Off-Road Motor Vehicles in the Second Schedule to the Road User Charges Act 1977. These are largely mobile machines such as Road Rollers, Mobile Cranes and Trench Diggers which do most of their mileage off the road.
- \* Distance licences are required for all other vehicles subject to road user charges and can be purchased in multiples of 1000 km.

Road user licences can be bought at most Post Offices and their cost depends upon -

- \* the weight at which the owner elects to operate the vehicle: and
- \* in respect of distance licences, the vehicle's axle configuration.

Road User Licences are not transferable between vehicles.

Supplementary Licences are available for situations where an owner wants to increase the nominated weight of a current licence.

#### Hubodometers

All vehicles over 3.5 tonnes that require Distance Licences have to be fitted with approved hubodometers.

Exemptions from fitting hubodometers can be obtained from the Secretary for Transport if it can be demonstrated that it is not practical to fit them.

### 4.19.3 Motor Registration and Licencing

Normally, farmers pay full registration and licensing fees for their vehicles, with the following exceptions:

Agricultural trailers, that is, trailers such as seeders, ploughs, and rotary hoes, designed exclusively for agricultural operations, are not required to be registered or licensed, if they are towed by a currently licensed vehicle.

Conventional trailers drawn by exempted vehicles with E Class B labels must be registered and licensed, but are exempt from payment of all fees, except for the accident compensation levy, and the cost of the licence label and (where applicable) the number plates.

[Ministry of Transport and  
New Zealand Post Office]

### 4.19.4 Transport Licencing

Generally, a farmer may carry his own goods in his own vehicle in connection with his business as a farmer, without restriction. There are, however, some limitations on this.

#### Five-Tonne Payload

If the load exceeds 5000 kilograms, and if there is an open railway route of not less than 150 kilometres available, the farmer must have a goods-service licence.

#### Exemptions

The following classes of goods may be carried without restriction, provided they are the farmer's own:

- \* Livestock, lime, hay or straw, fresh meat, poultry or fresh fish, fresh fruit or vegetables.
- \* Used, empty fruit or vegetable containers (or empty returnable pallets) on their return journey, when they have carried fresh fruit or vegetables on their outward journey.

[Ministry of Transport]

### 4.20 VEHICLE RUNNING EXPENSES

#### 4.20.1 Fuel, Oil and Grease

Petrol - Regular (83 octane) 46.3 cents per litre (after Agricultural Use Rebate of 11.7 cents per litre taken off retail price of 58 cents per litre.

- Super (96 octane) 49.3 cents per litre (after Rebate 11.7 cents per litre taken off 61 cents per litre.

Diesel - 44.2 cents per litre.

Multi-purpose lubricating oil = \$1.66 per litre in 209 litre drum.

Multi-purpose grease - \$2.32 per litre in 18 kg drum.

Transmission oil - \$1.55 per litre in 209 litre drum.

(Drum deposit on 209 litre = \$25.85).

Antifreeze = \$3.50 per litre.

In general the cost of fuel, oil and grease is considered in terms of cents per kilometre travelled.

Light trucks and cars	allow 25-30 cents per km
Heavy trucks	allow 43.52 cents per km
Tractors 37.3 kW (50 hp)	allow \$3.24 per hour
60.0 kW (80 hp)	allow \$5.76 per hour
67.1 kW (90 hp)	allow \$10.44 per hour
111.9 kW (150 hp)	allow \$17.64 per hour
Crawler tractors	allow \$5.40 per hour
Balers (conventional)	allow \$1.50 per hour
Header - tractor drawn	allow \$1.50 per hour
- self propelled	allow \$6.00 per hour

#### 4.20.2 Repairs and Maintenance

The best way to estimate likely expenditure on repairs and maintenance for all motorised plant is to obtain a figure direct from the farmer. However, if this is not possible then the following can be used as a rough guide.

Cars and light trucks	allow 20-25 cents per km
Wheel tractors	allow \$2.00 per hour
Crawler tractors	allow \$4.00 per hour
Mobile plant	allow 10% of initial value

#### 4.20.3 Tractor Running Costs

Supplied by J.M. Snook, Hutchinson Motors, Christchurch. Updated by Russell Paterson, Sockburn Motors and based on running costs over 5 years, using prices as at January 1982.

- (i) 22.35-29.8 kW Tractors (30-50 HP)  
3000 hours in 5 years

Initial Cost Ford 3600 or Equivalent  
and Safety Frame (35 kW - 47 HP) \$14,060

##### DIRECT COSTS

Diesel Fuel say 6.75 litres per hour for 3000 hrs @ 44.2c per litre	\$ 8,950.00
Fuel Filters change every 600 hours = 5 @ \$4.28	\$ 21.40
Engine Oil change every 150 hours 10.4 litres per change, plus top up, per litre \$2.59	\$ 538.72
Oil Filters change at 300 hours = 10 @ \$12.40	\$ 124.00

Transmission Oils change every 1500 hours capacity 40.5 litres 2 changes	\$ 253.53
Injector Servicing say 3 cyl. engines @ 1500 hours 2 services, plus labour	\$ 260.00
Top Overhaul including parts, one @	\$ 500.00
Air Cleaner oil bath or dry elements	\$ 200.00
Tyre Maintenance wear and tear 3000 hours	\$ 150.00
Grease (lubricating)	\$ 40.00
Anti-Freeze radiator	\$ 80.00
General Renewal Repairs fan belts, radiator hoses, general servicing etc.	\$ 700.00
Battery	\$ <u>187.00</u>

TOTAL DIRECT COSTS	<u>\$12,004.65</u>
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TOTAL DIRECT PER YEAR	\$ 2,400.93
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TOTAL DIRECT PER HOUR (assuming 600 hours per year)	\$ 4.00
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TOTAL DIRECT PER HA (assuming .607 ha per hour)	\$ 6.59
--	---------

#### FIXED COSTS

Registration agricultural use, \$19.70 per year	\$ 98.50
--	----------

Insurance, \$10.66 for first \$1,000 value plus \$4.70 per \$1,000 thereafter less 12.5% Per year for 5 years	\$ 316.80
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Depreciation D.V. over 5 years	\$11,000.00
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Interest on \$14,060 for 5 years @ 10%	\$ <u>7,030.00</u>
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TOTAL FIXED COSTS	<u>\$18,445.30</u>
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#### TOTAL COSTS

TOTAL COSTS FOR 5 YEARS	\$30,449.95
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TOTAL COSTS FOR 1 YEAR	\$ 6,089.99
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TOTAL COSTS FOR 1 HOUR (assuming 600 hours per year)	\$ 10.15
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TOTAL COSTS FOR 1 ha worked (assuming .607 ha/hour)	\$ 16.72
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TOTAL COSTS INCLUDING LABOUR AT SAY \$4.12 PER HOUR	
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TOTAL COSTS PER HOUR	\$ 14.27
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TOTAL COST PER HA WORKED (assuming .607 ha per hour)	\$ 23.50
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- (ii) 44.7 - 59.6 kW Tractors (60-80 HP)  
4000 hours in 5 years

Using as Initial Cost For 6600

16 speed 78 B.H.P. 58.2 kW

(with Q cab)

\$25,800.00

#### DIRECT COSTS

Diesel Fuel 12-14 litres per hour for 4000 hours @ 44.2 cents/litre	\$22,984.00
Engine Oil sump capacity 10-12 litre. Change every 150 hours at average \$2.59 per litre	\$ 650.00
Engine Oil Filters change every 300 hours, 14 @ \$17.40 each	\$ 161.20
Transmission Oil change at 2000 hours, capacity G.B. & B.A. 58.5 litre at \$3.13 per litre	\$ 183.10
Transmission Oil Filters change every 600 hours, say 7 @ \$22.10	\$ 154.70
Fuel Filters change ever 600 hours 7 @ \$4.28	\$ 29.96
Air Cleaner oil bath or dry element	\$ 210.00
Injector Servicing every 1500 hours	\$ 310.00
Top Overhaul including parts	\$ 500.00
Battery one replacement heavy duty	\$ 243.00
Tyres 14 x 30 or 15 x 30, say one	\$ 650.00
Anti-Freeze radiator, 6 litre @ \$3.40 per litre plus top up, (2 changes of 3 litres) say	\$ 20.40
Grease small drum for 4000 hours	\$ 45.00
Power Assisted Steering oil and filters over 4000 hours	\$ 55.00
General Renewals and Running Repairs fan belts, radiator hoses, brake adjustments, etc.	<u>\$ 600.00</u>

TOTAL DIRECT COSTS \$26,796.78

TOTAL DIRECT COSTS PER YEAR \$ 5,359.36

TOTAL DIRECT COSTS PER HOUR \$ 6.70

TOTAL DIRECT COSTS PER HA WORKED  
say .81 ha per hour \$ 8.27

# FIXED COSTS

Registration \$19.70 per year.	
This is for Class B	\$ 98.50
Insurance, \$10.66 for first \$1,000	
value plus \$4.70 per \$1,000,	
thereafter less 12.5%. Per year	
for 5 years	\$ 456.65
Depreciation: D.V. over 5 years	\$16,000.00
Interest on \$25,800 for 5 years	
@ 10%	<u>\$12,900.00</u>
 TOTAL FIXED COSTS	 <u>\$29,455.15</u>

## TOTAL COSTS

TOTAL COSTS FOR 5 YEARS	\$56,251.93
TOTAL COSTS FOR 1 YEAR	\$11,250.39
TOTAL COSTS FOR 1 HOUR	\$ 14.06
TOTAL COSTS FOR each ha worked	
say .81 ha per hour	\$ 17.36
TOTAL COSTS INCLUDING LABOUR AT	
\$4.12 per hour direct costs	
per hour	
DIRECT COSTS PER HOUR	\$ 10.82
DIRECT COSTS PER HA WORKED	\$ 13.36
TOTAL COST PER HOUR	\$ 18.18
TOTAL COST PER HA WORKED	\$ 22.44

(iii) 67.1 - 111.85 kW TRACTORS (90-150 H.P.)  
3000 hours in 5 years

AVERAGE INITIAL COST \$31,000.00 \$52,000.00

## DIRECT COSTS

	90 HP	150 HP
Diesel Fuel 19-32 litres		
per hour, @ 44.2 cents		
per litre	\$25,194.00	\$42,432.00
Engine Oil sump capacities		
11.25-13.5 litre oil		
change every 150 hrs,		
20 changes	\$ 582.75	\$ 699.30
Engine Oil Filters -		
change every 300 hrs		
- 10 changes @ \$15.00	\$ 150.00	\$ 150.00

Transmission Oil - change every 1500 hrs capacities 70 litre @ \$3.13 per litre	\$ 438.00	\$ 438.00
Transmission Oil Filters change every 400 hrs, say 8 filters @ \$12.40	\$ 99.20	\$ 99.20
Fuel Filters, duals, change every 600 hrs 10 filters @ \$4.28	\$ 42.80	\$ 42.80
Air Cleaner dry type Cyclopac cartridge, \$120.00 each, say three replacements over 3000 hrs	\$ 360.00	\$ 360.00
Injector Servicing every 1200/1500 hrs 4 and 6 cylinder, 2 services	\$ 310.00	\$ 465.00
Top Overhaul including parts	\$ 500.00	\$ 650.00
Battery one replacement in 5 years, heavy duty	\$ 243.00	\$ 243.00
Tyres 15 x 30 to 18.4 x 38, say one replacement or relug	\$ 650.00	\$ 740.00
Anti-Freeze radiator 4-6 litre, plus top up	\$ 26.00	\$ 32.00
Grease small drum	\$ 40.00	\$ 50.00
Power Assisted Steering oil and filters	\$ 35.00	\$ 45.00
General Renewals and Running Repairs, fan belts, radiator hoses, brake adjustment, etc.	\$ 500.00	\$ 600.00
TOTAL DIRECT COSTS	<u>\$29,170.75</u>	<u>\$47,046.30</u>
TOTAL DIRECT COSTS PER YEAR	\$ 5,834.15	\$ 9,409.26
TOTAL DIRECT COSTS PER HOUR	\$ 9.72	\$ 15.68
TOTAL DIRECT COSTS PER ha worked (say 1.2 ha per hour)	\$ 8.10	\$ 13.07
FIXED COSTS		
Registration per year (Class B)	\$ 98.50	\$ 98.50

Insurance, \$10.66 for first \$1,000 value plus \$4.70 per \$1,000 thereafter less 12.5%. Per year for 5 years	\$ 563.58	\$ 995.38
Depreciation, diminishing value for 5 years	\$30,000.00	\$36,000.00
Interest on \$31,000 and \$52,000 for 5 years @ 10%	<u>\$15,500.00</u>	<u>\$26,000.00</u>
TOTAL FIXED COSTS	<u>\$46,162.08</u>	<u>\$63,093.88</u>

#### TOTAL COSTS

TOTAL COSTS FOR 5 YEARS	\$75,332.83	\$110,140.18
TOTAL COSTS FOR 1 YEAR	\$15,066.57	\$22,028.04
TOTAL COSTS PER HOUR	\$ 25.11	\$ 36.71
TOTAL COSTS PER ha worked (say 1.2 ha per hour)	\$ 20.93	\$ 30.59

#### TOTAL COSTS INCLUDING LABOUR AT \$4.12 PER HOUR

DIRECT COST PER HOUR	\$ 13.84	\$ 19.80
DIRECT COST PER HA WORKED	\$ 11.53	\$ 16.50
TOTAL COST PER HOUR	\$ 29.23	\$ 40.83
TOTAL COST PER HA WORKED	\$ 24.35	\$ 34.03

#### 4.20.4 Costs of Cultivation

(adapted from a paper given by G.A.G. Frengley, Farm Management Department, Lincoln College, to the 'Conservation Tillage' Seminar at Ashburton in October 1980.

The last paper I gave on this, or a very similar subject, was to the Conservation Tillage Seminar at Christchurch last year. As a consequence of the comments given I will expand on last year's ideas in this paper. Whereas in the last paper I avoided the effects of inflation, in this paper I will allow for it as well as for taxation. The effects are interesting. As well, tractor replacement has been effected by saving money in contrast to borrowing money as in the earlier paper.

This paper is structured to allow direct cost comparisons to be made between conservation tillage and conventional cultivation followed by a consideration of management issues.

Management costs have two components - fixed costs and

variable costs. As variable costs are easily defined and estimated, I will deal with these first.

#### A. Variable Costs

These comprise the costs of running the machinery and the labour to operate it. If labour is permanently available on the farm and is not required for any other urgent job at the same time the cost included can be assumed to be nil. If, on the other hand, additional labour is required to do the job this cost must be included. If the farmer's time is at a premium, labour will be employed. For our purposes we will allow \$4 per hour for the driver.

The next cost is the one farmers are most conscious of - fuel, oil and repairs and maintenance. For a 60 kW tractor, fuel, oil and grease is \$3.70 per hour. Repairs and maintenance add a further \$1.60. If 12% is added for machinery costs, this gives a total variable cost of up to \$10 per hour if labour is employed. Given that cultivation times will vary according to soil type from 2 to 10 hours per hectare the cost per hectare will vary likewise. However, if a farmer is paying tax, these costs are deductible expenses. At the highest marginal tax rate the costs will be reduced by 60%.

Thus variable costs of cultivation may range from \$8.00 per hectare from one extreme to \$100 at the other. By contrast the variable cost of machinery per hectare for a single spray application will vary according to tax rate from \$2.40 to \$6.00 for a smaller tractor covering 2 ha-hour.

#### B. Fixed Costs

We now come to fixed costs and it is here that difficulties most often occur. Firstly, fixed costs are not easy to recognise and secondly they are hard to calculate.

We will assume the 60 kW tractor costs \$15,000 will last five years at 800 hours per year, and with 4,000 hours on the clock would sell for \$6,000 today.

Our initial investment is \$15,000 for the tractor which has an alternative investment opportunity of 15% at current rates of interest. We therefore lose \$2,250 potential interest per year or \$900 after tax at the highest rate. Unfortunately, when we go to replace it at current inflation rate (17%) it will cost us \$32,890 in five years time but its secondhand counterpart will now be

worth \$13,150. Therefore to replace the tractor we will need to find \$19,740 in five years time. We can estimate how much cash we need to set aside each year to do this using a sinking fund calculation. At our 15% interest rate this amounts to \$2,927 if you can set aside without paying tax or \$7,320 if your tax is hurting. We are not yet finished our fixed costs. Depreciation (and investment) allowances are granted for tax deduction purposes at the rate of 40% in the first year and 20% of the falling book value in each succeeding year. For a farmer paying the highest tax rate these deductions represent as cash in his pocket \$3,600 after the first year, and \$1,080, \$860, \$750 and \$670 in the following years. Thus, although the high tax payer must set more cash aside each year to replace the tractor, he is able to recover a substantial amount of tax.

To make this clear, we can set up a table.

Table 1. Cost of Tractor Replacement at 60% Tax Rate and Inflation of 17%

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Initial Cost	-15,000					(32,890)
Secondhand Value						+13,150 - 3,549*
Tax Recovered by Depreciation	0	+3,600	+1,080	+ 860	+ 760	+ 670
Cash to set aside for tractor replacement (before tax)	- 7,320	-7,320	-7,320	-7,320	-7,320	
Annual Cash Cost (Start of each Year)	-22,320	-3,720	-6,240	-6,460	-6,560	+10,270

- \* Tax on difference between depreciated value and secondhand price.  
(Note: cash cost based on saving money for tractor replacement.)

As stated earlier, all the costs associated with the tractor could have been invested at 15% interest. By using discounting procedures we can establish the present cost of the annual cash figures given above.

The discount figures for each year: .896 .756 .657 .571 .497 .432

and the investment required today (at the start of year 1) to meet these costs if \$27,690. This is the present cost of replacing the tractor for a farmer with a high tax bill. (Marginal tax rate 60%.)

Table 2. Cost of Tractor Replacement at Zero Tax Rate and Inflation of 17%

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Initial Cost	-15,000					(32,890)
Secondhand Value						+13,150
Cash to set aside for tractor replacement	- 2,927	- 2,927	-2,927	-2,927	-2,927	
Annual Cash Cost (Start of each Year)		-17,927	-2,927	-2,927	-2,927	+13,150

For this non tax paying farmer the investment required to replace the tractor is \$19,782 if all costs are brought to the start of year 1.

Thus we now have a tractor replacement cost for 4,000 hours operation, of \$9.42 per hour at the high marginal tax rate and \$4.94 for the non tax payer. With costs of machinery added these figures at 12% of the tractor costs, cultivation costs per hour can be seen as in Table 3.

Table 3. Machinery Costs per hour and per hectare for Cultivation

	High	Tax	No Tax	
Fixed Costs	10.55	10.55	5.54	5.54
Running Costs/hour				
with labour	4.00		10.00	
without labour		2.40		6.00
	14.55	19.95	15.54	11.54
Costs per hectare				
(a) Lowest cost x 2 hrs/ha				23.08
(b) Highest cost x 10 hrs/ha			155.40	

The range of costs for cultivation therefore will lie between \$23.08 and \$155.40/ha.

Our final comparison is with the minimum tillage farmer for whom fixed costs and variable costs are approximately .5 to .66 of the bigger tractor estimates if a small tractor is used. These costs per hour will vary from \$7.30 to \$10.26, and at a spraying rate of 2 ha/hr will amount to \$3.65 to \$5.13 per hectare (or \$4.40/ha after taxes at the highest rate). If larger machinery is used, costs per hour will rise significantly but these may be largely offset by faster working times per hectare.

With glyphosate costing \$22.00 per litre there is room to consider spraying for minimum tillage as a cost saving measure alone on many properties.

#### 4.20.5 Combine Harvester Running Costs

The following calculations of combine harvester running costs for 1981/82 assume.

1. The average price for a 4.3m, 80 kW harvester is \$80,000.
2. The harvester is used for 1000 hours over 5 years.

##### Direct Costs

Diesel fuel: say 22.0 litres per hour for 1000 hours at 44.2c per litre	\$ 9,724.00
Fuel filters: duals, change every 600 hours, say 4 @ \$10.00 each	\$ 40.00



Engine oil: 12 litres: change every 150	
hours, say 7 changes @ \$2.60 per litre	\$ 327.00
Engine oil filters: change every 300	
hours, say 3 @ \$12.40 each	\$ 37.20
Air cleaner: dry type, one every 1000 hours	\$ 95.00
Injector Servicing: once every 5 years	\$ 195.00
Battery: one heavy duty	\$ 240.00
Grease: small drum for 1000 hours	\$ 45.00
Power steering oil and filters	\$ 40.00
General renewals and running repairs:	
fanbelts, radiator hoses, cutter	
blades, reel tines, conveyor chains,	
concave fittings etc.	\$ 4,200.00

TOTAL DIRECT COSTS	\$14,943.20
TOTAL DIRECT COSTS PER YEAR	\$ 2,988.64
TOTAL DIRECT COSTS PER HOUR	\$ 14.94
TOTAL DIRECT COSTS PER HECTARE	
HARVESTED, say 1.25 ha/hour	\$ 11.95

#### FIXED COSTS

Registration: \$19.70	\$ 98.50
Insurance: \$12.60 for first \$1,000 value	
plus \$0.55 per \$1,000 thereafter.	
Per year for 5 years	\$ 2,235.50
Depreciation: D.V. over 5 years	\$55,424.00
Interest on \$70,500 for 5 years @ 10%	\$40,000.00

TOTAL FIXED COSTS	\$97,758.00
TOTAL COST FOR 5 YEARS	\$112,701.20
TOTAL COST FOR 1 YEAR	\$22,540.24
TOTAL COST FOR 1 HOUR	\$ 112.70

TOTAL COSTS FOR EACH HECTARE HARVESTED	
1.25 ha per hour	\$ 93.92

TOTAL COST INCLUDING LABOUR @ \$5.50	
per hour	
DIRECT COSTS PER HOUR	\$ 20.44
DIRECT COSTS PER HECTARE HARVESTED	\$ 16.35
TOTAL COST PER HOUR	\$ 118.20
TOTAL COST PER HECTARE HARVESTED	\$ 94.56

#### 4.20.6 Registration Costs

As at February 1982.

Cars	\$34.40 per year
------	------------------

Trucks	
- light under 2000 kg	\$32.20 per year
- heavy, 2 axles	\$49.20 per year
- For additional axles add	\$ 4.10
Wheel Tractor	\$19.70 per year
Trailers	
- light	\$12.20 per year
- heavy	\$37.20 per year
- with Certificate of Fitness	\$20.20 per year
Motor Cycles	
- under 60 cc	\$13.20 per year
- 60-125cc	\$27.20 per year
- over 125cc	\$37.20 per year

#### 4.20.7 Road User Charges

(Taken from the M.O.T. booklet "Road User Charges")

##### (i) Time Licences

- apply to off-road motor vehicles.
- 3 licence categories.

##### Category A

- among others includes tractors other than those exempted, sawing/shearing apparatus for tree cutting, bulldozers and angle dozers.

##### Category B

- among others includes front-end loaders, mobile pile drivers, self-propelled trench diggers and excavators.

##### Category C

- among others, includes mobile cranes.

Maximum Gross Weight (tonnes)*	Vehicle Licence Categories		
	A	B	C
1	\$15.84	\$15.84	\$15.84
2	\$15.84	\$15.84	\$20.16
3	\$15.84	\$15.84	\$24.48
4	\$15.84	\$21.60	\$31.68
5	\$15.84	\$24.48	\$37.44
6	\$15.84	\$30.24	\$44.64
7	\$18.72	\$36.00	\$54.72
8	\$21.60	\$44.64	\$64.80
9	\$24.48	\$53.28	\$79.20
10	\$30.24	\$63.36	\$93.60

##### (ii) Distance Licences

These are available in multiples of 1000 km.

Classified according to whether powered or unpowered the number of tyres per axle and the axle spacing. This results in a total of 24 categories, however in this Manual we have only covered those combinations likely to be owned by farmers.

Category 1

- powered vehicles, 2 single tyred spaced axles.

Category 2

- powered vehicle, 2 spaced axles, one single tyred and the other double tyred.

Category 11

- unpowered vehicle, 1 single tyred axle.

Category 12

- unpowered vehicle, 1 twin tyred axle.

Category 13

- unpowered vehicle, 2 spaced axles, both single tyred.

Category 14

- unpowered vehicle, 1 group of 2 close axles both single tyred.

Charge Rates for Distance Licences (\$ per 1000 km of distance specified in the licence)

Maximum Gross Weight (tonnes)	Licence Category of Vehicle					
	1	2	11	12	13	14
1	\$7.21	\$7.21	\$7.21	\$7.21	\$7.21	\$7.21
2	\$8.04	\$8.01	\$8.00	\$7.99	\$7.99	\$7.99
3	\$9.01	\$8.92	\$8.83	\$8.76	\$8.76	\$8.76
4	\$10.33	\$10.04	\$9.76	\$9.51	\$9.57	\$9.57
5	\$12.25	\$11.59	\$10.87	\$10.44	\$10.41	\$10.41
6	\$15.14	\$13.75	\$12.27	\$11.37	\$11.32	\$11.32
7	\$19.40	\$16.78	\$28.58	\$18.43	\$17.94	\$17.94
8	\$25.52	\$21.04	\$16.42	\$13.58	\$13.44	\$13.44
9	\$34.06	\$26.90	\$19.48	\$14.95	\$14.72	\$14.72
10	\$45.67	\$34.77	\$23.48	\$16.53	\$16.21	\$16.21

In addition to Time Licences and Distance Licences, there are supplementary licenses and overweight permits for which details can be obtained from the Ministry of Transport.

## 4.21 ADMINISTRATION EXPENSES

### 4.21.1 Professional Fees

For the actual charges of the various professional organisations see Section 2.3 "Farm Capital and Finance".

### 4.21.2 Telephone and Toll Charges

#### (i) Rental (2 monthly basis)

Class*	Business Rate			Residential Rate
	B1	B2	B3	
1	\$69.20	\$52.30	\$25.10	\$21.00
2	\$88.20	\$63.90	\$29.50	\$24.60
3	\$89.50	\$74.20	\$33.40	\$28.60
4	\$106.70	\$80.40	\$34.30	\$29.60
5	\$109.70	\$83.40	\$35.40	\$30.60
6	\$114.40	\$86.70	\$36.40	\$31.90
7	\$118.40	\$91.30	\$37.40	\$33.20

Class 1 - Restricted attendance exchanges.

Class 2 - Automatic exchanges (up to 200 subscribers) and continuous attendance manual exchanges (201-3000 subscribers)

Class 3 - Automatic exchanges (201-3000 subscribers) and manual exchanges (3000 plus subscribers)

Class 4 - Automatic exchanges (3001-10000 subscribers).

Class 5 - Automatic exchanges (10001-20000 subscribers).

Class 6 - Automatic exchanges (80000 plus subscribers).

#### (ii) Tolls

Charges for 3 Minute Calls.

The charge for a three minute call to any exchange may be obtained from the local Toll Operator on request.

Distance	Charge Code	Full Rate	Night Rate
Up to 40 km	A	14c	14c
Over 40 up to 50	B	28c	28c
Over 50 up to 65	C	45c	39c
Over 65 up to 100	D	69c	54c
Over 100 up to 165	E	\$1.05	72c
Over 165 up to 245	F	\$1.38	96c
Over 245 up to 325	G	\$1.74	\$1.17
Over 325 up to 485	H	\$2.10	\$1.44

Over 485 up to 650	I	\$2.58	\$1.86
Over 650	J	\$2.85	\$2.04

Rating Periods. On Week days:

Full Rate Period: 8 a.m. to 6 p.m.

Night Rate Period: 6 p.m. to 8 a.m.

On Sundays and Holidays:

Full Rate Period: 6 a.m. to Midnight.

Night Rate Period: Midnight to 6 a.m.

Additional Minutes:

Where the distance is more than 50 kilometres each additional minute after the first three is charged for at one-third of the minimum rate except that toll calls from coin-box telephones are charged for in multiples of three minutes regardless of the distance.

Urgent Calls:

Double the rate applicable at the time the call is connected.

Special Services Fees:

Person to Person fee: 85c. Completed Collect and

Transferred Charge fee: 30c.

Price Required call (where cost required before receipt of account) Fee: 25c.

[New Zealand Post Office]

#### 4.21.3 Postage and Stationery (as at 1 April 1982)

Surface Mails - inland:

Standard letters 24c.

Non standard articles:

100g - 1 kg 35c-\$1.15 first class.

25c-75c second class.

Over 1kg 85c per additional 1 kg.

up to 10 kg (first class).

PARCELS - Postal Districts of:

Zone 1: Whangarei, Auckland, Hamilton, Thames, Tauranga, Rotorua, Gisborne.

Zone 2: New Plymouth, Wanganui, Palmerston North, Napier, Masterton, Wellington.

Zone 3: Blenheim, Nelson, Westport, Greymouth, Christchurch, Timaru.

Zone 4: Oamaru, Dunedin, Invercargill.

Weight	Local Delivery	Within a Zone	Between Zones 1 and 2 or 3 and 4	Between Zones 2 and 3	Between Zones 1 and 3 or 2 and 4	Between Zones 1 and 4
3 kg	\$1.40	\$1.60	\$1.75	\$2.00	\$2.20	\$2.45
5 kg	\$1.50	\$1.90	\$2.50	\$2.45	\$2.80	\$3.15
10 kg	\$1.60	\$2.10	\$2.45	\$3.30	\$3.80	\$4.45

The "local" rate applies to parcels delivered from the office of posting or within a radius of 10 km.

Parcels may not exceed 2 m in length and girth combined and the greatest length of one side may not exceed 1.05 m.

Flat circular parcels are measured for girth across the flat surface and not around the circumference.

[New Zealand Post Office]

Stationery costs are variable depending on the size of the unit and the intensive nature of the management.

#### 4.21.4 Subscriptions

Both to farming magazines and to various farming organisations. The costs in both instances are fully tax deductible and highly variable.

Some examples are:

"New Zealand Dairy Exporter" - \$7.50 per year (monthly).

"New Zealand Farmer" - \$23.00 per year (fortnightly).

"New Zealand Journal of Agriculture" - \$14.00 per year (monthly).

"Apiarist" - \$5.00 per year (6 copies).

#### 4.21.5 Travelling

Cost of travel is fully tax deductible when the purpose is farm business. This can represent a large expenditure item with some systems of management or some types of farms, e.g. stud farms.

#### 4.21.6 Bank and Stock Company Charges

Banking and various Stock Company charges do add to total administrative costs and so must be accounted for.

- (i) Banks - base fee \$3.00 per half year.
  - Ledger Activity Fee - 8c per chargeable transaction. (This is not charged on the first 100 entries in each half year.)
  - Clearance Fee (on items lodged other than the first one each day) 7c per chargeable transaction.
- (ii) Stock Companies.
  - Client Stamp Duty:
    - 72c per activity (e.g. for paying bills or managing wages and documents on behalf of farmers).

## 4.22 STANDING CHARGES

### 4.22.1 Insurances

In the case of fire insurance, premiums vary according to the nature of the risk and the value of the buildings or assets insured etc. Accident premiums vary with the nature of the work, etc. The following figures are from insurance companies as at 1 December 1981.

- (i) Buildings: per \$100 value.
  - Fire Cover:
    - Dwellings - Brick \$0.26.
    - Wood \$0.34.
    - Outbuildings - Brick - concrete or earth floor \$0.175.
    - Wood - concrete or earth floor \$0.26.
    - Double brick or concrete \$0.172.
    - Dwelling contents - \$0.225 regardless of construction.
    - Comprehensive:
      - Dwelling Contents - \$0.172 - \$0.345.
- (ii) Plant: per \$100 value.
  - Fire Cover:
    - All engine functioned farm machinery - \$4.00.
    - Any other farm machinery and equipment including plant, P.T.O. balers and non engine functioned implements anywhere in the district - \$0.30.
    - Manures and general farm produce whilst on the farm - \$0.30.

Comprehensive:

Harvesting: self propelled \$12.60 for first \$1,000 plus \$0.55/\$1,000 thereafter.

When mechanical damage occurs, the first \$50 is now payable by the owner. Where internal damage to harvesting equipment occurs, an additional premium of 50% of the basic premium is payable.

Tractor: \$10.66 for first \$1,000 plus \$4.70/\$1,000 thereafter less 12.5%.

N.B. Tractor-drawn and self propelled harvesters at the same rate.

Contractors pay these rates plus an additional premium on their vehicles.

All these premiums plus \$0.07 per \$100 Earthquake and War Risk.

(iii) Tractor Tyre Insurance - Tyres are insured for farmers at 3% of their value, and for contractors at 5.25% with a minimum of \$6.00 or \$10.00 per tractor.

(iv) Specialised Farm Equipment - Chainsaws, tools, scanaprobe, nitrogen contrainers, radio telephones etc.

All Risks: per \$100 value - between \$0.90 and \$2.50 depending on the nature of the risk.

(v) Crops: per \$100 value:

Fire Only -

Growing or cut in the field (including threshing) in any building or silo and transit risk, \$0.49 (time limit up to 12 months).

As per above but excluding whilst in any building or silo, \$0.33 (3 month limit of cover).

Fire plus Hail, Flood, Stock, Snow and Frost Risk - \$1.00.

Hay - \$0.28.

(vi) Wool:

When in farm building the rate is that for contents of the building.



(vii) Shelter belts (excludes live hedge fencing):

Rate 1.406% of assessed value.

(viii) Employers' Liability:

Accident Compensation Commission - All employees will be covered by a levy paid to the Inland Revenue Department.

(ix) Personal Accident (owners' personal cover):

Details vary, but a typical cover would be as follows:

Death \$12,500. Total disablement from accident \$100 per week. Total disablement from disease \$80 per week. Premium \$170 per annum.

(x) Public Liability - to cover legal liability arising from negligence caused by employees, stock, farm vehicles or fire and explosion but excludes motor vehicles which should be registered under the Transport Act.

Cover	Premiums
\$ 10,000	\$ 3.25
\$ 20,000	\$ 5.00
\$ 40,000	\$ 8.00
\$100,000	\$15.00

The premiums are based on the ownership of one property.

(xi) Stock Insurance

Companies on the whole are reluctant to insure stock. However, these charges are from Pyne Gould Guinness for "loss of use by accident".

Stud bulls: 8% of value for 9 months and over.

5.7% for 6 months.

Run bulls: 5.7% for 6 months.

Pedigree bulls: 5.7% for up to 12 months.

#### 4.22.2 Rates

The main classes of rates are as follows:

- \* General County rates for the costs involved in administering the County.

- \* Special rates for ad hoc bodies, e.g. Catchment, Drainage Boards.
- \* Special rates for repayment of loans, raised by any local body.
- \* Water supply charges where stock water is supplied by and local body, e.g. water races, County water schemes.
- \* Pest Destruction Board rates where the farm is in a Board district.

All counties rate on either the Capital or Land values. Water and pest destruction rates may be assessed on either per hectare, Capital value or Land value basis.

For budgeting purposes ask the farmer for the total rates.

#### 4.22.3 Interest

Interest rates vary with personal element, risks, and security offered. They also fluctuate with the Bank's interest charges. At present:

Flat Mortgage interest rates are	13%	- 16%
Table Mortgage interest rates are	11%	- 15%
Bank overdraft interest rates are	13%	- 16%
Stock and Station Agents interest rates are	14.5%	- 18%

Rural Bank Interest Charges are:

All Table Mortgage	1st and Subsequent Securities
Land Purchase	9%, rebatable to 7.5% for the first 3 years.
Development	9%, rebatable to 7.5% for the first 3 years.
Refinance	11%
Stock Purchase	9%, rebatable to 7.5% for the first three years.
Plant and Machinery Purchase	12%
Settlement Loans	9%, rebatable to 7.5% for the first 3 years.

For assessment of Working Capital see Section 2.1.4.

With budgeting use 12%-14% on total working capital.

#### 4.22.4 Rent - charge actual rental paid by the farmer

Renewed Rents on Crown Renewable Leases are 4.5% of Crown Rental Value, as from 1971. Rentals carry a .5% rebate for prompt payment. Thus to calculate C.R.V., gross rentals must be ascertained. Short term lease rents usually assessed within the range of 4.5%-5% of Capital Value.

#### 4.23 WAGES OF MANAGEMENT

For Lincoln College purposes, Wages of Management (W.O.M.) should be based on a married man's salary plus 4% of total farm capital (T.F.C.).

Use the following estimates for a married man's salary, where a house is provided.

Town Milk Dairy	\$10,000-12,000
Factory Supply Dairy	\$ 8,500-10,500
Sheep and Mixed Cropping	\$ 8,500- 9,500

Generally within the range \$8,000-\$12,000 depending on experience.

#### 4.24 SUBSIDIES

For information on Subsidies, see 'Assistance and Incentives for Farmers', Section 1.

#### 4.25 FENCING

##### 4.25.1 Wire

	Gauge of Wire	Length of 25kg coil	\$ per coil
(i)	Plain Wire		
	4mm (No. 8)	253m	\$30.35
	3.15mm	408m	\$32.28
	2.5mm H.T.	648m	\$34.32
(ii)	Barbed Wire		
	2.5mm (barbs 75mm)	219m	\$45.63
	2.5mm (barbs 150mm)	261m	\$45.63

(iii)	Lacing Wire 2mm galvanised	5kg coils	\$11.33
		10kg coils	\$22.47
	1.6mm galvanised	5kg coils	\$12.28
		10kg coils	\$24.37

#### 4.25.2 Standards

(i)	Waratahs	1.35m	\$3.40
		1.5m	\$3.76
		1.65m	\$3.95
		1.8m	\$4.17

NOTE: Flat standards are not available. They have been in short supply for about 2 years.

#### 4.25.3 Posts

(i)	Treated Stakes	1.35m x 75mm x 50mm	\$1.60
		1.5m x 75mm x 50mm	\$1.75

#### (ii) Concrete Wigram Posts Ltd:

Strainers	2.4m x 200mm x 200 mm	\$21.50
	2.1m x 175mm x 175mm	\$17.70
	2.1m x 150mm x 150mm	\$14.35
	2m x 150mm x 150mm	\$13.35
	2m x 125mm x 125mm	\$10.80
Half Round	2m x 150mm x 150mm	\$13.35

Stays	2.4m	\$ 7.90
	2.7m	\$ 8.50

Stay blocks	Extra large	\$ 3.90
	Large	\$ 2.50
	Small	\$ 2.15

Intermediates	1.83m	\$ 5.30
	1.67m	\$ 5.15

#### McKendrys:

Farm Posts	1.83m	\$ 5.50
Cattle Posts	1.98m	P.O.A.
Sheep Yard Posts	1.67m	P.O.A.
Posts	2.74m	\$ 7.00
Post Butts	1.37m	\$ 5.50
Paling Posts	1.67-3.65m	\$ 6.00-
		\$ 9.00
Gate Posts	1.83m x 15cm x 15cm	\$11.50

Fletchers:

	11.2cm	\$ 6.48
	15cm	\$ 8.24
	22cm	\$10.53
(iii)	Tanalised Round Intermediates	
	1.8m x 75mm SED	\$ 3.20
	1.8m x 100mm SED	\$ 4.20
	1.8m x 125mm SED	\$ 4.65
(iv)	Tanalised Half Rounds	
	1.8m x 150mm	\$ 3.25
	2.4m x 150mm	\$ 6.00
	2.7m x 150mm	\$ 5.50
	3.0m x 175mm	\$ 7.25
(v)	Tanalised Strainers	
	2.1m x 150mm SED	\$ 8.00
	2.1m x 175mm SED	\$ 9.00
	2.1m x 200mm SED	\$10.00
	2.4m x 150mm SED	\$10.00
	2.4m x 175mm SED	\$12.00
	2.4m x 200mm SED	\$13.00
(vi)	Tanalised Stock Yard Posts	
	2.7m x 150mm SED	\$11.00
	2.7m x 175mm SED	\$13.00
	2.7m x 200mm SED	\$15.00
(vii)	Tanalised Stays	
	2.7m x 75mm SED	\$ 4.25
	2.7m x 90mm SED	\$ 5.00
	2.7m x 115mm SED	\$ 5.50

SED = Small End Diameters.

4.25.4 Stays

Concrete (incl. small fotting block)		\$ 7.20
Tanalised	2.4m x 7.5-10cm	\$ 4.25
	2.7m x 7.5-10cm	\$ 4.80

4.25.5 Stay Blocks

Concrete		\$ 2.85
Tanalised	200mm x 75mm x .5m	\$ 2.15
	200mm x 50mm x .5m	\$ 1.43
	150mm x 50mm x .5m	\$ 1.07

#### 4.25.6 Staples

(i)	Sliced Point Staples	Per 25kg Case
	20mm x 4.00mm	\$46.17
	30mm x 4.00mm	\$46.17
	30mm x 4.00mm	\$49.02
	27mm x 2.80mm	\$49.66
	.25mm x 2.50mm	\$50.87
	19mm or 15mm x 2.00mm	\$54.70
(ii)	Barbed Staples	
	50mm x 4.00mm	\$48.68
	40mm x 4.00mm	\$48.68
	30mm x 4.00mm	\$48.68
	30mm x 3.15mm	\$51.39
(iii)	Concrete Post Staples (for single or double hole posts)	
	5 kg bags	\$ 9.13
	25 kg bags	\$45.57

#### 4.25.7 Battens (Tanalised)

1.07m x 50mm x 40mm each	64c
per 100	\$64.00
1.37m x 50mm x 40mm each	70c
per 100	\$70.00

#### Cyclone Lightning Fence Droppers

914 mm (per 100)	\$60.88
940 mm (per 100)	\$61.46
965 mm (per 100)	\$66.34
1003mm (per 100)	\$67.19

#### 4.25.8 Gates

(i)	McVicars (Wooden)	
	Hurdles	
	1.8 m	\$18.90
	2.1 m	\$20.25
	Gates	
	3.6 m	\$52.55
	4.2 m	\$55.30

(ii)	McAlpines (Wooden)		
	Hurdles	1.8 m	\$15.00
		2.1 m	\$15.50
		2.4 m	\$16.10
	Gates	3.0 m	\$44.50
		3.6 m	\$47.00
		4.2 m	\$50.00
	Sheep Yard	1.8 m	\$37.00
		2.1 m	\$38.00
		2.4 m	\$40.00

(iii) Cyclone (galvanised steel)

		Length (metres)				
		3.05	3.35	3.66	4.27	4.88
Economy				\$67.39	\$71.97	
Standard	\$66.52	\$70.02				
Special				\$84.19	\$102.82	
180 barred	\$106.89			\$120.30	\$141.61	
Stressmaster				\$99.31	\$112.68	\$139.49
Stressmaster heavy				\$102.52	\$117.98	\$157.43
Special pairs					\$110.56	\$125.32

Hurdles 2.4m long x 900mm high \$42.91 each

Economy Farm Gates	Length in metres	
	3.66	4.27
	\$67.39	\$71.97
Price for 20 or more	\$64.68	\$69.07

Deer Gates	
3 05 m x 1900 mm	\$113.13
3.66 m x 1900 mm	\$129.16
4.27 m x 1900 mm	\$145.43

(iv) Hurricane (galvanised steel)

All purpose	length (metres)				
	3.0	3.5	3.75	4.00	4.25
Standard (medium)	\$75.02	\$79.32	\$82.74		
Standard (heavy)	\$94.37	\$99.16	\$104.83		
With Cross Corner bracing (medium)	\$84.03	\$88.09	\$91.53	\$95.95	\$99.07
With Cross Corner bracing (heavy)	\$106.00	\$112.11	\$117.83	\$123.91	\$129.74
Pairs (medium)	\$97.07	\$101.20	\$104.63	\$109.46	\$112.73
Pairs (heavy)	\$121.72	\$127.83	\$133.36	\$140.16	\$145.85
Long pairs	4.50 metres long				\$152.76
(heavy)	4.75 metres long				\$158.43
Economy	3.75m long			4.25m long	
Special	\$69.39	(\$64.68 for 20 or more)		\$71.97	(\$69.07 for 20 or more)
Heavy weight	\$85.22	(\$81.67 for 20 or more)		\$90.95	(\$87.27 for 20 or more)

(v) New World Galvanised Steel Gates

Model	3.02m	3.32m	3.62m	3.92m	4.22m	4.52m
38E	\$58.50	\$61.00	\$63.50	\$68.00	\$72.50	\$77.00
38S	\$69.25	\$72.00	\$74.80	\$79.30	\$83.80	\$88.30
38HD	\$89.50	\$95.00	\$100.70	\$106.30	\$112.00	-

#### 4.25.9 Gate Fittings

- (i) Gudgeons  
 Canadian Screw 12mm-20mm - \$1.34-\$1.98 each  
 Drive Gudgeon 20mm - \$3.47 each.  
 Std. Through Post 200mm-400mm  
 \$2.98-\$4.35 each.  
 "Lock" Through Post 200mm-400mm  
 \$4.15-\$5.77 each.  
 Square Shank Through Post 250mm-500mm  
 \$4.73-\$5.71 each.  
 3 post gudgeons 35cm \$4.70 each.
- (ii) Hinge Straps  
 Standard Canadian 150mm-300mm  
 \$2.08-\$5.24 per pair.  
 Heavy duty Canadian 300mm-600mm  
 \$6.88-\$10.30 per pair.



(iii)	Clamp hinges		
	Single way - concrete post		
	125mm-200mm	\$12.42	per set
	Two way - concrete post		
	125mm-200mm	\$13.33	per set
(iv)	Gate Fastenings		
	Hayes Fork Chain fastener for		
	for double gates	\$ 7.19	
	for single gates	\$ 6.37	
	Heavy Ring	\$ 4.03	
	Light Ring	\$ 0.31	
	Hayes adjustable fastener for		
	square concrete posts		
	(3 sizes)	\$ 5.09-\$10.24	
	Chain Catch with hook	\$ 2.49	
	Cattle gate chain	\$14.11	
(v)	Gate lugs		
	Galvanised 16 and 20 mm - 53c and 69c.		
	Hinges - Wooden Gates		
	450mm (per pair)	\$ 6.50	
	450mm (per pair)	\$12.00	
	Hayes Life and Swing Gate		
	Hinge Sets	\$80.70	

#### 4.25.10 Wire Netting

##### (i) Cyclone

##### Twinlock Hinge - Joint Boundary

Type	Height	Stay	Price/100m
High Tensile		Spacing	
8 line	900 mm	150 mm	\$153.28
8 line	900 mm	300 mm	\$117.36
8 line	800 mm	150 mm	\$148.46
8 line	800 mm	300 mm	\$114.33
7 line	900 mm	150 mm	\$141.25
7 line	900 mm	300 mm	\$106.53
7 line	800 mm	150 mm	\$136.47
7 line	800 mm	300 mm	\$104.11
7 line	725 mm	150 mm	\$132.21
7 line	725 mm	300 mm	\$102.44
6 line	700 mm	150 mm	\$119.71
6 line	700 mm	300 mm	\$91.58

### Tightlock Stiff Stay Boundary

7 line	900 mm	300 mm	\$116.32
8 line	900 mm	300 mm	\$124.45
9 line	900 mm	300 mm	\$139.84
8 line	800 mm	300 mm	\$121.98
8 line	750 mm	300 mm	\$122.32
7 line	600 mm	300 mm	\$107.75

### Medium Tensile

7 line	900 mm	300 mm	\$134.62
8 line	750 mm	150 mm	\$176.85
8 line	750 mm	300 mm	\$157.80
9 line	900 mm	150 mm	\$200.39
9 line	900 mm	300 mm	\$178.25

### Medium Lightweight

7 line	900 mm	300 mm	\$109.40
8 line	800 mm	300 mm	\$116.89

### Deer Fence

13 line	1900 mm	150 mm	\$313.69
13 line	1900 mm	300 mm	\$223.21
11 line	1550 mm	150 mm	\$251.91
11 line	1550 mm	300 mm	\$183.69

Chain Link netting. Galvanised - general purpose.  
(Prices per square metre)

Mesh Size	Wire Diameter			
	2.00 mm	2.50 mm	3.15 mm	3.55 mm
37.5 mm	\$4.36	\$5.98	\$9.00	-
50 mm	\$3.48	\$4.50	\$6.65	-
75 mm	-	\$3.26	\$4.80	\$5.90
100 mm	-	\$2.39	\$3.45	\$4.24

### Galvanised - Heavy Duty

Mesh Size	Wire Diameter	
	4.00 mm	
75 mm	\$7.09	
100 mm	\$5.16	
150 mm	\$33.65	

# Plastic Coated

Mesh Size	Wire Diameter	
	2.64 mm	3.25 mm
50 mm	\$4.35	\$5.85

## Farm Mesh

75mm x 150mm x 4 mm diameter galvanised wire.		
Roll Size:		
30m long x 840mm wide		\$126.34 per roll
30m long x 1150mm wide		\$172.26 per roll

(ii)

## Hurricane

Type	Height	Stay Spacing	Price/100m
High Tensile			
8 line	900 mm	150 mm	\$153.28
8 line	900 mm	300 mm	\$117.36
8 line	800 mm	150 mm	\$147.98
8 line	800 mm	300 mm	\$118.79
7 line	900 mm	150 mm	\$141.25
7 line	900 mm	300 mm	\$106.53
7 line	800 mm	150 mm	\$136.47
7 line	800 mm	300 mm	\$104.11
7 line	725 mm	150 mm	\$132.21
7 line	725 mm	300 mm	\$102.44
6 line	700 mm	150 mm	\$119.71
6 line	700 mm	300 mm	\$ 91.58

## Stiff Stay Type (South Island Only)

8 line	900 mm	300 mm	\$124.45
8 line	800 mm	300 mm	\$121.98

## High Tensile Deer Fence

12 line	1800 mm	1560 mm	\$262.04
12 line	1800 mm	300 mm	\$193.98

## 4.25.11 Fencing Aids

### (i) Straining Equipment

Hayes 'Smooth grip' chain grap	\$42.70
Tension Handle (for perm. wire strainers)	\$46.63
Straining Tension Indicator	\$31.37

'Triplex' Permanent Strainers	
- not insulated	\$ 1.50
- insulated	\$ 2.07
'Rotatense' tensioning system	
(steelpost, baseplate, 4 anchors)	\$50.54
Boundary Fence Clamps	\$39.94
Wooden Netting Clamps	\$35.62
General Purpose Strainer	\$69.78
General Purpose Strainer heavy duty	\$96.48
Boundary Fence Strainer	\$74.39
Supporting Standard Plates	
100mm x 100mm per 100 slotted	
for attaching to plain standards	\$38.50
Supporting Standard Plates etc.	
Slotted for attaching to Y section	\$38.50
Supporting Standard Plates	
150mm x 100mm	\$50.83
Cyclone Hardwood Strainer Boards	
Field Fence	\$50.06
Field Fence	\$80.61
Ranchman Circular Wire Strainer	\$ 0.75
Handles (pair)	\$16.93
(ii) Post and Standard Drivers	
Hayes Tubular Standard Drivers	\$27.35
Stake Driver 100 mm	\$46.46
150 mm	\$86.53
200 mm	\$104.34
Donalds P.T.O. Post Driver (new model)	\$1299.00
Manual Post Driver 125mm 16 kg	\$67.50
150mm 20 kg	\$80.00
150mm 25 kg	\$90.00
Manual Standard Driver	\$32.50
(iii) Post and Standard Removers	
Donalds Standard Lifter	\$32.50
Post and Standard Puller	\$65.00
Hayes Standard Lifter	\$45.10
(iv) Wire Reels	
Hayes Combination Wire Coiler and Reel	\$140.64
Multiwire Reel 2 Reels	\$100.94
3 Reels	\$134.91
Junior Wire Reel Standard	\$39.55
Deluxe	\$82.38

	Bell Booth Spinning Jenny	\$31.65
(v)	Post Hole Diggers	
	Gallager Post Hole Digger gear box, drive shaft and frame only, E370	\$895.00
	Gallager Auger complete with Plain or Stony Tip	
	100 mm D 140	\$130.00
	150 mm D 139	\$134.00
	200 mm D 141	\$170.00
	250 mm D 142	\$180.00
	300 mm D 143	\$180.00
	350 mm D 144	\$272.00
	400 mm D 145	\$287.00
	500 mm D 146	\$368.00
	600 mm D 147	\$398.00
(vi)	Tools	
	Hayes Standard Hammer and Setter	\$26.99
	Staple Pick	\$9.24
	Post Rammer - wooden handle	\$12.22
	- steel handle	\$18.13
	Channellock Fencing Pliers	\$13.35
	Crescent Fencing Pliers	\$15.10
	Plier Pouch	\$ 4.62
	Staple Bag	\$16.10
	Fencing Apron	\$25.20
	Tool Kit Pouch (Bell Booth)	\$39.44
	Drum Hydraulic Post Rammer	\$1555.00
	Lumberjack Stain Concentrate 1 x 500 ml can	\$ 3.95

#### 4.25.12 Shade and Windbreak Cloth

##### Donaghys Windbreak Cloth

	90cm x 50m	180cm x 50m	270cm x 50m
1 - 20 rolls	\$72.80 ea	\$120.00 ea	\$184.51 ea
21 - 100 rolls	\$61.80 ea	\$105.00 ea	\$154.00 ea
100 + rolls	\$49.00 ea	\$84.00 ea	\$124.11 ea

#### 4.25.13 Electrical Fencing Components

##### (i) Electric Fence Energisers

Mains: 230-240 V A.C.

Gallagher BEV II	\$175.00
Gallagher Super 60	\$270.00
Gallagher M.P.E.	\$106.00
Gallagher E12	\$102.30
Gallagher KM 2	\$ 81.00
Gallagher SP5 c/w batteries	\$491.65
Gallagher SP50 battery case	\$1186.80
Gallagher super battery (12,24,36 V)	\$220.00
Gallagher WP50 with battery case	\$1045.44
Gallagher E8 Strip Grazer	\$98.00
Waikato Watchdog Mains 50	\$151.04
Waikato Watchdog Mains 100	\$265.74
Waikato Watchdog Sola 6	\$409.16

##### (ii) Energiser Replacement Modules and Parts

Gallagher Module BEV II Type 10	\$48.87
Gallagher Module Super 60 Type 16	\$99.40
Gallagher Module MPE	\$33.00
Gallagher Module E12 MK III	\$46.12
Gallagher Module KM2R	\$59.00
Gallagher Module KM2	\$41.92
Gallagher Battery Plate KM2	\$ 5.94
Gallagher H.T. Lead (1m) for E12,KM2,SP5	\$ 0.20
Gallagher Module Super battery	\$100.48
Gallagher Module WP50	\$98.23
Gallagher Module SP50	\$100.81
Gallagher Module E8 Strip Grazer	\$42.00
Gallagher Module SP5	\$75.53
Gallagher SP50 Solar Panel 32 Watt	\$906.67
Gallagher SP5 Solar Panel 5 Watt	\$352.18
Gallagher WP 50 Wind Charger 50 Watt	\$745.00
Gallagher VDR Panel for E8	\$ 8.23
Gallagher Coil only for EA	\$ 12.50

##### (iii) Electric Fence Accessories

Waikato Fence Tester Watchdog	\$ 38.59
Gallagher Digital Voltmeter	\$ 89.00
Gallagher Automatic Remote Monitor	
Systems (ARMS) 4 channel	\$640.00
1 channel	\$399.00
Gallagher Flood Gate Controller/Energy Limiter	\$ 11.02

STC Transformer 1.0 KVA	\$102.50
1.5 KVA	\$145.00
2.0 KVA	\$160.00
Wire joint Sealing Compound (per tube)	\$ 3.16
30 Amp Cutout fuses	\$ 8.32
Line Clamps	\$ 0.31
Flexible connector (with leads and bolt)	\$ 0.99
Knife-switch Cut-out (with leads)	\$ 5.76
Gallagher Tool Kit	\$ 43.84
Neon Fence Tester	\$ 10.94
Gallagher battery charger for KM2R	\$ 28.46
Wire twisting tool	\$ 3.57
"Maun" 8 side cut insulated pliers	\$ 20.75

(iv) Insulators

Rod Type R 10 mm	\$0.22-\$0.24
Bobbin Type B	\$0.16-\$0.19
Steel Post Type Y	\$0.23-\$0.27
Wooden Post WP	\$0.37-\$0.45
Wooden Post	\$0.16-\$0.20
Strain Type S	\$0.29-\$0.34
Porcelain Strain Corner - 100	\$0.72
Outrigger 225mm long with 'W'	
insulator PK50	\$0.90
Outrigger and WP Insulator 225 mm	
long PK50	\$1.05
Outrigger 450 mm long with 'W'	
Insulator PK100	\$1.07
Outrigger and WP Insulator 450 mm	
long (PK100)	\$1.28
Porcelain Reel Insulator & Clip	
(PK100)	\$0.50
Bevin Corner	\$0.28
Drive-on for wooden posts	\$0.16
Live-wire screw-on	\$0.20
Beattie Permanent for Y and	
flat standards	\$0.25
Temporary for Y and flat	
standards	\$0.25
Pin-lock for Y and flat	
standards	\$0.25
Pin-lock for wooden posts	\$0.14
10mm Rod	\$0.15
Porcelain Corner Type 107	\$1.05
Bobbin Type 445	\$0.54
Waikato Corner	\$0.17
Waikato Waratah (per bag)	\$9.22
Waikato Fence Breaker (spring	
loaded)	\$2.48
Field Marshall Bevin Gate Break	\$2.50

Wang-on Permanent PK300	\$0.50
(v) Electric Fence Wire, Cable and Netting	
'Livestrand' 200 m	\$ 8.61
'Livestrand' 350 m reel	\$15.07
500 m	\$21.23
Super 6 Hotstrand 200 m	\$10.35
Super 6 Hotstrand 500 m	\$25.32
Hottape 200 m reel	\$17.58
'Spark' 200 m	\$ 6.75
500 m	\$16.85
Waikato Poliwire 200 m	\$ 8.03
Watchdog 500 m	\$20.08
Watchdog 6 strand 500 m	\$21.70
'Livewire' Heavy Duty Underground cable 100 m	\$42.22
Gallagher Galv. Underground Cable double Insulated 100 m	\$35.80
'Flexinet' 50 yard (45.7 m)	\$85.90
'Bell Booth' undergate cable 100 m	\$32.00
Gallagher Alumin. lead-out wire 3.15 mm (1100 mm)	\$238.50
Fence Tensioner	\$ 9.40
Polywire (6 strand) 500 m	\$ 25.32
200 m	\$ 11.46
Gallagher Earth Stakes Galvanised angle	\$ 14.46
Gallagher Flood Gate Chain 12 g (150 m)	\$117.00
Flood gate chain 9 g (150 m)	\$150.00
Spring Gate c/w Handle & Insulator	\$ 6.82
Cyclone Twinlock Hinge, Joint Field Fence, Electric	
5 line      525 mm      300 mm	\$71.94/100 m
(vi) Electric Fence Standards	
'Trident'	\$ 1.74
'Stafix' 10 mm Rod	\$ 1.63
12 mm Rod	\$ 2.10
Yates Type D Pigtail	\$ 2.30
Standard H Hi-Tensile	\$ 1.50
(vii) Electric Fence Reels	
'Stafix' Self Insulated Reel	\$ 12.97
with carrying handle	\$ 14.97
with Mounting Post	\$ 21.00



'Stafix' Fence-Mounted Mini Reel	\$ 11.20
Single Mini Reel on Standard	\$ 16.52
Double Mini Reel on Standard	\$ 27.18
Triple Mini Reel on Standard	\$ 37.84
Reel Assembly including	
Bracket and Insulator	\$ 10.66
Reel Standard	\$ 5.86
Yates Wheelbrand reel	\$ 17.20
Wheelbrand reel and std.	\$ 23.73
Thompson's Hot-Dip Galvanised	\$ 1.95
'Insultimber'	
Semi-permanent post	\$ 2.52
Droppers	\$ 1.49
Permanent posts	\$ 2.98
Deer posts (large)	\$ 5.98
(small)	\$ 4.73
Tie downs	\$ 0.96

#### 4.25.14 Contract Fencing Rate (1982)

##### (i) On Canterbury Plains

- 200 wooden posts @ 400 wooden droppers per km, 10 2.5mm hi-tensile wires, horizontal strainers gates etc. \$15-\$20 per 20 m.
- Hourly rate = \$13-\$15 per man.

##### (ii) On Hills and Downs

- 50 wooden posts per km, 200 waratahs per km, 300 lighting droppers per km, 7 2.5 mm hi-tensile wires, 1 barb strainers, gates etc. \$20-\$25 per 20 m.
- 100 wooden posts per km, 150 waratahs, 7 2.5mm hi-tensile wires, 1 barb, strainers, gates etc. \$15-\$20 per 20 m.

##### (iii) Contract Post Driving

\$26-\$28 per hour includes tractor, driver and operator.

4.25.15 Guide to Fencing Cost  
Cost per km of Fence

(i) Plain Wire

No. of Wires in Fence	1	7	8	9	10
4.0 mm	\$119.96	\$839.72	\$959.68	\$1079.64	\$1199.60
3.15 mm	\$ 79.12	\$553.82	\$632.94	\$ 712.06	\$ 791.18
2.5 mm HT	\$ 52.96	\$370.72	\$423.69	\$ 476.64	\$ 529.60

(ii) Barbed Wire (2.5 mm)

No. of Wires in Fence	1	2
Barbs 75 mm apart	\$208.36	\$416.71
Barbs 150 mm part	\$174.82	\$349.66

(iii) Netting

Cyclone Twinlock Boundary

B8/900/300 HT	\$1173.60
B7/900/150 HT	\$1412.50
B5/525/300 S	\$ 719.40

Tightlock Boundary

A8/900/300 HT	\$1244.50
A7/900/300 H	\$1163.20

Deer fence

A13/1900/300 HT	\$2969.80
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Hurricane High Tensile

HT8/36/12	\$1173.60
SSHT8/36/12	\$1244.50
HT/13/75/12	\$2075.20

(iv) Posts

Post spacing in metres	3	4	5	6	7	8
No. posts per km	333	250	200	166	142	125
Treated round 1.8m x 100mm	\$1398.60	\$1050.00	\$840.00	\$697.20	\$596.40	\$525.00
Treated round 1.8m x 125mm	\$1548.45	\$1162.50	\$930.00	\$771.90	\$660.30	\$581.25
Concrete 1.8m	\$1764.90	\$1325.00	\$1060.00	\$879.00	\$752.60	\$662.50
Waratah 1.65m	\$1315.35	\$987.50	\$790.00	\$655.70	\$560.90	\$493.75

(v) Battens: Timber 1.37m

No. Battens between Posts	Post Spacing in metres					
	3	4	5	6	7	8
3	\$699.30	\$525.00	\$420.00	\$348.60	\$298.20	\$262.50
4	\$932.40	\$700.00	\$560.00	\$464.80	\$397.60	\$350.00
5	\$1165.00	\$875.00	\$700.00	\$581.00	\$497.00	\$437.50
6	\$1398.60	\$1050.00	\$840.00	\$697.20	\$596.40	\$525.00

Lightning 1003 mm

No. Battens between Posts	Post Spacing in metres					
	3	4	5	6	7	8
3	\$671.23	\$503.93	\$403.14	\$334.61	\$286.23	\$251.96
4	\$894.97	\$671.90	\$537.52	\$446.14	\$381.64	\$335.45
5	\$1118.71	\$839.88	\$671.90	\$557.68	\$477.05	\$419.94
6	\$1342.46	\$1007.88	\$806.28	\$669.21	\$572.46	\$503.93

(vi) Staples.

(1) Post Staples. 50mm x 4.0mm barbed.

No. posts per km	333	250	200	166	142	125
No. of Wires						
7	\$46.38	\$34.82	\$27.86	\$23.12	\$19.78	\$17.41
8	\$53.01	\$39.80	\$31.84	\$26.42	\$22.60	\$19.90
9	\$59.63	\$44.77	\$35.82	\$29.73	\$25.43	\$22.39
10	\$66.26	\$49.74	\$39.80	\$33.03	\$28.26	\$24.87

(2) Batten Staples. 30mm x 3.15mm barbed.

No. battens per km	2000	1500	100	750	500
No. of wires					
7	\$109.13	\$81.54	\$54.56	\$40.92	\$27.28
8	\$124.71	\$93.54	\$62.36	\$46.77	\$31.18
9	\$140.30	\$105.23	\$70.15	\$52.61	\$35.08
10	\$155.89	\$116.92	\$77.95	\$58.46	\$39.97

#### 4.25.16 Guide to Fencing Cost

Cost per Unit

(Cost per Unit will vary for size of post and Stay Used)

(i)	Strainer:	Single Stay Horizontal	
		2.4m x 175mm back post	\$12.00
		2.1m x 150mm front post	\$ 8.00
		2.7mm x 115mm stay	\$ 5.50
		.5 batten, twitch wire etc.	\$ 1.00
			<u>\$26.50</u>
(ii)	Strainer:	Diagonal Stay	
		2.4m x 200mm post	\$13.00
		2.7m x 115mm stay	\$ 5.50
		stay block .5 round post	\$ 2.00
			<u>\$20.50</u>
(iii)	Strainer:	Concrete	
		200 mm x 200 mm x 2.4 m post	\$21.50
		2.7 m stay	4 8.50
		Stay block large	\$ 2.50
			<u>\$32.50</u>

4.25.17 Pricing types of fences - exclusive of labour  
(based on 200 m strain on flat country)

(i)	200 wooden posts per km	\$840.00
	2 single stay horizontal end assemblies	\$ 53.00
	10 2.5mm hi-tensile wire	\$529.63
	400 wooden droppers	\$280.00
	2 steel gates and gudgeons	\$253.36
	Staples	\$ 71.50
	4 in line strainers, tie downs, permanent wire strainers	\$ 155.50
		<u>\$2,182.99</u>
(ii)	150 wooden posts per km	\$ 697.50
	2 diagonal stay end assemblies	\$ 41.00
	8 wire HT netting	\$1,173.60
	150 treated stakes	\$ 262.50
	1 2.5mm HT wire	\$ 52.96
	2 steel gates and guegoens	\$ 253.36
	Staples	\$ 52.00
	4 in line strainers, tie downs	\$ 88.00
		<u>\$2,621.00</u>
(iii)	200 concrete posts per kmm	\$1,060.00
	2 diagonal stay end assemblies	\$ 65.00
	7 4.0 mm wire	\$ 839.72
	1 150 mm barb wire	\$ 174.82
	800 wooden battens	\$ 560.00
	2 steel gates and guegoens	\$ 253.36
	Staples	\$ 98.00
	4 in line strainers, tie downs	\$ 103.00
		<u>\$3,154.00</u>

4.26 WATER SUPPLY

4.26.1 Polythene Piping

Polipipe Size	Standard/100m	High Density/ 100 m
15mm	\$31.20	\$32.00
20mm	\$61.00	\$63.00
25mm	\$78.75	\$76.00
32mm	\$98.40	\$108.00
40mm	\$116.25	\$153.00
50mm	\$161.25	\$278.00

New World Arupec low density polythene utility pipe.

15mm	per 100 m	\$28.15
20mm	per 100 m	\$55.38

4.26.2 P.V.C. Pressure Pipe

AHI Garnite.

Gold Ribbon High Density Polythene (HDPE) Pipe

NZS 7602. Price per 100 metres.

Pressure Classes and Colour Code

	Class B 60m head	Class C 90m head	Class D 120m head
	87 psi 600 kPa Red	130 psi 900 kPa Blue	174 psi 1200 kPa Green
Nominal Diameter			
15 mm	-	\$27.21	\$34.66
20 mm	-	\$53.14	\$69.20
25 mm	\$70.02	\$85.14	-
32 mm	\$95.18	\$122.18	-
40 mm	\$137.16	\$176.88	-
50 mm	\$227.93	\$323.08	-

Prices for each coil size available.

Price for each coil size (\$)

Nominal Diameter	25m	50m	100m	105m	200m
15mm Class C	6.80	13.61	27.21	40.82	54.42
15mm Class D	8.67	17.33	34.66	51.99	69.32
20mm Class C	13.29	26.57	53.14	79.71	106.28
20mm Class D	17.30	34.60	69.20	103.80	138.40
25mm Class B	-	35.01	70.02	105.03	140.04
25mm Class C	-	42.57	85.14	127.71	170.28
32mm Class B	-	47.59	95.18	142.77	-
32mm Class C	-	61.09	122.18	183.27	-
40mm Class B	-	68.50	137.16	205.74	-
40mm Class C	-	88.44	176.88	265.32	-
50mm Class B	-	113.97	227.93	341.90	-
50mm Class C	-	161.54	323.08	484.62	-

# Philmac 'Polygrip' HDPE Pipe Fitting Prices

Cat. No.	Description	Size mm	Std Pack	Trade Price
P.G. 901	Straight Coupler	15	10	\$ 2.04
		20	10	\$ 2.18
		25	10	\$ 3.25
		32	5	\$ 6.49
		40	2	\$ 7.26
		50	2	\$12.10
P.G. 902	Male Coupler (thread male) BSP	15	10	\$ 1.72
		20	10	\$ 2.18
		25	10	\$ 3.25
		32	5	\$ 4.43
		40	2	\$ 5.91
		50	2	\$ 8.86
P.G. 903	Female Coupler (thread female) BSP	15	10	\$ 2.22
		20	10	\$ 2.66
		24	10	\$ 3.70
		32	5	\$ 6.30
		40	2	\$ 8.39
		50	2	\$12.60
P.G. 905	Tee	15	10	\$ 3.85
		20	10	\$ 6.19
		25	10	\$ 8.47
		32	5	\$14.76
		40	2	\$20.98
		50	2	\$25.17
P.G. 906	Tee Female Thread (thread female BSP on brand)	15	10	\$ 4.93
		20	10	\$ 6.16
		25	10	\$ 8.62
		32	5	\$13.42
		40	2	\$16.79
		50	2	\$20.13
P.G. 907	90° Elbow Female Thread (thread female BSP on one end)	15	10	\$ 3.85
		20	10	\$ 4.62
		25	10	\$ 6.47
		32	5	\$ 8.39
		40	2	\$10.51
		50	2	\$13.42
P.G. 911	Threaded Reducing Bush (thread male and female BSP)	20 x 15	10	\$ 1.62
		25 x 20	10	\$ 1.76
		32 x 20	10	\$ 2.06
		40 x 25	10	\$ 2.20
		40 x 32	10	\$ 2.20
		50 x 32	10	\$ 2.95
		50 x 40	10	\$ 2.95

#### 4.26.3 Concrete Water Troughs (McKendry's)

##### Capacity

1137 litres	round	\$90.00
910 litres	round	\$84.00
455 litres	round	\$62.00
318 litres	long	\$66.00
273 litres	long	\$55.00
182 litres	round	\$55.00
182 litres	long	\$55.00

#### 4.26.4 Concrete Tanks (McKendry's)

Capacity	Width	Height	Weight	Price
4450 litres	1.8 m	1.8 m	1.0 tonne	\$550.00
2730 litres	1.7 m	1.3 m	0.6 tonne	\$450.00
1820 litres	1.5 m	1.3 m	0.5 tonne	\$330.00

##### Butynol Lined Tanks

22750 litres	3.50	3.20		\$1,400.00
13650 litres	2.80	2.90		\$1,200.00
9100 litres	2.54	2.58		\$1,050.00
4450 litres	1.83	2.13		\$875.00

#### 4.26.5 Valves and Floats

Fullflow 69	20 mm Standard Valve	\$ 15.36
Jobe	20 mm trough Valve	\$ 15.21
	20 mm Tank level control valve	\$ 49.84
	25 mm Tank level control valve	\$ 51.49
	30 mm Tank level control valve	\$ 85.82
	36 mm Tank level control valve	\$ 90.73
	50 mm Tank level control valve	\$ 95.64
	75 mm Tank level control valve	\$ 83.91
	20 mm trough valve	
	- bottom intake	\$ 15.50
	- top intake	\$ 15.50
High-Low	15 mm x 220 mm trough valve	\$ 11.61
	15 mm x 225 mm	\$ 6.57
Dolphin	Indestructible Float	\$ 1.75
	Brass Ferrel Float 115 mm	\$ 12.15
	150 mm	\$ 12.15

#### 4.26.6 Pumps

(i)	Piston Pumps (Dav' B Series and RO 75)	
	B1 standard 23 litres per minute	\$357.00



	B1LP Low 30 litres per minute	\$363.00
	B1HP High 15 litres per minute	\$371.00
	B1 HPBF Boiler feed 15 litres per minute	\$418.00
	Pressure systems for the above vary in cost from \$654 to \$1133.00 depending on tank size (55 to 410 litre) and pressure \$345 to 1380 k Pa).	
(ii)	Geared Piston Pumps (Davies C Series)	
	C1 Standard 38 litres per minute	\$786.00
	C1 HP High Pressure 23 litres per minute	\$795.00
	C1HPBF Boiler feed 23 litres per minute	\$847.00
	C12 Low pressure 57 litres per minute	\$709.00
	C2 C1 less Vee Drive and Motor Bracket	\$732.00
	C3 C1 less Vee Drive	\$787.00
	Pressure systems for the above vary in cost from \$1296.00 to \$1394.00 depending on tank size (246 to 492 litres) and pressure (690 to 1380 k Pa).	
(iii)	Deep Well Gearing (Davies D. Series)	
	19.8 cm Stroke with 5 cm gland assembly	\$1086.00
	15 cm Stroke with 5 cm gland assembly	\$860.00
	Pressure systems for the above vary from \$1272 to \$1645 depending on tank size (164 to 492 litres). Pressure is 690 k Pa.	
(iv)	D. McL. Wallace	
	20.3 cm Stroke	\$1133.00
	Pressure systems for Wallace vary from \$1746 to \$1806 depending on tank size (340 to 492 litres).	
(v)	Hand Pumps (Davies L. Series)	
	L1 .25 Double acting 3.175 cm bore	\$219.00
	L1 .50 Double acting 3.81 cm bore	\$207.00
	L1 .75 Double acting 4.445 cm bore	\$211.00
	L2 .50 Double acting 6.35 cm bore	\$268.00
(vi)	Hydraulic Water Rams (Davies)	
	Ram 3	\$354.00
	Ram 5	\$462.00
(vii)	Centrifugal Pumps (Davies K Series)	
	Motorised	
	K .17 BSP .12 kW 2 pole single phase 230 volt	\$225.00
	K .33 B .25 kW 2 pole three phase 400 volt	\$262.00
	K .75 BSPGM .68 Kw 2 pole single phase 230 volt	\$357.00

K .75 BGM .55 kW 2 pole three phase 400 volt	\$362.00
K1 .25 BSP GM .93 kW 2 pole single phase 230 volt	\$444.00
K2 B DV 1.50 kW 2 pole single phase 230/460 DV	\$528.00
K3B GM 2.20 kW 2 pole three phase 400 volt	\$559.00
K3B DV 2.20 kW 2 pole single phase 230/460 DV	\$898.00
K5B 3.70 kW 4 pole three phase 400 volt	\$1154.00
K75B 5.50 kW 4 pole three phase 400 volt	\$1298.00
KH5B 3.70 kW 2 pole three phase 400 volt	\$776.00
K10B 11.00 kW 4 pole three phase 400 volt	\$2256.00
KH75B 5.50 kW 2 pole three phase 400 volt	\$1337.00
K15B 5.50 kW 2 pole three phase 400 volt	\$2491.00
KH15B 11kW 2 pole 400 volt three phase	\$2052.00
KH20B 15.00 kW 2 pole three phase 400 volt	\$2183.00

D. McL. Wallace

1.27 cm Gnome 0.13 kW one phase	\$268.00
1.9 cm 0.56 kW one phase	\$370.00
2.54 cm 1.5 kW three phase	\$537.00
3.175 cm 2.25 kW three phase	\$617.00
3.81 cm 4.1 kW three phase	\$999.00

(viii) Self-Priming Centrifugal Pumps (Davies  
SP Series) Engine Driven

SPE2/40 (AL) BS Aluminium (2.98 kW 4 stroke Briggs and Stratton petrol engine)	\$548.00
SPE2/50 (AL) BS Aluminium (3.37 kW 4 stroke Briggs and Stratton petrol engine)	\$612.00
SPE2/50 (CI) BS Cast Iron (3.73 kW 4 stroke Briggs and Stratton petrol engine)	\$566.00
SPEPT Portable Trolley with cushion tyres for above models	\$153.00

Motorised

SKP .75 BSP .68 kW 2 pole 230 volt single phase	\$396.00
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SPK .75 B .55 kW 2 pole 400 volt three phase	\$398.00
SPK 1.25 BSP .93 kW 2 pole 230 volt single phase	\$484.00
SPK 1.25 B .93 kW pole 400 volt three phase	\$479.00
SPK .75 BSPGM .68 kW 2 pole single phase gunmetal	\$492.00
SPK .75 BGM .55 kW 2 pole 400 volt three phase gunmetal	\$494.00
SPK 1.25 BGM .93 kW 2 pole 400 volt three phase gunmetal	\$570.00

#### 4.27 FARM MACHINERY

##### 4.27.1 Tractors

###### (i) Ford: 2 wheel drive models

3600 Vineyard	35.0 kW (47 h.p.)	available indent only
3600	35.0 kW (47 h.p.)	\$12,000
4100	38.7 kW (52 h.p.)	\$14,100
4600 Narrow Orchard	46.2 kW (62 h.p.)	\$14,250
4600	46.2 kW (62 h.p.)	\$15,170
5600	50.7 kW (68 h.p.)	\$16,640
6600	58.2 kW (78 h.p.)	\$16,910
6600	58.2 kW (78 h.p.)	\$18,110
6600	58.2 kW (78 h.p.)	\$19,640
7600	72.4 kW (97 h.p.)	16 speed \$22,950
7700	72.4 kW (97 h.p.)	\$29,950
TW20	114.8kW (163 h.p.)	\$41,900
Safety Cab \$2,785 (including fitting)		
Deluxe Campbell Q Cab \$3,770 (including fitting)		

###### New Models:

1200 4 W.D.	11.9 kW (16 h.p.)	\$ 5,484
1900 4 W.D.	22.4 kW (30 h.p.)	\$ 8,350
1900 4 W.D.	22.4 kW (30 h.p.)	\$ 7,150

###### (ii) Ford County: 4 Wheel Drive Model (with cab)

3600	35.0 kW (47 h.p.)	P.O.A.
4100	38.7 kW (52 h.p.)	P.O.A.
4600	46.2 kW (62 h.p.)	P.O.A.
774	58.2 kW (78 h.p.)	P.O.A.
974	72.4 kW (97 h.p.)	P.O.A.
1174	89.5 kW (116 h.p.) with dual wheels	P.O.A.
1474	108.2 kW (148 h.p.) with dual wheels	P.O.A.

(iii) Case: All with cab (blower/heater) and radio,  
power shift, quick hitch and 4 x 8 ram and hoses

2090	94.6 kW (127 h.p.)	\$46,925
2290	114.7 kW (154 h.p.)	\$51,133
2390	134.1 kW (180 h.p.)	\$55,836

(iv) David Brown: Price does not include safety frame

1190 NC	36.0 kW (48 h.p.)	\$14,219
1290 NC	43.5 kW (58 h.p.)	\$16,203
1290 NC 4 W.D.	43.5 kW (58 h.p.)	\$20,498
1390 NC	49.9 kW (67 h.p.)	\$18,419
1390 C	49.9 kW (67 h.p.)	\$23,462
1390 C 4 W.D.	49.9 kW (67 h.p.)	\$26,504
1490 NC	61.8 kW (83 h.p.)	\$22,210
1490 C	61.8 kW (83 h.p.)	\$26,880
1490 C 4 W.D.	61.8 kW (83 h.p.)	\$31,793
1690 C	76.7 kW (103 h.p.)	\$32,898
1690 NC 4 W.D.	76.7 kW (103 h.p.)	\$38,609

(v) International Harvester. Prices as at 9/11/81.

Model		2 WD	4 WD
284*	22.4 kW (30 h.p.)	\$7,450	\$8,855
383*	30 kW (40 h.p.)	\$11,745	\$13,445
483*	34.5 kW (46 h.p.)	\$13,945	\$15,645
V533	36 kW (48 h.p.)	\$13,730	-
V633	41.25 kW (55 h.p.)	\$14,400	-
485 Std*	40.5 kW (54 h.p.)	\$16,090	P.O.A.
485 TA*	40.5 kW (54 h.p.)	\$16,690	P.O.A.
585 Std*	46.5 kW (53.7 h.p.)	\$17,790	P.O.A.
585 TA*	46.5 kW (53.7 h.p.)	\$18,690	\$23,950
685 TA*	54 kW (72 h.p.)	\$20,550	\$25,790
685 TAXL*	54 kW (72 h.p.)	\$25,700	P.O.A.
785 TA*	60 kW (80 h.p.)	\$22,650	\$28,550
785 TAXL*	60 kW (80 h.p.)	\$27,900	P.O.A.
H 84*	60 kW (80 h.p.) Q cab	\$27,591	\$31,588
H 84*	60 kW (80 h.p.)	\$23,100	\$27,097
786 TA	75 kW (100 h.p.)	\$36,995	P.O.A.
886 TA	90.75 kW (121 h.p.)	\$42,565	P.O.A.
986 TA	105 kW (140 h.p.)	\$47,981	P.O.A.
1086 TA	111 kW (148 h.p.)	\$51,545	P.O.A.
3388 TA	120 kW (160 h.p.)	-	\$64,525

\* For a frame add \$311 (except for 284 - \$193).

TA = 172 reduction in each gear without use of clutch.

XL = Factory fitted cab.

(vi) Massey Ferguson:

MF 210	18.7 kW (25 h.p.)	\$6,600.00
MF 210 4 WD	18.7 kW (25 h.p.)	\$7,330.00
MF 220	22 kW (30 h.p.)	\$7,600.00
MF 220 4 WD	22 kW (30 h.p.)	\$8,830.00
MF 245	36 kW (48 h.p.)	\$14,420.00
MF 265 8 speed	46.5 kW (62 h.p.)	\$16,500.00
MF 265 12 speed	46.5 kW (62 h.p.)	\$17,250.00
MF 290 8 speed	58.7 kW (79 h.p.)	\$20,400.00
MF 290 12 speed	58.7 kW (79 h.p.)	\$21,200.00
MF 575 12 speed	52 kW (70 h.p.) cab	\$24,250.00
MF 590 12 speed	58.7 kW (79 h.p.) cab	\$26,850.00
MF 595 12 speed	67 kW (90 h.p.) cab	\$28,850.00
MF 595 12 speed cab turbo	80.2 kW (107 h.p.)	\$30,850.00
MF 590 4 WD	80.2 kW (107 h.p.)	\$33,000.00
MF 595 4 WD	80.2 kW (107 h.p.)	\$35,000.00
MF 2680 2 WD cab	93.5 kW (126 h.p.)	\$46,500.00
MF 2680 4 WD cab	93.5 kW (126 h.p.)	\$53,000.00

Safety frames on non cab tractors = \$285.00

(vii) Zetor

Model	kW	H.p.	WD	Price
5011	36.7	50	2	\$13,771.00
5011Q	36.7	50	2	\$17,171.00
6011	44.1	60	2	\$14,907.00
6011Q	44.1	60	2	\$18,307.00
6045	44.1	60	4	\$17,858.00
6045Q	44.1	60	4	\$21,258.00
7011	51.4	70	2	\$15,767.00
7011Q	51.4	70	2	\$19,167.00
7045	51.4	70	4	\$18,654.00
7045Q	51.4	70	4	\$22,054.00
8011Q	58.8	80	2	\$21,407.00
8045Q	58.8	80	4	\$26,545.00
10011Q	73.5	100	2	\$23,077.00
1045Q	73.5	100	3	\$28,672.00
12011Q	88.2	120	2	\$27,736.00
12045Q	88.2	120	4	\$33,919.00

(viii) Kubota

B7100 Std/turf/NAX	\$ 5,698.00
L245-DT	\$ 7,790.00
L295-DT	\$ 8,479.00
L305-FP	\$ 8,790.00
L305-DT	\$10,135.00
M4500-FP	\$14,832.00

M4500-DT		\$17,449.00
M5500-DT		\$19,549.00
M7500-FP		\$18,256.00
M7500-DT		\$21,679.00
Kubota-KDIE walk behind bulldozer		\$ 7,989.00
(plus freight)		
Kubota Cab-Rollmasta		\$ 4,262.00
(ex fitting)		

(ix) Belarus

611	52.2 kW (70 h.p.) 2 WD	\$13,450.00
702	52.2 kW (70 h.p.) 2 WD	\$10,691.00
704	52.2 kW (70 h.p.) 4 WD	\$13,250.00
902	67.1 kW (90 h.p.) 2 WD	\$12,989.00
904	67.1 kW (90 h.p.) 4 WD	\$16,262.00

Safety frames are extra on the above models.

(x) Hinomoto

E150E	11.9 kW (16 h.p.) 4 WD	est. \$ 6,400.00
E250E	20.5 kW (28 h.p.) 4 WD	\$ 7,963.00
E18D	23.1 kW (31 h.p.) 2 WD	\$ 5,500.00
E280	23.1 kW (31 h.p.) 2 WD	\$ 7,746.00

(xi) John Deere

1050	30 kW (40 h.p.) 2 WD	\$13,630.00
1050	30 kW (40 h.p.) 4 WD	\$15,510.00
1140	42 kW (56 h.p.) 2 WD	\$19,760.00
1640	49 kW (66 h.p.) 2 WD	\$20,770.00
1640	49 kW (66 h.p.) 4 WD	\$25,185.00
2040	52.9 kW (79 h.p.) 2 WD	\$23,565.00
2140	52.9 kW (79 h.p.) 4 WD	\$29,910.00
3140	72.2 kW (103 h.p.) 2 WD	\$30,770.00
3140	72.2 kW (103 h.p.) 4 WD	\$34,810.00
4040	87.7 kW (117 h.p.) 2 WD	\$49,695.00
4040	power front wheel drive	\$61,640.00
4040	2 wheel drive	\$54,605.00
4040	power front 2 wheel drive	\$66,535.00
4440	116.2 kW (155 h.p.) 2 WD	\$60,905.00
4440	power front wheel drive	\$72,815.00
4640	135 kW (180 h.p.) 2 WD	\$80,045.00
4640	power front wheel drive	\$92,035.00
8440	162.2 kW (215 h.p.) 4 WD	\$92,860.00
8640	206.2 kW (275 h.p.)	\$107,050.00
Chamberlain 3380		
	58.9 kW (79 h.p.)	\$27,325.00
Chamberlain 4080		
	72.3 kW (97 h.p.)	\$29,000.00
Chamberlain 4280		
	72.3 kW (97 h.p.)	\$35,000.00

Chamberlain 4480  
72.3 kW (97 h.p.)

\$38,175.00

Soundguard cab with heater and air conditioning  
standard equipment inclusive in the above prices.

(xii) Fiat

450	35.8 kW (48 h.p.) Low Orchard Version / No S.F.	\$13,090.00.
470 DT	35.8 kW (48 h.p.) Live P.T.O.	\$19,600.00
480	35.8 kW (48 h.p.) safety frame	\$12,500.00
480 DT	35.8 kW (48 h.p.) safety frame	\$15,200.00
540	40.3 kW (54 h.p.) c/w safety frame	\$15,850.00
540 DT	40.3 kW (54 h.p.) c/w safety frame	\$18,400.00
640 DT	47.8 kW (64 h.p.) c/w safety frame	\$22,800.00
680 H	50.7 kW (68 h.p.) c/w safety frame	\$18,400.00
680 H	50.7 kW (68 h.p.) Pininfarina 'Q' cab	\$30,500.00
680 HDT	50.7 kW (68 h.p.) c/w safety frame	\$29,760.00
680 HDT	50.7 kW (68 h.p.) Pininfarina 'Q' cab	\$34,610.00
680 HDT	(68 h.p.) Pininfarina 'Q' cab	\$36,310.00
780	58.2 kW (78 h.p.) c/w safety frame	\$19,600.00
780	58.2 kW (78 h.p.) Pininfarina 'Q' cab	\$25,000.00
780	52.2 kW (78 h.p.) 'Q' cab (factory a/conditioned)	\$32,550.00
780 DT	52.2 kW (78 h.p.) safety frame	\$31,550.00
780 DT	58.2 kW (78 h.p.) Pininfarina 'Q' cab	\$33,690.00
880	65.7 kW (88 h.p.) Pininfarina 'Q' cab	\$26,800.00
880 DT	65.7 kW (88 h.p.) Pininfarina 'Q' cab	\$37,840.00
980	73.1 kW (98 h.p.) Pininfarina 'Q' cab	\$33,500.00
980 DT	73.1 kW (98 h.p.) Pininfarina Factory a/conditioned	\$44,130.00

(xiii) Leyland

245	35.0 kW (47 h.p.)	\$12,083.00
262	46.2 kW (62 h.p.)	\$14,953.00
272	53.6 kW (72 h.p.)	\$15,980.00

285	63.4 kW (85 h.p.) with cab	\$18,424.00
2100	74.5 kW (100 h.p.) with cab	\$18,968.00

(xiv) Satoh (Mitsubishi)

630 x 4	18.6 kW (25 h.p.)	\$ 8,230.00
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(xv) Howard (1980/81 price)

2000	9.6 kW (13 h.p.) Garden Tractor	\$ 4,360.00
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(xvi) Holder

A50 Tractor Standard		\$20,380.00
A50 Tractor c/w single acting hydraulics		\$20,480.00

(xvii) Moller

Power pony

PP 16T	11.9 kW c/w Lift Lever Turf Tyres	\$ 3,790.00
PP 12T	8.9 kW c/w Lift Lever Turf Tyres	\$ 3,670.00

N.B. Specialist attachments include mid-mounted mowers, front end loader, rotary hoes, etc.

(xviii) Universal

Model	WD	Tyre Sizes		Price
		Front	Rear	
*45-SD shuttle drive	2	6.00 x 16	14.9/13 x 28	\$10,950
*45-PTC shuttle drive	4	7.50 x 20	14.9/13 x 28	\$12,800
*45-DTC-SD shuttle drive	4	7.50 x 20	14.9/13 x 28	\$13,500
45 V Standard Vineyard	2	5.00 x 15	11.2/10 x 28	\$10,400
45-K lowered kiwifruit	2	650 x 13	15 x 31	\$11,500
45-L gardening	2	6.00 x 16	9.5/9 x 36	\$10,750
46-HC high clearance	2	6.00 x 16	11.2/10 x 18	\$14,500
45-SM Crawler		-	-	\$15,900
45-SV vineyard crawler		-	-	\$13,500
* includes safety frame.				
UTB 530		37 kW	(50 h.p.)	\$10,500
UTB 530 DT 4 WD		37 kW	(50 h.p.)	\$13,000
UTB 530 Low clearance		40.7 kW	(55 h.p.)	\$13,900



UTB 640	46.5 kW	(62 h.p.)	\$12,750
UTB 640 DT 4 WD	46.5 kW	(62 h.p.)	\$14,500
Safety frames - plus \$250.			

(xix) Shibaura

SE 1340 4 WD	10.7 kW	(15 h.p.)	\$ 5,495
SE 2200 2 WD	18.0 kW	(24 h.p.)	\$ 6,500
SE 2240 4 WD	18.0 kW	(24 h.p.)	\$ 7,340
SE 2500 2 WD	18.0 kW	(27 h.p.)	\$ 6,995
SE 2540 4 WD	20.2 kW	(27 h.p.)	\$ 7,995
SE 3000 2 WD	23.5 kW	(32 h.p.)	\$ 8,185
SE 3040 4 WD	23.5 kW	(32 h.p.)	\$ 9,125
SE 4000 2 WD	32.2 kW	(43 h.p.)	\$10,900
SE 4040 4 WD	32.2 kW	(43 h.p.)	\$12,250
SD 4603T 2 WD	36.7 kW	(49 h.p.)	\$13,250
SD 4643T 4 WD	36.7 kW	(49 h.p.)	\$14,250
SE 6300 2 WD	47.2 kW	(63 h.p.)	\$16,850
SE 6340 4 WD	47.2 kW	(63 h.p.)	\$19,995
SE 7300T 2 WD	54.2 kW	(73 h.p.)	\$19,600
SE 7340T 4 WD	54.2 kW	(73 h.p.)	\$21,950
SE 8300 2 WD	62.2 kW	(83 h.p.)	\$20,450
SE 8340 4 WD	62.2 kW	(83 h.p.)	\$23,995
SE 1000T 2 WD	77.0 kW	(105 h.p.)	\$25,450
SE 1040T 4 WD	77.0 kW	(105 h.p.)	\$29,450

(xx) U.S.A. All with air conditioned cabs.

4040	117 Engine h.p.	(79.2 kW)	\$47,745
4240	132 Engine h.p.	(105.5 kW)	\$54,795
4440	132 Engine h.p.	(105.5 kW)	\$64,390
4640	132 Engine h.p.	(105.5 kW)	\$67,720

#### 4.27.2 Crawlers (1980/81 prices)

(i) Fiat

455C	37.5 kW (50 h.p.)	hydraulic linkage	\$14,900
505C	45.0 kW (58 h.p.)	hydraulic linkage	\$16,850
605 CMS	49.2 kW (66 h.p.)	hydraulic linkage	\$22,900
805C	59.7 kW (80 h.p.)	Remote linkage	\$36,200
805C	59.7 kW (80 h.p.)	remote linkage	
	Angle blade		\$42,200

(ii) John Deere

JD 350	34.3 kW (46 h.p.)		\$39,000
JD 450	52.1 kW (70 h.p.)		\$59,000
JD 550			\$69,000
JD 750	air conditioned cab,	rippers	\$128,000
JD 850	air conditioned cab,	rippers	\$168,000

#### 4.27.3 Trucks

##### (i) Nissan/Datsun

###### Datsun Utility

1 tonne, cab and chassis - petrol	\$ 9,795
- diesel	\$11,295
dropside deck (extra)	\$ 1,036
wellside deck (extra)	\$ 1,400

###### Nissan Petrol

4 WD, cab and chassis	\$13,695
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##### (ii) Mazda

B1600 SWB	1 tonne, cab and chassis	\$ 9,350
	pickup	\$10,665
B1600 LWB	1 tonne, cab and chassis	\$ 9,550
	pickup	\$10,740
B2200 Diesel	1 tonne, cab and chassis (5 speed)	\$11,550
	pickup	\$12,940

##### (iii) Land Rover

SWB	Hard Top (petrol)	\$16,734
	Truck Cab, wellside	\$16,356
LWB	Truck cab, wellside	\$16,540

##### (iv) Toyota

Land cruiser	Hard top - petrol	\$17,250
	- diesel	\$19,000
Land cruiser	L.W.B., cab & chassis - petrol	\$17,000
	- diesel	\$18,750
Dyna	2 tonne - petrol	\$11,795
	3 tonne - diesel	\$13,595
Hi-Lux	2.2 litre diesel cab & chassis	\$11,295
	2.2 litre diesel cab & chassis Ute	\$12,495
	Light ace van 1.3	\$11,795
	1 tonne, cab & chassis, 1.6 litre	\$ 9,595
	2.0 litre cab & chassis	\$ 9,795
	2.0 litre 2 WD - petrol	\$13,695
	4 WD diesel cab & chassis	\$14,995
	4 WD diesel Ute	\$16,295
	4 WD petrol Ute	\$14,995
	Utility 1.6 litre	\$10,496
	2.0 litre	\$10,690
	2.0 litre 4 WD	\$13,695
Hi-Ace	1 tonne, cab & chassis	\$ 9,595
	1 tonne van, 2.0 litre	\$13,795

(v) Bedford

CF	0.9 tonne, cab & chassis	\$10,200
CF	0.9 tonne, van	\$13,985
CF	1.27 tonne, van	\$16,495
173	0.7-0.9 tonne utility	\$10,595
	1 tonne, cab & chassis	\$13,830
TLD23	Isuzu 1.7 tonne	\$12,045

(vi) Mitsubishi

L021PS	1600 cc wellside	\$10,550
	1600 cc cab & chassis	\$ 9,350
L022PF	2000 cc sport	\$11,993
L022GFSR	2000 cc 4 WD wellside	\$14,695
L022GFSR	2000 cc 4 WD cab & chassis	\$13,495
L032PYR	1600 cc cab & chassis	\$ 9,595
L032PVR	1600 cc van	\$12,266
L032PHRS	1600 cc starwagon	\$15,450

(vii) Canter

FC212EZY	22 tonne - petrol	\$13,367
FE211EZY	22 tonne diesel	\$14,295
FC212EZY	3 tonne petrol	\$14,377
FE211EZY	3 tonne diesel	\$15,115

(viii) Dodge

G11AU5405WBY2	\$28,080
G11AU5460WBY2	\$28,430

4.27.4 Farm Bikes

60 percent deposit on all new bikes.

(i) Yamaha

	Retail	Sales Tax	Net to Farmer
AG100H	\$1,499	\$201	\$1,298
AG175	\$1,975	\$369	\$1,606
XT250 4 stroke	\$2,349	\$447	\$1,902
TT250 4 stroke	\$2,699	\$501	\$2,198
Tri Moto 125	\$1,699	no deductions of sales tax.	
Tri Moto 175	\$2,149	no deductions of sales tax.	

(ii) Kawasaki

KE 100	\$1,289	\$174	\$1,065
KV 100	\$1,549	\$210	\$1,339
KE 125	\$1,549	\$210	\$1,339
LK 250	\$2,295	\$432	\$1,863
KL 250 B1	\$2,449	\$464	\$1,985
KV 175	\$2,199	\$419	\$1,780
KLT 200 (3 wheeler)	\$3,199	no rebate	

(iii) Suzuki

RV 90	\$1,300	\$194	\$1,106
TF100	\$1,298	\$190	\$1,108
TF125	\$1,526	\$223	\$1,103
TF185	\$1,720	\$369	\$1,351
PE175	\$1,790	\$394	\$1,396
TS100 ER	\$1,304	\$194	\$1,110
TS185 ER	\$1,590	\$346	\$1,244
TS250 ER	\$1,794	\$400	\$1,394

(iv) Honda

CT110 B	\$1,580	\$206	\$1,094
XL100 SB	\$1,599	\$210	\$1,247
ATC110 A	\$1,898	\$250	\$1,558
ATC185 SC	\$2,439	N.A.	\$2,439
XL185 SB	\$2,249	\$412.75	\$1,837
XL250 SB	\$2,499	\$466	\$2,033

4.27.5 Ploughs

(i) Duncan

530 mounted	3 furrow c/w landwheel	\$2,228
	4 furrow c/w landwheel	\$2,389
540 semi-trailed	5 furrow c/w hydraulic ram	\$5,361
(Deduct \$159 if landwheel is not required)		
(Deduct \$187 if hydraulic ram is not required)		
Optional extras:		
	Extra furrow assembly for 530 and 540	\$522
	Extra land wheel for 530	\$225
	20 cm D/A Ram and Hoses for 560 Draft bar	\$312

(ii) Clough	2fw	3fw	4fw	5fw	6fw	7fw	8fw
Semi-mounted							
850 (30cm, 33cm or							
or 36cm furrows)	\$2655	\$3134	\$3880	\$4700	\$6869	\$8922	
A.P. Shear Leg	\$2811	\$3426	\$4237	\$4943	\$7465	\$9443	
Mounted							
840 Standard							
30cm	\$1288	\$1665	\$2257				
35cm	\$1336	\$1836	\$2329				
842 Shear Leg							
33cm general							
purpose	\$1470	\$1979	\$2525				
38cm all purpose							
or digger	\$1503	\$2052	\$2597				
Deduct \$105 if landwheel not required.							

#### 4.27.6 Mole Drain Ploughs

Belgrave Trailing	\$245.00
Three point linkage	\$395.00
Combination	\$450.00
Alkathene sowing attachment 25 mm diameter	\$ 35.00

#### 4.27.7 Chisel Ploughs and Subsoilers

(i) Bamford	N.I.	S.I.
'Superflow' Subsoilers		
Single tine unit working depth 60cm	\$802	\$817
Frame only	\$395	\$395
Twin Heavy Duty Unit	\$1,386	\$1,421
Frame only	\$572	\$572
With wheels	\$1,729	\$1,764

(ii) Clough  
(Rubber wheels \$358 a pair extra)

5 tine chisel plough	\$1,316
7 tine	\$1,694
9 tine	\$2,151
11 tine	\$2,882
15 tine	\$3,351

(iii) Aitchison

Multiflow Chisel Ploughs 1.83m frame

Cushion Tines:	N.I.	S.I.
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MFC65 5 cushion tines	\$1,230	\$1,254
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MFC67/S 2 x 30cm stumps fitted.		
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7 cushion tines. Total width		
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2.44 cm		
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\$1,599	\$1,623
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MFC69/E 2 x 60cm extensions.		
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9 cushion tines. Total width		
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3.05 m		
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\$2,044	\$2,068
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Rigid Tines

MFR65. 5 rigid tines	\$ 864	\$ 888
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MFR67/S. 2 x 30cm. Stumps fitted. 7 rigid tines. Total		
--	--	--

width 2.44 m		
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\$1,087	\$1,111
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MFR69/E. 2 x 60 cm extensions.		
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9 rigid tines. Total width		
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3.05 m		
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\$1,386	\$1,410
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Flexlines

MF65. 6 flexlines	\$ 699	\$ 720
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MFF67/S. 2 x 30cm stumps fitted.		
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7 flexlines. Total width 2.44cm	\$ 814	\$ 838
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MFF69/E. 2 x 60m extensions.		
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9 flexlines. Total width 3.05m	\$1,069	\$1,099
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NOTE: Additional flexlines can be fitted.

Accessories:

MF12. Stump extension 30cm/pair	\$ 67.00
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MF24. Extension 60 cm per pair	\$210.00
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MFC. Cushion tine (each)	\$151.00
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MFR. Rigid tine with clamp plates	\$ 78.00
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Shovel point (each)	\$ 25.00
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Crustbuster	\$ 30.60
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MFF. Multiflow flexline	\$ 54.00
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Heavy duty chisel ploughs two beam frame.

40° Lo-Draft tines

1.98m frame. 3 tines	\$1,205	\$1,229
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1.98m frame. 4 tines	\$1,430	\$1,454
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2.44m frame. 4 tines	\$1,495	\$1,526
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2.44m frame. 5 tines	\$1,739	\$1,772
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Cushion Spring Tines

1.98 frame. 3 tines	\$1,244	\$1,291
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1.98 frame. 4 tines	\$1,483	\$1,522
2.44 frame. 4 tines	\$1,549	\$1,589
2.44 frame. 5 tines	\$1,804	\$1,850

#### Heavy Duty Three Beam Frame.

#### 45° Lo-Draft Tines

1.98m frame with 5 tines incl. depth wheels.	\$2,204	\$2,249
1.98m frame with 7 tines incl. depth wheels.	\$2,574	\$2,626
2.44m frame with 7 tines incl. depth wheels.	\$2,785	\$2,841
2.44m frame with 9 tines incl. depth wheels.	\$3,153	\$3,261
3.05m frame with 9 tines incl. depth wheels.	\$3,352	\$3,420
3.05m frame with 11 tines incl. depth wheels.	\$3,721	\$3,796

#### Cushion Spring Tines

1.98m frame with 5 tines	\$2,270	\$2,313
1.98m frame with 7 tines	\$2,668	\$2,718
2.44m frame with 7 tines	\$2,878	\$2,934
2.44m frame with 9 tines	\$3,271	\$3,337
3.05m frame with 9 tines	\$3,470	\$3,539
3.05m frame with 11 tines	\$3,865	\$3,942

#### 4.27.8 Discs

##### (i) Reid and Grey (1980/81 prices)

2.7m Tandem	-
3.0m Tandem	\$1,809

##### (ii) American Line (1980/81 prices)

32 blade trailed	\$3,825
36 blade trailed	\$4,222
48 blade trailed	\$5,902
32 blade mounted	\$2,494

##### (iii) Duncan

#### Standard Century Disc

2.1m all plain	\$2,049
all scalloped 24 blades	\$2,128

2.4m all plain	\$2,169
all scalloped 28 blades	\$2,265
2.7m all plain	\$2,332
all scalloped 32 blades	\$2,443
3.0m all plain	\$2,593
all scalloped 36 blades	\$2,726

#### 800 Mounted Disc Series

2.1m all plain	\$2,388
all scalloped 24 blades	\$2,455
2.4m all plain	\$2,465
all scalloped 28 blades	\$2,346
2.7m all plain	\$2,565
all scalloped 32 blades	\$2,657

#### 4.27.9 Cultivators

##### (i) Duncan

Standard Type	from \$1,269 to \$2,847
Multi-Time	from \$1,265 to \$2,717
Heavy Duty	from \$1,997 to \$3,429

##### (ii) Clough

##### Series 900 tool bar cultivators

2.6m 9 rigid tines	\$724
2.6m 3 tines, 3 moulders	\$636
2.6m 9 tines, 3 moulders	\$895
Pair of wheels	\$177

##### Standard Frame Mini-Till Models.

	With Crumbler	Less Crumbler
1.6m	\$ 822	\$489
2.1m	\$ 960	\$588
2.6m	\$1,087	\$680

NOTE: The above models are 3 bar with standard 280 mm diameter crumbler and fitted with 100 mm points.

##### Folding Wing Cultivator

	Single Bar	Double Bar
23 tine	\$2,686	\$3,050
25 tine	\$2,813	\$3,232
27 tine	\$2,927	\$3,372
29 tine	-	\$3,493



## Maxitill Cultivators

	With Crumbler	Less Crumbler
2.4m	\$1,318	\$ 854
3.0m	\$1,454	\$ 965
3.6m	\$1,590	\$1,076
4.2m	\$1,808	\$1,219

## Agritiller Double Bar Cultivators

9 tine	\$ 841
11 tine	\$ 982
13 tine	\$1,126
15 tine	\$1,257
17 tine	\$1,433
19 tine	\$1,619

## Uni-Tiller

9 tine	\$ 903
11 tine	\$1,030
13 tine	\$1,208

### (iii) Bamford

'Easyflow' spring tine cultivators.

7m	69 tines, 4 bar frame, trailed with crumbler	\$5,329
5.6m	55 tines, trailed with crumbler	\$4,671

### (iv) Aitchison

'Turbotiller' Rolling Cultivator      N.I.      S.I.

M2	1.8 m	2 gangs	38 cutters	\$1,048	\$1,076
M6	2.5 m	6 gangs	76 cutters	\$2,504	\$2,567
M116	3.6 m	6 gangs	116 cutters	\$3,906	\$4,006

## Easyflow Mounted Cultivator

1.37m	with 250mm crumbler rollers	\$ 745	\$ 760
1.83m	with helper springs and 250mm roller 750 kg	\$1,348	\$1,365
2.13m	with helper springs and 250mm roller 310 kg	\$1,587	\$1,610
2.44m	with helper springs and 250mm roller 343 kg	\$1,605	\$1,638
3.05m	with helper springs and 250mm roller 414 kg	\$1,795	\$1,831

(v) Aitchison Trailed Models

5.6m 4 bar frame, 56 tines, 250mm angled crumber rollers	\$4,869	\$5,071
7.0m 4 bar frame, 69 tines, 250mm angled crumbler rollers	\$5,547	\$5,779

4.27.10 Rotary Cultivators

(i) Gallagher Rototiller

30 complete with skids, E10, .76m	\$1,640
40 complete with skids, E11, 1.05m	\$1,763
Rototiller blades	\$ 3.03

(ii) Howard

YM 186	HL40	1.02cm	\$2,835
	HL40	c/w cadet rotor	\$3,048
YM 336	HL50	1.26m	\$2,999
	HL50	c/w cadet rotor	\$3,251
	HL60	1.52m	\$3,164
	HL60	c/w cadet rotor	\$3,442
YM 186	HN32	812 mm c/w depth wheels	\$2,389
		c/w depth skids	\$2,239
		No skids or wheels	\$2,143
YM 186	HN40	1.02m c/w depth wheels	\$2,483
		c/w depth skids	\$2,333
		No skids or wheels	\$2,237

Horticultural Rotovators (1980 prices)

200	Petrol	\$1,247
350	Petrol	\$2,240
Gem 20	Petrol	\$4,034
Super Gem 20	Petrol	\$5,061
Super Gem 20	Diesel	\$5,541
Super Gem 24		\$4,502
Super Gem 30	Petrol	\$4,937
Super Gem 30	Diesel	\$5,976

(iii) Gallagher Rotohoes

Lightweight	1050	1.05 m	\$2,797
	1300	1.30 m	\$2,884
	1550	1.55 m	\$2,962

(Wheels and roller crumbler extra)

Super Lightweight rototiller max. 15 kW	
.76 m c/w skids	\$1,640
1 m c/w skids	\$1,763

#### Heavy Duty

50 offset mounted, skid & wheel	1.3 m	\$4,342
60 offset mounted, skid & wheel	1.55 m	\$4,407
60 central mounted, two wheels	1.55 m	\$4,470
70 offset mounted, two wheels	1.88 m	\$4,552
80 central mounted, two wheels	2.05 m	\$4,889
90 central mounted, two wheels	2.3 m	\$4,973

#### Dreadnought

80 central mounted	2.05 m	\$5,628
90 central mounted	2.3 m	\$6,276
100 central mounted	2.55 m	\$7,028
120 central mounted	3.05 m	\$8,063

#### Rotohoe blades Standard pattern

6 mm, 12 mm holes (L/W only)	\$3.35
8 mm, heavy duty	\$3.87
10 mm, Dreadnought	\$4.37

#### Roller Crumbler Complete

Model	Width	L/W	H/D & D/N
40	1.05 m	\$230	-
50	1.3 m	\$269	\$458
60	1.55 m	\$309	\$503
70	1.88 m		\$548
80	2.05 m		\$592
90	2.3 m		\$637
100	2.55 m		\$682
120	3.05 m		\$772

#### 4.27.11 Harrows (conventional):

##### Duncan

Zig-Zag Harrows	1 leaf (less drawbar)	\$121
	3 leaf bar	\$120
	4 leaf bar	\$133
	5 leaf bar	\$157
Self-clearing Harrows	1 leaf (less drawbar)	\$122
	3 leaf bar	\$165

	4 leaf bar	\$194
	5 leaf bar	\$237
Drill covering Harrows	Single leaf (less bar)	\$ 65
	3 leaf bar and sliders	\$267
	4 leaf bar and sliders	\$340
	5 leaf bar and sliders	\$446
	3 leaves with bar and sliders	\$ 72
	4 leaves with bar and sliders	\$ 80
	5 leaves with bar and sliders	\$119

#### 4.27.12 Power Harrows

##### (i) Vicon

SE 2300	3.0 m	\$6,500
SE 4500	4.5 m	\$8,450

##### (ii) Gallagher

E 50	1.05 m	\$2,965
E 51	1.30 m	\$3,079
E 52	1.55 m	\$3,193

(Wheels or roller crumbler extra)

##### Heavy Duty

50 offset mounted, skid & wheel	1.3 m	\$5,301
60 offset mounted, skid & wheel	1.55m	\$5,501
60 central mounted, 2 wheels	1.55m	\$5,568
70 offset mounted, 2 wheels	1.88m	\$5,802
80 central mounted, 2 wheels	2.05m	\$6,274
90 central mounted, 2 wheels	2.3 m	\$6,513
100 central mounted, 2 wheels	2.55m	\$6,735
120 central mounted, 2 wheels	3.05m	\$7,223

##### Power Harrow Blades

6 mm Lightweight	\$2.78
8 mm H/D & D/N	\$3.09

##### Dreadnought

80 central mounted	2.05m	\$7,238
90 central mounted	2.3 m	\$7,914
100 central mounted	2.55m	\$8,695
120 central mounted	3.05m	\$9,759

#### 4.27.13 Rollers

##### (i) Cambridge Rollers

###### Duncan

300 Field Roller	2.4m, 65 cm rings	\$1,714
	2.7m, 65 cm rings	\$1,845
	3.0m, 65 cm rings	\$1,955
Roller Seed box	16 run, 2.4 m	\$1,779
	18 run, 2.4 m	\$1,919
	20 run, 3.0 m	\$2,038

###### Belgrave

2.4 m	\$1,250
2.4 m with Willetts seedbox and clutch	\$2,041
2.7 m	\$1,350
2.7 m with Willetts seedbox and clutch	\$2,221
3.0 m	\$1,450
3.0 m with Willetts seedbox and clutch	\$2,348
2.4 m with Willetts seedbox	\$ 561
2.7 m with Willetts seedbox	\$ 641
3.0 m	\$ 668

##### (ii) Heavy (Water Ballast) Rollers

###### Springston Agricultural Engineering

8 tonne 2.4 m long, 13 mm plate steel	\$2,900
15 mm plate steel	\$3,300
10 tonne 3.0 m long, 13 mm plate steel	\$3,500
16 mm plate steel	\$4,500

#### 4.27.14 Drills and Seed Boxes

##### (i) Duncan

24 Run Hoe drill	\$7,217
24 Run Hoe drill telescopic draw bar	\$7,636
730 Multiseeder 15 run triple disc	\$10,406
19 run triple disc	\$12,573
23 run triple disc	\$14,000
200 mm D/A depth stop ram and horses	\$ 312

##### Optional extras:

Small seeds box	16 run	\$ 872
	18 run	\$ 957
	20 run	\$ 1,050
	24 run	\$ 1,228

Eclipse box	16 run	\$ 957
	18 run	\$ 991
	20 run	\$ 1,036
	24 run	\$ 1,111

(ii) Aitchison  
(S.I. prices in brackets)  
'Seedmatic' light drill and undersower

Basic model, 12 row, 1.8 m, mounted	\$2,875.00	(\$3,075)
- 12 nozzle strip spray boom	\$ 289.00	
16 row, 2.4 m, mounted	\$3,385.00	(\$3,595)
- 16 nozzle strip spray boom	\$ 330.56	

Wheels 400 x 8 (alternative to  
skids)/pair \$ 165.00 (\$ 165)

Frame weights 9 kg each \$ 148.40 (\$ 148)

Deluxe model, 12 row, 1.8 m, mounted  
fitted with spray boom  
and pump 200 litre  
fibreglass tank, tank  
transport tray, tank filler  
and hectarmeter \$3,859.00 (\$4,059)  
16 row, 2.4 m,  
mounted (as above) \$4,514.00 (\$4,724)

Hoppers -  
1.8 m, 12 dropper outlets \$495.00  
2.4 m, 16 dropper outlets \$595.00  
2.7 m, 18 dropper outlets \$702.20  
3.0 m, 20 dropper outlets \$746.77

Mono positive displacement pump  
with hoses and relief valve \$336.60 (\$336.60)  
Transport tray with tank bracket \$209.00 (\$209.00)  
Spray tank 200 l fibreglass \$150.95 (\$150.95)  
Spray tank filter (100 mesh) \$ 26.23 (\$ 26.23)

(iii) Conor-shea

2.7 m trailed model \$ 4,900

#### 4.27.15 Precision Drills (1980/81 Prices)

(i) Stanhay

Handpush	Single Row	\$ 479
S870 MLW	3 row	\$3,429
	4 row	\$3,982
	5 row	\$4,550
	6 row	\$5,100

#### 4.27.16 Planters

Faun Automatic potato planter P.O.A.

#### 4.27.17 Transplanters

Howard

Type C	Manual gripper 2 row	\$1,439
Type T	Tobacco	\$1,722
Type B	Special Nursery	\$2,539

#### 4.27.18 Fertiliser Spreaders & Topdressers

##### (i) Drum Machinery

1 x 1 tonne	\$1,965
2 tonne	\$2,275

##### (ii) Hylton Engineering

2 tonne trailed	p.t.o. driven	\$4,430
	motor driven	\$4,337
2 tonne trailed	blower unit	\$5,100
3 tonne trailed	p.t.o. driven	\$5,087
	motor driven	\$4,994
4 tonne trailed	p.t.o. driven	\$5,565
	motor driven	\$5,472

Drawbar jack, dual wheels, extra height adjustment and blowers are all optional extras on the above models.

3.7 m truck mounted	\$5,001
4.0 m truck mounted	\$5,950
4.3 m truck mounted	\$6,134
4.6 m truck mounted	\$6,318
4.9 m truck mounted	\$6,502
5.2 m truck mounted	\$6,687

The above prices for truck mounted spreaders exclude the cost of the motor.

Optional extras include extra height adjustment, lifting stand (\$510).

(iii) Nodet Gougis

Precision pneumatic tractor mounted.

12.2 m width, 1 tonne hopper \$6,250

(iv) Aitchison Industries

'Agrispred' Oscillating pipe N.I. S.I.

SP400	350 kg, mounted	\$ 945	\$ 965
SP500	500 kg, mounted	\$ 999	\$1,019
SP600	600 kg, mounted	\$1,052	\$1,072
SP1000	1000 kg, mounted	\$1,495	\$1,520
SN1000	1000 kg, mounted	\$1,416	\$1,441
SPT1000	1000 kg, trailed	\$1,998	\$2,043
SNT1000	1000 kg, trailed	\$1,873	\$1,918
SPT2000	2000 kg, trailed	\$2,446	\$2,491
SNT2000	2000 kg, trailed	\$2,284	\$2,329

'Agrispred' Spinner

SN400	350 kg, mounted	\$ 832	\$ 852
SN500	500 kg, mounted	\$ 888	\$ 980
SN600	600 kg, mounted	\$ 928	\$ 948

Attachments for these spreaders include 2 and 4 row side dressers, 1, 2 and 3 row subsoilers, side spread conveyor chutes (spinner only), hopper extensions, hopper covers etc.

#### 4.27.19 Combine Harvesters

(i) Claas

Dominator 96	5.2 m hydrostatic and grain monitor	\$108,655
Dominator 76	4.6 m hydrostatic	\$ 95,480
Dominator 56	3.6 m	\$ 72,500

(ii) Massey Ferguson (1980/81 prices)

440	3.0 m	\$ 51,000
750	Hydrostatic 4.8 m air cond. cab	\$ 86,000
760	Hydrostatic 5.5 m air cond. cab	\$106,000

(iii) International Harvester

1420	4.6 m platform	\$ 99,871
1460	5.2 m platform	\$124,987
1480	6.7 m platform	P.O.A.



(iv) John Deere

JD 955	4.2 m	\$ 75,000
JD 975	4.2 m	\$ 90,000
JD 6620	Basic machine	\$ 98,000
JD 7720	Basic machine	\$104,000

(v) New Holland/Clayson

8030	Ford 2712E Mech. drive 55.7 kW	\$ 69,000
	(no cab, no perf. monitor)	
8040	Fiat 806, 77.2 kW	\$ 79,000
	(no cab, no perf. monitor)	
8050	4.6 m Mech. drive	\$ 86,000
8060	4.6 m with grain monitor, Ford 82 kW	
	(116 h.p.) engine	\$ 97,000
8070	5.2 m with grain monitor, Ford 96 kW	
	(140 h.p.) engine, tinted glass	\$103,000
8070	5.2 m Hydrostatic drive, Merc.	
	96 kW (140 h.p.)	\$121,000
	6.0 m Hydrostatic drive, cab, Merc.	
	100 kW (175 h.p.)	\$136,000

4.27.20 Windrowers

(i) Hesston

Hydro-swing trailed auger header	4.2 m	\$ 20,550
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(ii) International harvester

5000	Self propelled	3.8 m	\$ 32,000
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4.27.21 Mulchers (Straw Choppers)

(i) Taarup

SKT 1500		\$3,293
SKT 2100	2.1 m	\$4,378
SKT 3000	3.1 m	\$5,493

#### 4.27.22 Forage Harvesters

##### (i) Gallagher

	1070 mm	1370 mm	1830 mm
Standard Cut Offset			
Without Chute	-	\$3,083	\$3,803
With wide mouth chute	-	\$3,451	\$4,245
With main chute and short top swivel	-	\$3,659	-
With side loading chute and long top swivel	-	\$3,831	\$4,705
Fine cut offset			
Without chute	\$3,319	\$3,702	\$4,500
With wide mouth chute	-	\$4,070	\$4,942
With main chute and top swivel	\$3,870	\$4,278	-
With side loading, chute and long top swivel	-	\$4,450	\$5,402
Precise cut central mounted			
Without chute	-	\$4,771	\$5,739
With wide mouth chute	-	\$5,139	\$6,181
With side loading, chute and long top swivel	-	\$5,519	\$6,641
Back loading Chutes			
Wide mouth chute only	-	\$ 368	\$ 442
Offset wide mouth chute	-	\$ 381	\$ 455
Main chute without swivel	\$ 335	\$ 360	-
Top swivel chute (short)	\$ 216	\$ 216	-
Top swivel chute (long)	-	\$ 243	\$ 243
Side loading chute only	-	\$ 505	\$ 659
Hydraulic control for top swivel chutes	\$ 375	\$ 375	\$ 375
Pre-wilt and Hay Chutes	\$ 196	\$ 222	\$ 280
Scrub and Safety Chutes	\$ 292	\$ 349	\$ 414
Sandy Silage Treet or Hay-X-Perf Applicator	\$ 495	\$ 495	\$ 495

##### (ii) Giltrap

Double Acting ram for turning chute on Gallagher Forager Harvester	\$ 370
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Electric remote control for turning chute on  
Gallagher Forage Harvester \$ 260

(iii) Taarup

406	Fine chop		\$10,965
502	Double chop		\$ 9,245
605	Precision chop		\$11,842
DMH 1100	Single chop	1.1 m	\$ 3,681
DMH 1350	Single chop	1.3 m	\$ 4,255
DC 1500	Single Chop		\$ 5,900
S 1500	Double chop		\$ 8,372

(iv) John Deere

JD 15A	Double chop	1.6 m	\$ 9,300
JD 16A	Double chop	1.8 m	\$ 9,900

(v) Hesston

2000/150 Pull type		\$15,381
2000/100 pull type, std. tyres, no hydraulic rebevel grinder		\$12,950
2000/100 pull type		\$12,950

Optional equipment

Two row head, 0.76 m (disc cut off)	\$ 2,780
Three row head, 0.76 m (sickle cut)	\$ 3,550

(vi) Tullochs

CB 750 'cut and blow'  
(available for 540 or 1000 RPM tractors)  
designed for tractors up to 90 PTO kW \$13,950

CB 750 'cut and blow'  
(available for 540 only designed for tractors up to 67 PTO kW)

Attachments:

HA 400 1.5 m pickup front	\$ 3,400
HA 1000, 2 m pickup front	\$ 4,450
CA 660, single row corn front	\$ 4,450
TR 600, two row corn front	\$ 6,800

JF Precision Cut Forage Harvester - trailed

FCT 80	\$11,650
Single row maize attachment	\$ 2,950
Two row maize attachment	\$ 5,800

Two drum mower attachment	\$ 3,650
JF Precision Cut Forage Harvester (side mounted)	
FC 80	
Complete with manual controls	\$ 8,980
Single row maize attachment	\$ 2,950

(vii) New Holland

339	1.5 m	Double Chop 540 RPM	
		manual controls	\$ 6,950
		electric controls	\$ 7,590
342	1.7 m	Double Chop 1000 RPM	
		(electric controls \$470 extra)	
707	1.6 m	tractor mount	\$ 9,250
770		base unit 540 RPM	\$ 3,200
770 N2		2 row cornhead attachment	\$ 2,000
770 W	1.7 m	wide windrow pickup	\$ 3,150
717 S	1.5 m	Sickle bar	\$ 3,100
718		base unit fine chop 1000 RPM	
		540 RPM (electric controls)	\$ 10,490

#### 4.27.23 Silage Feed Equipment

Self feed units Giltrap, Gallagher Combinations.

Model 50 H.C. 5 tonne capacity as feed wagon and 11.95 cubic metres as forage wagon, filled with Gallagher Forager in draw bar.

With Gallagher Precise cut head 1370 mm	\$12,355
With Gallagher Fine cut head 1370 mm	\$11,405
Less cutting head, high sides - back & ram	\$ 6,125
Model 40 H.C. 4 tonne capacity as feed wagon and 8.75 cubic metres as forage wagon.	

With Gallagher Precise cut head 1370 mm	\$11,975
With Gallagher Fine cut head 1370 mm	\$11,025
Less cutting head, high sides - back & ram.	
Fast floor for rear unloading, standard	\$ 5,675

Model 25 HC 2.5 tonne capacity as feed wagon and 6.93 cubic metres as forage wagon.

With Gallagher Precise cut head 1370 mm	\$11,530
With Gallagher Fine cut head 1370 mm	\$10,580
Less cutting head etc.	\$ 5,375

Giltrap Fella Loaderwagon.

Model 250 H complete with imported German cutter head, 8 cubic metres capacity as feed out wagon or 26 cubic metres equivalent as Forage Wagon.

Pickup and discharge wagon only	\$14,650
With hitch elevator section for centre feeding at rear	\$15,650
With brakes - plus	\$ 550
With cross conveyor - plus	\$ 1,000
Model 25 P.T.O. front centre feed, approx. 2.5 tonne capacity, 3.93 cubic metres.	
Standard 10.75 x 15 new tyres	\$ 4,650
Model 25 H as for M25 plus hydraulic kitset fitted to P.T.O. shaft on gearbox.	\$ 4,900
Model 40 P.T.O. Front centre feed model, approx. 4 tonne capacity, 6.08 cubic metres	\$ 5,200
Model 40 H with complete hydraulic drive	\$ 5,200
Model 50 P.T.O. Front Centre Feed Model, approx. 5 tonne capacity, 8 cubic metres.	
Standard 12.5 x 16 tyres. 1 metre longer than M40	\$ 5,650
Model 50H with complete hydraulic drive	\$ 5,650
Model 65 P.T.O. Front Centre Feed model, approx. 6 tonne capacity, 10 cubic metres.	
Standard oscillating tandem axle on 10.75 x 15 tyres. Hydraulic draw bar jack.	\$ 7,300
Model 30 P.T.O. Cross conveyor, side feed model, approx. 3 tonne capacity, 4.25 cubic metres. Standard 10.0/75 x 15 tyres	\$ 5,800
Model 45 P.T.O. Cross conveyor, side feed model, approximately 5 tonne capacity, 8 cubic metres. Standard 12.5 x 16 new tyres.	\$ 6,850
Model 60 cross conveyor side feed model, approx. 6 tonne capacity, 10 cubic metres.	\$ 8,400
Giltrap - Extras available for all self feed wagons.	
Hydraulic Drive Kitsets (for all P.T.O. models)	\$ 375
Extension high side (green maize, silage)	\$ 65
Extension high side	\$ 40
Single Bale Cradle, Centre Feed Models	\$ 134
Double Bale Cradle, Centre Feed Models	\$ 184
Raising Blocks for towing wagon over stack, pair	\$ 25
Swivel hitch (bolt on attachment) for towing behind silerator	\$ 105
Drive shaft	\$ 130
Brakes M40 ) work off tractor	\$ 550
Brakes M25 ) external hydraulics	\$ 600
10.0/75 x 15 tyres	\$ 950
12.5 x 16	\$ 1,080
Gordon Bros. Silage Spreader	\$ 480
Swivel Hitch	\$ 105
Trailer Drawback jack	\$ 48
Hydraulic drawback jack (new trailers only)	\$ 50
Spare part	\$ 95

Giltrap Rear End Loader - 3 pt linkage with bucket	\$ 906
With 5 tine silage fork-extra	\$ 265
Granway - Feed systems. Feed handlers.	
Single axle - 4 tonne 6 cubic metres	\$ 5,600
Tandem - 5 tonne, 8 cubic metres	\$ 6,460
Single axle with cross feed conveyor, P.V.C. belt, drive unit fitted and underscoop	\$ 6,960
Tandem and underscoop conveyor, P.V.C. belt	\$ 7,820
Tandem low liner - for 2 Howard bales, deck 4.5 m long, sides 5 m high	\$ 6,600
Single axle model low liner - sides 5 m high	\$ 5,500

Feed wagon accessories:

Articulated hitch supplied with initial wagon order	\$ 330
Articulated hitch supplied separately	\$ 580
Hydraulics power kit for farm vehicles	\$ 830
Pair wide wheels - 12.5 x 16 tyres (extra)	\$ 280
Round bale self-loading attachment - including winch unit and forks	\$ 420
Canopy covers for harvesting behind flail	
Single axle wagon	\$ 244
Tandem wagon	\$ 270
Side loading extension	
Single axle wagon	\$ 50
Tandem wagon	\$ 65
Underscoop for precision Chop material	\$ 28
Extension hoses to connect past flail - pair hoses 1 m each ready to connect	\$ 48
Cross feed conveyor unit - including flap and underscoope	\$ 1,360
Accumulator harvest - 5 tonne capacity	\$ 8,300
6 tonne tandem tip trailer with scissor ram - 4 m x 2.2 m steel deck 11 x 15 tyres	\$ 5,250
Conestoga Farm Trailer Running gear	
Single Axle adjustable length	\$ 1,780
Tandem axle adjustable length	\$ 2,270
Tandem Trailer axle assembly 4 of 11 x 15 tyres	\$ 1,680
Single axle assembly 11 x 15 tyres	\$ 870
Screw Jacks - heavy acme thread	\$ 64
Bale basket - 20 bales capacity (3 pt. linkage)	\$ 2,165
Hay Toss - 3 pt. linkage	\$ 1,460
Box Blade - heavyweight	\$ 1,260
Power pack aux. vacuum pump drive	\$ 395
Calf Feeder Unit - 3 pt. linkage	\$ 780
D.H. Instant Hitch - A frame	\$ 186
D.H. Instand Hitch - Saddle	\$ 59

#### 4.27.24 Mowers

##### (i) Moller

###### Fieldmaster

150	Offset orchard	\$2,284
200	c/w Rear roller	\$2,780
228	M150 with swing arm	\$2,850
225	pasture topper, reserves	\$2,998
270	Offset orchard	\$2,998
380	Super cut large pasture topper	\$4,392

###### Flailmaster

M56		\$1,298
M60	Light rubbish cutter	\$1,648
Junior	Med. duty slasher	\$2,058
HD60	Heavy duty Scrub Cutter	\$2,598
MH60	Haymaster	\$2,145

##### (ii) P.Z. (1980/81 prices)

135	2 Drum Rotary	\$2,160
165	2 Drum Rotary	\$2,520
185 HYD	2 Drum Rotary	\$3,595
210	2 Drum Rotary	\$4,190
215	4 Drum Rotary	\$3,395

##### (iii) Kinco - 38

\$1,495

##### (iv) Kuhn

GMD 44	4 discs 1.6 m	\$3,315
GMD 66	6 discs 2.4 m	\$4,572

##### (v) Busatis

BM	1.5 m Double Knife	\$2,210
1102 kW	1.9 m	\$2,290
	Electric grinder	\$ 420
Inner Swath Board		\$ 58

##### (vi) Vicon

CM 165	4 disc 1.6 m	\$3,300
CM 240	6 disc 2.4 m	\$4,039

##### (vii) Claas Rotary

WM20	1.65 m	\$3,225
WM24	1.85 m	\$3,855

(viii) New Holland

442	4 disc 1.6 m	\$3,315
462	6 disc 2.4 m	\$4,572

(ix) Gallagher

Multimows

Parks & verges twin rollers, with hinged chute

1370 mm 1830 mm

Offset to right	\$4,663	\$5,239
Offset to left	\$4,835	\$5,412
Central mounted	\$4,663	\$5,239

Universal (Heavy Duty)

Central mounted with heavy flails, rear roller, no chute.	\$4,524	\$5,463
Wide mouth chute - reinforced	\$ 423	\$ 508
Scrub & safety chutes	\$ 349	\$ 414

Rotomov Orchard and Topping Mower

Model	Width of Cut	Price
48	1.2 m	\$2,810
60	1.5 m	\$2,844
72	1.8 m	\$2,878
84	2.15 m	\$2,912

(x) Taarup

204	4 disc	\$3,466
205	5 disc	\$3,984
206	6 disc	\$4,324

(xi) Massey Ferguson

60	1.5 m	\$1,281
	1.8 m	\$1,324

(xii) Andrews & Bevan

A & B Flail mower	1.2 m	\$2,050
	1.5 m	\$2,760
	1.8 m	\$2,850
	2.1 m	\$2,950
	2.4 m	\$3,120

EZE-MOW

3 point linkage	1.9 m	\$1,680
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	1.3 m	\$1,730
	1.5 m	\$1,780
Front Mounted (machine weight 170 kg)		
	1.9 m	\$2,217
	1.3 m	\$2,315
	1.5 m	\$2,315

#### 4.27.25 Ride on Mowers

##### (i) Monro

Cub 3.72 kW (5 h.p.) Manual, 609.6 mm (24")	\$1,595
Cub 3.72 kW (5 h.p.) Electric, 609.6 mm (24")	\$1,738
Scout 5.96 kW (8 h.p.) Manual, 685.8 mm (27")	\$1,995
Scout 5.96 kW (8 h.p.) Electric, 685.8 mm (27")	\$2,185
Minitractor 8.19 kW (11 h.p.)	\$2,350
Trailing Cutter 5.96 kW (8 h.p.) Manual, 1524 mm	\$1,585

##### (ii) Turftrac (1981 prices)

1900 triplex 11.92 kW (16 h.p.) Electric start, 3 x 660 m 5 blade cutting system	\$7,645
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#### 4.27.26 Mower Conditioners

##### (i) Vicon

OM 240 Flail type	\$ 8,700
KM 240 6 disc rubber roller	\$10,300

##### (ii) New Holland

Haybine 477 with hydraulic ram 2.1 m	\$ 6,500
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##### (iii) Hesston

1090 3 pt Linkage pull type 2.8 m with with Crop divider kit	\$ 9,620
1180 Pull type 2.4 m with Crop divider kit	\$ 7,430
PT7 Pull-type 2.2 m with Crop divider kit	\$ 5,400
6400 Self propelled with hay auger front and conditioner	\$26,500

(iv)	Taarup	
	TSC 2100 (Roller type)	\$ 8,445
	305 (Rotary fixed tine)	\$ 7,577
	307 (Rotary fixed tine)	\$11,536
(v)	Kuhn	
	FC44	\$ 5,756
(vi)	Hood and Belcher	
	350 kg haybine c/w hydraulic ram	\$ 6,500
4.27.27	Hay Conditioners	
(i)	Kuhn	
	GRS 21 Gyrotedder	\$2,300
(ii)	Gallagami	
	1.5 m trailed	\$ 1,500
4.27.28	Hay Rakes	
(i)	Bamford	
	R2 7 Reel Rake	\$2,780
(ii)	Kuhn	
	GA 300 Gyro rake	\$2,136
	GA 402 Gyro rake	\$2,805
(iii)	Vicon	
	HKX 620 4 finger wheels, 2 pt linkage	\$1,480
	H 1020 6 finger wheels, trailing	\$2,680
	CH 300	\$2,498
4.27.29	Balers (Conventional)	
(i)	Massey Ferguson	
	124	\$10,500

(ii) International

425		\$10,100
445		\$11,400

(iii) New Holland

370	Hayliner	\$11,900
377	High Capacity Hayliner	\$14,200
386	Hayliner - 400 mm x 450 mm	\$15,800

(iv) Welger

AP 52		\$ 9,299
AP 61		\$10,998
AP 71		\$12,199

4.27.30 Big Balers

(i) Hesston

5800	Round	\$12,590
5500	Round	\$11,970
5400	Small Round	\$ 5,940
Stak Hand 10		\$ 9,800
5540	Round	\$14,850
5580	Round	\$17,995

(ii) International

2401	Big Roll	\$11,568
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(iii) Howard

Big Baler		\$17,300
	- gripper kit	\$ 1,378

(iv) New Holland

846	Round Baler with autowrap	\$15,520
851	Round Baler with autowrap	\$18,600

(v) Welger

RP 150	Round 1.2 m wide	\$13,600
RP 180	Round 1.5 m wide	\$15,574
RP 180	Auto tying	\$15,964

#### 4.27.31 Grain Handling Equipment

- (i) Portable Grain Augers  
Slade Engineering (N.B. Prices do not include motors)

Double Augers 200 mm diameter	P.T.O.	Electric	Petrol
7.2 m	2,140	1,950	2,077
8.4 m	2,251	2,061	2,188
9.6 m	2,401	2,211	2,338
10.8 m	2,534	2,344	2,471
12.2 m	2,667	2,477	2,604
13.2 m	2,801	2,610	2,737
14.4 m	2,934	2,743	2,870

Hydraulic operation available - electric add \$495.

#### 175 mm diameter

7.2 m	2,081	1,891	1,983
8.4 m	2,148	1,958	2,050
9.6 m	2,215	2,025	2,117

#### Sweep Augers 150 mm diameter

2.4 m	Hand operated	\$264
3.0 m	Hand operated	\$288

#### Unloading Augers 50 mm diameter

3.6 m		\$229
4.2 m	All with detachable power head	\$245
4.8 m	discharch guard and motor mounting	\$261

#### 100 mm diameter

3.0 m		\$285
3.6 m		\$314
4.2 m		\$343
4.8 m		\$372
5.4 m		\$402

#### 175 mm diameter

3.6 m		\$399
4.2 m		\$437
4.8 m		\$475

Rotary Electric Motor Driven Sweep Augers  
100 mm diameter

3.0 m	\$334
3.6 m	\$354
4.0 m	\$374

(Rotary switch not included)

Aitchison

		N.I.	S.I.
9.75 m	PTO - drive	\$2,433	\$2,488
10.97 m	PTO - drive	\$2,679	\$2,734
12.1 m	PTO - drive	\$2,949	\$3,004
13.7 m	PTO - drive	\$3,043	\$3,098
Fully Flighted "long" 76 mm diameter		\$261	
Fully Flighted "long" 102 mm diameter		\$285	

Hayes 180 mm Grain Augers

P.O.A.

(ii) Grain Bins

Springston Agricultural Engineering

3 to 4 tonne, flat bottom (for tip deck)	\$ 700
3 to 5 tonne, V bottom, side unloading (excluding motor)	\$ 750
5 to 6 tonne, V bottom, centre unloading (excluding motor)	\$1,000

(iii) Grain Dryers

Moridge

Model 400 400 bu. capacity LPG fuel	\$16,000-\$20,000
Model 8770 700 bu. capacity LPG fuel	\$40,000 indent only

Waterwise Systems sold fuel burners

Model 70DF direct fired up to 3 million BTU/880 kWh	\$ 7,660
Kitset duct to fit Moridge 400 dryer	\$ 396
Spark arrester	\$ 394
Extra fan for increased capacity	\$ 522
Model 70 HE heat exchanger up to 2 million BTU/685 kWh	\$16,880
c/w induction fan and flue no ducting for hot air supplied	

Bisley Fans for grain dryer

Chicargo 508 mm 10B 7500 CFM (farm batch drying)	\$3,490
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Chicago 610 mm 1/2 10B 10500 CFM (commercial or auto drying on large farm unit)	\$4,590
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(iv) Miscellaneous

Bisley Vertical Mixer 1 tonne	\$5,175
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Bisley Hammermills

BM2	5.6 kW	)	up to 50 sow or 1,000	\$2,117
BM2	7.0 kW		bird unit	\$2,180
BM3	15.0 kW	)	40-150 sow or 10-25,000	\$2,995
BM3	18.7 kW		bird unit	\$3,354

#### 4.27.32 Hay Handling Equipment

(i) Hesston

10W Stakmover	
with conveyer extension	\$1,500
30 Stakmover	\$3,750
5000 bale mover	\$ 260

(ii) Springston Agricultural Engineering

Bale elevator 6 metres long (mobile; petrol or P.T.O. optional)	\$1,200
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#### 4.27.33 Manure Spreaders

Springston Agricultural Engineering

Vacuum type complete recirculating	4500 litres	\$2,800
	3600 litres	\$2,100
	2250 litres	\$1,200

Manure Sprinklers

J33/3	MK2 sprinkler with sledge mount	\$ 247.00
J35	Quick release coupling 5	\$ 24.64
J38	Pot spreader	\$ 54.85
J40	5cm manure check valve	\$ 50.27

#### 4.27.34 Trailers

General Purpose  
Drum Machinery

Hydraulic Tip Trailer	\$ 1,664
Talgate	\$ 98

Hay Extension	\$	183
Hay poles	\$	54
Dual wheels	\$	107
Tandem Wheel Trailers	\$	1,350
Tandem Wheel Trailers plus sales tax	\$	202
Hay Trailers 4.2 m x 2.4 m	\$	1,075
Giltrap Trailers - Hydraulic Tip		
5 tonne capacity with silage cage and power gate with precise cut head 1,370 mm	\$10,325	
With fine cut head 1,370 mm	\$	9,375
3 tonne capacity with Gallagher precise cut head 1,370 mm	\$	9,450
3 tonne capacity with Gallagher fine cut head 1,370 mm	\$	8,500
3 tonne tip trailer 2.75 x 2.3 deck		
Standard 900 x 16 new tyres	\$	2,000
or on 900 x 16 new duals	\$	2,470
5 tonne tip trailer 3.65 x 2.3 deck		
2 stage telescopic ram Standard		
12.5 x 16 new tyres	\$	2,750
Or on 900 x 16 new duals	\$	3,130
Giltrap Scissors lift trailer - bulk unloader		
Model 110 with hydraulic stabilisers	\$	8,436
Model 1100 combination, no stabilisers		
With Gallagher precise cut head 1,370 mm	\$14,400	
With Gallagher fine cut head 1,370 mm	\$13,470	
Giltrap Silage Cages - with mechanical power gates		
Standard side loading complete with high mesh front, 3 tonne	\$	960
5 tonne	\$	1,063
Front loading complete with low front pipe frame roof and heavy cover, 3 tonne		
5 tonne	\$	254
	\$	314
Giltrap single acting ram as used in 3 tonne trailer	\$	295
Giltrap single acting ram as used in 5 tonne trailer	\$	425
Giltrap extras for both models of tip trailer,		
	3 tonne	5 tonne
All steel deck	\$190	\$260
Steel tail door with chains	\$ 90	\$ 90
0.914 m hay extension	\$ 85	\$ 85
Swivel hitch for towing behind silerator	\$105	\$105

Brakes - work off tractor, external hydraulics	\$550	\$550
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Drum		
Silorator Cages		\$ 1,460

#### 4.27.35 Chainsaws

Where chainsaws have variable bar lengths available, price quoted is for smallest bar.

##### (i) Dolmar

CT	118 cc	76 cm bar	\$950
112	51 cc	38 cm bar	\$470
123	70 cc	51 cm bar	\$670
114	51 cc	38 cm bar	\$570
117	51 cc	38 cm bar	\$560
119	61 cc	38 cm bar	\$650
153	110 cc	64 cm bar	\$770

##### (ii) Stihl

032AV	51 cc	41 cm bar	\$570
038AV	61 cc	51 cm bar	\$628
056AV	80 cc	51 cm bar	\$688
051AV	90 cc	64 cm bar	\$762
076AVE	111cc	76 cm bar	\$824

##### (iii) McCulloch

Mac 110	25 cm bar	\$179
Mac 120	31 cm bar	\$199
Power Mac 310	36 cm bar	\$279
Power Mac 320	41 cm bar	\$299
Pro Mac 510	41 cm bar	\$339
Pro Mac 610	41 cm to 51 cm bars	\$459
Pro Mac 650	41 cm to 70 cm bars	\$489
Pro Mac 700	41 cm to 70 cm bars	\$529
Pro Mac 850	50 cm to 83 cm bars	\$619

##### (iv) Homelite

XL	25 cm bar	\$179
XL2	31 cm bar	\$245
SXL2	36 cm bar	\$285
150AO	31 cm to 41 cm bars	\$380
XL12	31 cm to 50 cm bars	\$399
SXLEZ	31 cm to 50 cm bars	\$409
SXLAO	31 cm to 61 cm bars	\$475
360AO	31 cm to 76 cm bars	\$580



550AO	40 cm to 90 cm bars	\$675
750AO	48 cm to 109 cm bars	\$869

#### 4.27.36 Portable Generators and Welders

##### (i) McCulloch 'Mite-E-Lite' Generators (Briggs and Stratton Engines)

RC 103	220V, 900W, 4.5 Amp	\$610
RC 153	220V, 1350W, 6.8 Amp	\$755
RC 253	220V, 2250W, 11.4 Amp	\$970
BC 153	220V, 1350W, 6.8 Amp	\$487
BC 253	220V, 2250W, 11.4 Amp	\$610

##### (ii) Robin Electric Generators

LG 101	\$ 697
LG 151	\$ 843
LG 201	\$1,062

##### (iii) Lincoln Electric

Tractapac basic (Mobile DC Welder and 240 V Aux. Power Source)	\$1,086
20 cm wheels and tyres trailer	\$ 750
35 cm wheels and tyres trailer	\$ 780
Weldanpower 150 including roll cage, rope start	\$1,768
Weldanpower 175 (diesel) roll cage, rope start	\$3,178

#### 4.27.37 Spray Equipment

##### (i) Tanks

Aitchison

'Spraymate' fibreglass reinforced plastic      N.I.      S.I.

SL 500	500 litre bare tank	\$282.00	\$292.00
SL 500-2	with 2 bar hitch frame	\$426.00	\$456.00
SL 500-3	with 3 pin hitch frame	\$426.00	\$456.00
SL 200	200 litre bare tank	\$166.00	\$166.00
SL 200-F	with saddle mount support frame	\$ 94.95	\$ 94.95
SL 1200	1200 litre with tubular steel frame	\$868.00	\$868.00

F.M. Winstone medium and high density plastic.		
Model 500	500 litre tank with 3 pt linkage frame, line strainer, filling strainer, rubber lid, sight glass, bypass fittings and boom/reel mounts.	\$ 495
Model 500	500 litre tank as above less suction line strainer and fittings, and filling strainer.	\$ 455
Model 700	750 litre tank with 3 pt linkage frame filling strainer, 2 Venturi agitators, Venturi refiller, sight glass, 2 emptying taps, mounting facilities for pump, control unit and hose reel.	\$ 995
Model 701 Masotti	750 litre tank as above plus 2 banks of 4 Masotti No. 8 spray guns, IDS 1400 pump, control unit, BYPY drive shaft.	\$2,900
Model 702 Fan	750 litre tank as above plus 600 mm fan P74 pump, control unit, BYPY drive shaft.	\$4,285
'Sprayrite' (Moller)	polythene	
Polytank 500	500 litres freestanding tank with 3 pt linkage frame	\$ 370 \$ 405
Mini Tank (less boom)		\$1,020

(ii) Spray Pumps

F.M. Winstone pump kits

Model 33	Golden Hypro N6400 nylon roller pump W.P. = 1400 kPa; output = 39 litres/minute	\$ 240
Model 625	Comet P25 double diaphragm pump W.P. = 3000 kPa; output = 23 litres/minute	\$ 395

Model 648	Comet P48 d.d. pump W.P. = 3000 kPa; output = 51.7 litres/minute	\$ 465
Model 668	Comet P68 d.d. pump W.P. = 3000 kPa; output = 69 litres/minute	\$ 583
Model 6105	Comet BP 105/20 triple diaphragm pump W.P. = 2000 kPa; output = 101 litres/minute	\$ 585
Model 225	Comet P25 d.d. pump with Comet 5.33:1 reduction gear box and Briggs and Stratton 6 kW petrol motor (4 str.) W.P. = 3000 kPa; output = 23 litres/minute	\$ 825
Model 248	Comet P48 d.d. pump with Comet 6:1 reduction gearbox and Briggs and Stratton 6 kW petrol motor (4 str.) W.P. = 3000 kPa; output = 52 litres/minute	\$1,250
Mini Comet	lightweight portable pumping unit W.P. = 1500 kPa; output = 11 litres/minute petrol electric	\$ 525 \$ 489
R15 Spray Kit	Comet MC15 pump; for attachment to Masport Rotahoe; W.P. = 1500 kPa; output = 11 litres/minute	\$ 370
'Sprayrite' (bare pump prices shown by *)		
Bertolini 36S	Double Diaphragm pump W.P. = 3420 kPa; output = 36 litres/minute P.T.O. or engine drive available	\$ 350* \$ 477/ \$ 431
Bertolini 55S	Double Diaphragm pump W.P. = 3920 kPa; output = 55 litres/minute P.T.O. or engine drive available	\$ 435 \$ 534/ \$ 508

Bertolini 85S	Triple diaphragm pump W.P. = 4900 kPa; output = 85 litres/minute	\$ 746
Bertolini 110S	Triple diaphragm pump W.P. = 6370 kPa; output = 110 litres/minute P.T.O. or engine drive available	\$1,100
Bertolini 140S	Quadruple diaphragm pump W.P. = 6370 kPa; output = 140 litres/minute P.T.O. driven	\$1,409
Bertolini 67SD	Double diaphragm pump W.P. = 1475 kPa; output = 65 litres/minute P.T.O. driven	\$ 323*
Bertolini 103SD	Triple diaphragm pump W.P. = kPa; output = 100 litres/minute P.T.O. driven	\$ 427*
Bertolini 150SD	Triple diaphragm pump W.P. = 1960 kPa; output = 150 litres/minute P.T.O. driven	\$ 648*

(iii) Spray booms

F.M. Winstone

3m straight boom, 9 Delavan nozzles, 3m of 13 mm plastic hose	\$110
6 m Articulated boom, 15 Delavan nozzles, 6 m of 13 mm plastic hose	\$475
10 m Articulated boom, 25 Delavan nozzles, 13 mm connecting hose	\$620

All booms fitted with LF 1.54 tips as standard

'Sprayrite'

3.5 m straight boom, 9 nozzles, electro-galv. tubing	\$ 71.30
5.5 m Articulated boom, 15 nozzles, electro-galv./hot-dip galv. H.D.	\$235.00

(iv) Hose Reels

F.M. Winstone. Holds 80 m of 13 mm hose or 100 m of 10 mm hose	\$159
'Sprayrite'. Holds 75 m of 13 mm hose or 100 m of 10 mm hose	\$142

(v) Hoses (H.P.) - price per metre

Outlet hose (100 m coils)	
- Kuraray PVC 10 mm 2 braid 4250 kPa W.P.	\$2.70
13 mm 2 braid 4250 kPa W.P.	\$3.55

Bypass hose (30 m coils)	
- 13 mm Yellow black stripe heavy wall plastic	\$1.25
- 19 mm Yellow black stripe heavy wall plastic	\$4.53
- 25 mm Yellow black stripe heavy wall plastic	\$4.53

Suction hose (30 m coils)	
- 19 mm rubber hose 1400 kPa W.P.	\$9.28
- 32 mm Heliflex PVC spiral reinforced	\$9.40

(vi) Spray Guns

Masotti H.P. (2 tips)	\$ 79.00
Masotti Special No. 8	\$345.00
Maxi Gun H.P. (3 tips)	\$ 90.00
Mini Gun H.P.	\$ 54.00
Lancer Gun M.P.	\$ 68.00
Gun Set H.P.	\$115.00
Winstone Spray Pistol H.P. (3 tips)	\$ 39.00
Winstone 'Shorty' Spray Pistol (3 tips)	\$ 39.00
Sprayrite Gun Pistol	\$ 36.00
Spraying Systems Pistol	\$ 52.00
Sprayrite Long Barrelled Pistol	\$ 39.00

(vii) Control Units

Winstone MK V	13 mm intake 0-2500 kPa pressure gauge	\$ 58.00
	13 mm intake 0-4000 kPa pressure gauge	\$ 58.00
	19 mm intake 0-4000 kPa pressure gauge	\$ 58.00
Comet BP Series	Control unit with 2 m pressure connecting hose 0-4000 kPa glycerine-filled pressure gauge 4 individually controlled outlets	\$123.00

Comet AZ	0-10000 kPa glycerine-filled pressure gauge	
	2 individually controlled outlets	\$155.00
	(2m H.P. connecting hose \$16 extra)	

(viii) Pressure Gauges

0-1000 kPa rear entry	\$16.00
0-1600 kPa rear entry	\$16.00
0-2500 kPa rear entry	\$16.00
0-4000 kPa rear entry	\$16.00
0- 600 kPa bottom entry	\$16.00
0-2500 kPa bottom entry	\$16.00
0-6000 kPa (glycerine)	\$25.00

(ix) Strainers

19 mm foot strainer 60 mesh Acetyl	\$ 8.20
MOPLN fine mesh linestrainer	\$24.00
MOPLN medium mesh linestrainer	\$24.00
MOPLN coarse mesh linestrainer	\$24.00
MOPLN linestrainer high volume long version	\$30.00
31 mm Nylon foot strainer	\$10.25

(x) Nozzles and Tips

Fan tip	L.F. 0.77-L.F. 15.5	\$1.45
Hollow cone tip	H.C. 5	\$2.31
H.S. Disc	DC2-DC6	\$0.55
Core Brass	DC23-DC56	\$0.55
Off-centre tip		\$3.21

N.B. It is important to discuss the choice of nozzles with your local spray equipment dealer; above prices from Moller (Sprayrite) and F.M. Winstone (Delavan).

Foam Nozzles	DF Boom 45° or 80° Fan	\$ 5.00
	DFA Foam aerial spray/handgun	\$ 9.00
	DFOC Foam handgun	\$19.00
	Foam Tip 20° flat fan	\$11.00

(xi) Portable Sprayers & Applicators

Solo Knapsack Sprayers	
Hand Operated	\$139.00
accessories - tree spraying extension	
land	\$ 11.00
- spray guard	\$ 10.00
- pressure gauge and	
nozzles	\$ 25.00
- pressure valve	\$ 21.00

Motorised - Junior 35cc	\$449.00
- Port 70cc	\$565.00
accessories - dusting attachment	
: Junior	\$ 14.00
: Port	\$ 29.00
- flame thrower attachment	
: Junior	\$ 71.00
: Port	\$ 77.00
- centrifugal pump assembly	
: Junior	\$ 42.00
: Port	\$ 65.00
- U.L.V. attachment	\$ 12.00
- spray lance attachment	\$ 49.00
 Fox Knapsack Sprayer F-230	
with single diaphragm pump, use	
hydraulic pressure	\$378.00
 Tas JKS 37 Knapsack sprayer/duster	\$288.00
 Alpha H.P. Knapsack	\$134.50
 Donaghys 'Weed Wand' for application of	
liquid herbicides.	\$ 29.95
 (xii) Horticultural Spray Equipment	
 Trailed P.T.O. Driven Sprayers	
 Cropland 'Cropliner'	
2000 litres Tu 71 60,000 CMH fan	
 AR 1900 pump 191 l p.m.	\$7,820
AR 1400 pump 140 l p.m.	\$7,320
AR 110 pump 104 l p.m.	\$7,095
 TU 60 30,000 CMH fan	
AR 110 pump 104 l p.m.	\$6,225
AR 1400 pump 140 l p.m.	\$6,450
(fan unit less)	\$1,700
 'Cropliner' Narrow Gauge	
700C tank AR 110 pump	\$2,191
+ TU 60 fan	\$3,891
 Mounted Sprayers	
 Cropland 'Crop Spray' 500 litres	
 AR 110 pump TU 60 fan 30,000 CMH	\$3,400
AR 110 pump TU 71 fan 60,000 CMH	\$4,270

## Metter Sprayer

AF2 c/w 1900 1 tank 31" fan	\$9,000.00
1500 1 tank 29" fan	\$8,600.00

## 4.27.38 Windmills

Hayes 2.5 m:	headgear only	\$1,733
	headgear with gland pump	\$1,856
	steel stand, no pump	\$2,044
	gland pump, steel stand	\$2,166
	twin 64 mm gland pump, steel stand	\$2,331
	deep well cylinder, compensating head and steel stand	\$2,257
	galvanised, headgear only	\$1,947
	galvanised, headgear gland pump	\$2,070
	galvanised, steel stand, no pump	\$2,259
	galvanised, steel stand, gland pump	\$2,380
	galvanised, twin 64 mm gland pumps and steel stand	\$2,545
	with deep well cylinder, compensating head and steel stand	\$2,472
2.6 m:	headgear only	\$1,947
	headgear, gland pump	\$2,070
	steel stand, no pump	\$2,262
	gland pump, steel stand	\$2,382
	twin 64 mm gland pumps, steel stand	\$2,551
	deep well cylinder, compensating head and steel stand	\$2,475
	galvanised, headgear only	\$2,162
	galvanised, headgear, gland pump	\$2,283
	galvanised, steel stand, no pump	\$2,479
	galvanised, gland pump, steel stand	\$2,596
	galvanised, twin 64 mm gland pumps and steel stand	\$2,765
	galvanised, deep well cylinder, compensating head, steel stand	\$2,692
1.8 m wonder windmill:	headgear only	\$ 576
	with glandless pump	\$ 700
	with twin 51 mm glandless pump and steel stand	\$1,032
	galvanised, headgear only	\$ 691
	galvanised, with glandless pump and steel stand	\$ 993

## 4.27.39 Farm Machinery Accessories

### (i) Tractor Trays

Drum carry-all tray 2.2 m x 1.2 m	\$ 232.00
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	Hayes utility tray	\$ 230.83
	with steel stock sides	\$ 414.72
(ii)	Grader Blades	
	New World Products	
	Standard	\$ 645.00
	Depth wheel	\$ 16.500
	Big Ed	\$1,215.00
	Big Ed Depth wheel	\$ 180.00
	Andrews and Bevan Easy-set	\$ 495.00
(iii)	Loaders and Fork Lifts	
	Zetor Heavy Duty	\$3,600.00
	Heavy Duty loader silage fork	\$ 480.00
	Trip bucket loader	\$2,250.00
	Drum front end loader forks	\$ 275.00
	Hayes tractor fork lift	\$ 160.92
	Begg/Allen bucket loader	\$1,600.00
	Hood and Belcher crowd action loader	\$1,960.00

#### 4.27.40 Horticultural Machinery

##### (i) Hustler Masts Forklift 1360 kg to 2.4 m

(Category 'C')	rear mounted	\$3,620
	front mounted	\$4,025

##### (ii) Pruners

###### Hydraulic:

HFS	12 x 36	\$ 389
HFS	36 x 60	\$ 402
H2SA	48 x 85 Trimmer	\$ 498
HGS	24	\$ 456

###### Pneumatic:

E	12 x 36	\$ 450
E	18 x 42	\$ 452
E	24 x 48	\$ 452

###### Vineyard Pruners:

V3	without hose	\$ 320
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Hand:			
	Felco	No. 2	\$20.65
		LH	\$18.90
		No. 3	\$14.78
		No. 4	\$20.40
		No. 6	\$19.25
		No. 7	\$29.50
		No. 9	\$20.65
		Loppers (pair)	\$28.07
		Secateurs	\$ 9.65

Snapcut		
	Long handled loppers 145	\$20.45

Universal Hand Shears	\$ 135
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(iii) Picking Platforms

Hawke Hydraulic Ladder MK IV	
3 posn. manual swing boom,	
Kohler engine, Hamilton hydr. motor	\$6,900
Picking frame and bucket	\$ 217

(iv) Mechanical Harvesters

Potato Harvester (Viking)	\$16,000
Potato: Grimme (complete)	\$14,700
Blackcurrant:	
Small Ford	\$85,000
McIntosh	\$34,000
(with spray unit)	\$39,000
Blackcurrant & Raspberry:	
Egger Bros. (Nelson)	\$72,000
Egger Bros. smaller model	\$48,000
Patterton machine (approx.)	\$85,000
Raspberry: Peco	\$50,000

(v) Mechanical Protection

Birdscarers:

Exid birdscarers c/w clock	\$ 327.00
4.5 kg cylinder	\$ 50.00
Gas unit	\$ 6.93

Frost Alarms:

Exale Alarm thermometer	\$ 250.00
Mini Tiedemann MKII single probe	\$ 247.55

## 4.28 BUILDINGS

### 4.28.1 Dwellings

New cost varies considerably but on average \$45 per sq. metre.

### 4.28.2 Garages

New cost varies but on average \$10 per sq. metre.

### 4.28.3 Woolsheds

- (i) Fletcher Brownbuilt Shearing Shed and Covered Yards

3 bay Woolroom - 3 stand - 5 bay covered yard.

	Kitset	Est. to Erect
Concrete floor	\$27,260	\$6,420
Wooden floor	\$29,385	\$5,455
Standard Shearing shed - 3 bay woolroom, 3 stand, for concrete floor.	\$18,340	\$5,150
3 bay woolroom, 3 stand, wooden floor	\$20,445	\$4,300
Woolroom extra bays		
For concrete floor, grating, stand excluded	\$ 2,453	\$ 535
For wooden floor, grating, stand excluded	\$ 3,203	\$ 270
For concrete floor, grating, stand included	\$ 6,070	\$ 860
For wooden floor, grating, stand included	\$ 6,815	\$ 590
Covered yard extra bays		
11 m x 4.235 m	\$ 1,650	\$ 240
Extra for netting and foil per bay	\$ 154	\$ 29

## Standard Sheds

Extra Stands	\$	625	\$	65
Return race conversion kit	\$	49	\$	11

## (ii) Woolaway Construction

Costs exclude cartage, electrical and plumbing installations:

Small woolshed (1-3 stand) per square metre	\$168.80-200.40
Medium woolshed (4-5 stand) per square metre	\$150.60-167.30
Large woolshed (6-8 stand) per square metre	\$139.10-151.40

e.g.

8 stand 22.5 x 27.0 m	\$90,000
6 stand 13.5 x 18.0 m	\$40,000
4 stand 9.3 x 18.0 m	\$30,000
2/3 stand 7.6 x 13.5 m	\$20,000

## Covered Yards:

Small (per square metre)	\$42.70-\$49.15
Large (per square metre)	\$34.50-\$40.80
Grating Below (per square metre)	\$40.20-\$42.50

Rough guide to cost breakdown as follows:

Timber	35%
Cement and Shingle	2.5%
Hardware	15.5%
Corrugated iron and flashing	12%
Steel	16%
Labour	18%

Cost to raise shed 100 mm:

- up to 2.1 m (per square metre)	\$0.65
- over 2.1 m (per square metre)	\$1.03

## Covered Yards

NOTE: All costs based on a 13.5 m wide covered yard and 4.5 m wide bays.

600 mm roof drop (per metre)	\$23.70
750 mm roof drop (per metre)	\$29.50

Cover down side (1 sheet Novarroof per bay) per metre	\$34.35
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(4.5 m bay) Eyebrow 3.0 m wide	
Initial bay	\$496.72
Additional bays	\$335.08
Eyebrow 2.5 m wide	
Initial bay	\$433.13
Additional bays	\$283.59
Cost to replace timber end of covered yard with steel truss (per metre)	\$16.50

#### 4.28.4 Haybarns

##### (i) New World Round Barns

	Length	Kitset Form	Erected
2 bay	6 metre	\$1,125	\$1,490
3 bay	9 metre	\$1,610	\$2,100
4 bay	12 metre	\$2,125	\$2,750
5 bay	15 metre	\$2,635	\$3,350
6 bay	18 metre	\$3,740	\$4,950
7 bay	21 metre	\$4,390	\$5,670
8 bay	24 metre	\$5,060	\$6,470
9 bay	27 metre	\$5,720	\$7,260
10 bay	30 metre	\$6,270	\$8,300
Blank end		\$ 500	\$ 550
Door end		\$ 700	\$ 770

##### (ii) Waikato Farm Buildings Implement Shed

3 bay	9 m x 7.3 m x 3 m	\$2,490
4 bay	12.2 m x 7.3 m x 3 m	\$2,977

##### (iii) Fletcher Brownbuilt Utility Shed

	Kitset	Estimate to Erect
Standard 3 bay	\$6,220	\$1,455
Extra bays	\$1,505	\$ 270
All materials for closing in front of shed.		
1 bay	\$ 270	\$ 45
2 bays	\$ 490	\$ 80
3 bays	\$ 710	\$ 115

##### (iv) Fletcher Brownbuilt Implement Shed

Standard 3 bay	\$6,595	\$1,455
Extra bays	\$1,585	\$ 270

All materials for closing in  
front of shed.

1 bay	\$ 225	\$ 45
2 bays	\$ 410	\$ 80
3 bays	\$ 595	\$ 115

Netting and foil.

To roof slopes only (per bay)	\$ 155	\$ 29
Spouting D.P.s (both sides)	\$ 23	\$12.20

(v) Aabaas Bros Oval Hay Barns

Tunnel Barn	3475 bales (kitset)	\$3,541
	5775 bales (kitset)	\$7,799
10 m arched	3000 bales (kitset)	\$3,805
	6000 bales (kitset)	\$6,431
9 m cabled	2880 bales (kitset)	\$5,236
	5700 bales (kitset)	\$8,929

#### 4.28.5 Glasshouses

(i) Fletcher Brownbuilt

Size (m)	Area (sq.m.)	Kitset	Erected
16.4 x 9.2	133	\$11,835	\$14,145
19.5 x 9.2	175	\$14,580	\$17,360
24.4 x 9.2	218	\$17,330	\$20,285
20.3 x 9.2	262	\$20,080	\$23,315
34.2 x 9.2	306	\$22,825	\$26,240
19.5 x 18.3	349	\$25,845	\$30,365
24.4 x 19.3	437	\$30,345	\$35,480
29.3 x 18.3	524	\$35,075	\$40,620
34.2 x 18.3	612	\$40,000	\$46,115
39.0 x 18.3	699	\$44,705	\$51,690
43.9 x 18.3	786	\$49,430	\$56,825

Size (m)	Area (sq.m.)	Kitset	Erected
14.6 x 27.4	400	\$30,640	\$35,030
19.5 x 27.4	534	\$36,995	\$42,665
29.3 x 27.4	802	\$50,500	\$57,895
34.2 x 27.4	937	\$57,195	\$65,825
39.0 x 27.4	1068	\$63,860	\$73,720
43.9 x 27.4	1202	\$70,595	\$81,410
29.3 x 36.6	1072	\$65,915	\$75,775
34.2 x 36.6	1231	\$74,305	\$85,090
39.0 x 36.6	1427	\$82,940	\$95,265
43.8 x 36.6	1603	\$91,640	\$104,585

(ii) "Agrarian" 2.33 metres wide. Range of length:

2.38 m = \$780 with glass.

3.14 m = \$935 with glass.

3.93 m = \$1,070 with glass.

(iii) "Propagator" 3.8 metres

32 square metres, 3.14 m = \$1,200

47.85 square metres, 4.69 m = \$1,470

(iv) "Low-Grow" 33 cm high = \$109.

1.58 m x .61 metres wide (kitset)

63 cm high \$145

\$35.00 per square metre.

#### 4.28.6 Cool Storage

Coolstores = 2.4 m x 3 m x 2.4 m

Medium temperature 1° - 4°C (18.84 cubic metres)

(Cool room): no floor, hinged door, inside

75 mm polystyrene insulating panel.

\$5,200

Coolpak (hiring)

Berryfruit:

5c/kilo for first month

(if fruit is soft)

4c/kilo for first month

(if fruit is frozen)

3c/kilo thereafter.

Cooltainers:

18.5 cubic metres (from New Zealand to Melbourne)

or 14.5 tonne

\$3,299

26.4 cubic metres

\$4,629

#### 4.28.7 Grain Silos

(i) American Line Silos

Wheat tonnage capacity	Silo dia. (m)	Wall Height (m)	Price (\$)
22	3.7	2.4	1,603
29	3.7	3.25	1,763
36	3.7	4.06	1,951
36	4.6	2.4	1,747
43	3.7	4.9	2,139
47	4.6	3.25	2,014
58	4.6	4.06	2,316

68	4.6	4.9	2,571
84	5.5	4.06	2,949
100	5.5	4.9	3,352
115	5.5	5.69	3,790
131	5.5	6.5	4,286
147	5.5	7.3	4,744
159	6.4	5.69	4,919
116	6.4	4.06	3,902
138	6.4	4.9	4,363

(ii) Cone based Silos (American Line)

Capacity (tonnes)	Price (\$)
27.1	3,853
33.9	4,012
40.8	4,200
45.4	4,824
56.2	5,091
67.0	5,392
100.5	7,261

(iii) Springston Agricultural Engineering

Round, flat-bottomed; mounted on skids

20 tonnes	3.5 m dia.	2.5 m high	\$1,550
30 tonnes	3.5 m dia.	3.7 m high	\$1,950
40 tonnes	3.5 m dia.	4.9 m high	\$2,200

V bottom on legs

15 tonnes	\$1,300
25 tonnes	\$2,150
35 tonnes	\$2,400

(iv) Cyclone Silo Mesh

Roll Size: 16 m long x 2365 mm wide	\$257.62
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(v) Oxford Industries  
(on skids)

20 tonnes	\$30.00
30 tonnes	\$24.50
low loader door on 20 tonnes	\$30.00
Gravity feed exit door	\$30.00
Drying floors	\$500.00



#### 4.28.8 Pig Shelters

##### Springston Agricultural Engineering:

Small	\$150.00
Large	\$175.00

#### 4.28.9 Dog Kennels

##### Aabaas Dog Motels:

Single	\$168.00
Double	\$278.00
3 berth	\$388.00
4 berth	\$498.00

##### Drum Machinery and Engineering:

Dog Kennel & Run .8 m sq. - single	\$198.00
- double	#331.00
- triple	\$449.00

#### 4.28.10 Cages and Accessories:

##### Riverview Rabbit Cages

Kitset cage with heavy duty floor	\$ 39.50
Kitset cage, divided	\$ 44.00
Kitset base and tray for all cages	\$ 24.00
Spare trays for base	\$ 12.50
Half inch x half inch inlay (baby saving wire) per cage	\$ 5.50
Large metal nest box	\$ 11.95
Medium metal nest box	\$ 9.95
Large metal feed hopper	\$ 6.50
Small metal feed hopper	\$ 5.50
Feed hopper with lid	\$ 7.50

#### 4.28.11 Bobby Calf Pens (Drum)

	Short Legs	Skids	Wheels
2.4 m	\$355	\$375	\$450
3 m x 1.2 m	\$410	\$430	\$485

#### 4.28.12 Sheep Yards

Cyclone Sheep Yards (made in panel form, add 30% for cost of erection).

Yard for handling 1200 sheep	\$5,790.00
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Yard for handling 500 sheep	\$5,063.00
2.4 metre yard gates	\$ 65.00
1.4 metre yard gates	\$ 41.48
1.2 metre drafting gate	\$ 37.29

#### 4.28.13 Cattle Yards

Cyclone Cattle Yards (materials only)

Standard Cattle Gates 1.3 m high by 2.1 m wide.

5 rail	\$ 100.00
6 rail	\$ 109.48

Yard Fences 2.0 metre panel, 5 rail. From

\$138.90 per panel.

Forcing Pen Race \$57.34 and Drafting Gates.

From \$95.16.

Dehorning Bail	\$ 402.00
Lifting arm extra	\$ 21.38

#### 4.28.14 Dairy Sheds

The costs of building dairy sheds vary considerably depending on type of dairy operation, availability of materials and labour, building site (completely new or conversion of existing shed), access to electricity and water, to name but a few factors.

Examples of estimated costs for dairy sheds in 1981/82 are shown below:

##### (i) 12 Aside Highline Herringbone

Site preparation and tanker track	\$ 762
Building, yards, pipework	\$27,305
Electricity	\$ 1,460
Milking machines	\$ 8,890
Water supply	\$15,240
Effluent disposal etc.	\$ 2,540
Miscellaneous	\$ 825

Total Cost	\$57,022
Cost per set of cups	\$ 3,606
Performance: 1 man, 60-69 cows per hour	

##### (ii) 20 Aside Highline Herringbone

Site preparation and tanker track	\$ 770
Building, yards, pipework	\$33,000

Electricity	\$ 1,760
Milking machines	\$13,200
Water supply	\$ 2,750
Effluent disposal etc.	\$ 1,210

Total Cost	\$52,690
Cost per set of cups	\$ 2,711
Performance: 2 men, 110-140 cows per hour.	

(iii) 22 bail Rotary

Site preparation and tanker track	\$ 912
Building	\$36,708
Electricity	\$ 2,850
Milking plant, cup removers, etc.	\$15,960
Rotary platform	\$10,260
Water supply	\$ 2,622
Effluent disposal etc.	\$ 3,420
Miscellaneous	\$ 2,280

Total Cost	\$75,000
Cost per set of cups	\$ 3,408
Performance: 2 men, 120-180 cows per hour.	

(iv) 28 bail Rotary

Site preparation and tanker track	\$ 900
Building	\$38,000
Electricity	\$ 2,700
Milking plant, cup removers etc.	\$17,000
Rotary platform	\$15,000
Water supply	\$ 2,800
Effluent disposal etc.	\$ 3,800
Miscellaneous	\$ 2,500

Total cost	\$82,700
Cost per set of cups	\$ 2,953
Performance: 2 men, 160-200 cows per hour	

(v) 36 bail Rotary

Site preparation and tanker track	\$ 1,100
Building	\$49,500
Electricity	\$ 3,300
Milking plant, cup removers, etc.	\$23,100
Rotary platform	\$22,000
Water supply	\$ 3,300
Effluent disposal etc.	\$ 4,400

Total Cost	\$109,450
Cost per set of cups	\$ 3,039
Performance: 2-3 men, 180-250 cows per hour	

#### 4.28.15 Building Materials

##### (i) Fletcher Construction Plywood

	7.5 mm	9 mm	12 mm	17.5 mm
2400 x 1200 DD	\$11.89	\$16.32	\$22.84	\$32.27
2400 x 1200 SFD	\$19.99	\$25.94	\$30.10	\$40.51
2400 x 1200 BD	-	-	\$36.10	\$48.61
2400 x 1200 Utility	-	\$16.32	\$22.84	-

##### (ii) Durolite

8.5 corrugated Durolite (per metre)	\$12.46
10.5 corrugated Durolite (per metre)	\$13.82
900 mm Flat Durolite (per metre)	\$16.12
1200 mm Flat Durolite (per metre)	\$19.50

##### (iii) Particle Board

		2400 x 1200	2400 x 1800	3600 x 1800
Super Flake	9 mm	\$13.81	\$20.67	\$29.40
Super Flake	12 mm	\$15.81	\$23.49	\$33.72
Super Flake	15 mm	\$18.83	\$27.74	\$40.26
Super Flake	18 mm	\$21.36	\$31.44	\$45.71
Super Floor	21 mm	\$31.27	-	\$70.55
Pyne Floor	21 mm	\$28.96	-	\$65.35
Structex Primed	9 mm	\$22.93	-	-
Structex Primed	12 mm	\$26.49	-	-
Structex Primed	18 mm	\$38.22	-	-
Structex Unprimed	9 mm	\$19.34	-	-
Structex Unprimed	12 mm	\$22.16	-	\$49.83
Structex Unprimed	18 mm	\$31.73	-	\$71.37

##### (iv) Corrugated Iron

Standard	1500 mm	\$ 5.30
	1800 mm	\$ 6.35
	2100 mm	\$ 7.43
	2400 mm	\$ 8.50
	2700 mm	\$ 9.55
	3000 mm	\$10.55
	3300 mm	\$11.68
	3600 mm	\$12.83
Long Run	10.5/3 x 26 gauge/metre	\$ 5.10
	8/3 x 26 gauge/metre	\$ 4.03

## (v) Galvanised Weatherboard

	1800 mm	2100 mm	2400 mm
Galvanised weatherboard	\$10.35	\$11.80	\$13.22
Galvanised plain ridging (450 mm)	\$ 7.60	\$ 8.86	\$10.13
Galvanised 75 mm downpipe	\$ 5.80	\$ 6.76	\$ 7.73

## (vi) Nails

	Steel/ case	Steel/ kg	Galv./ case	Galv./ kg
100 x 4	\$48.63	\$ 2.35	\$68.23	\$ 3.30
75 x 3.15	\$50.09	\$ 2.42	\$69.70	\$ 3.37
55 x 2.5	\$52.26	\$ 2.53	\$72.45	\$ 3.51
50 x 2.5	\$52.92	\$ 2.56	\$73.09	\$ 3.54
40 x 2.0	\$54.29	\$ 2.63	\$74.75	\$ 3.68
30 x 2.0	\$54.29	\$ 2.63	\$74.75	\$ 3.68
60 x 3.55 (lead nails)	\$78.00	\$ 3.77	\$81.82	\$ 3.96
75 x 3.55 (lead nails)	\$78.21	\$ 3.78	\$80.96	\$ 3.92

## (vii) Concreting Requisites

## Cement bagged

	Per Tonne	Bags
Guardian	\$145.28	\$6.13
Milburn	\$145.28	\$6.13
Rapid Hardening	\$162.22	\$6.87

## Cyclone C.R.C. Reinforcing Fabric

L = longitudinal wire centres.

T = tranverse wire centres.

L mm		T mm		Wire Diameter mm	Price/ 10 sq.m
150	x	150	x	7.50	\$ 80.10
150	x	150	x	7.10	\$ 71.78
150	x	150	x	6.30	\$ 57.70
150	x	150	x	6.00	\$ 51.84
150	x	150	x	5.30	\$ 42.32
150	x	150	x	5.00	\$ 39.04
150	x	150	x	4.00	\$ 27.04
150	x	150	x	3.15	\$ 19.50
75	x	75	x	6.30	\$115.82
75	x	75	x	6.00	\$104.04
75	x	75	x	5.30	\$ 84.96
75	x	75	x	4.00	\$ 53.74
75	x	75	x	3.15	\$ 39.38

## Fletchers Sand and Shingle

All prices per cubic yard (0.76 cubic metre) and ex yard.

18 mm Pre-mix	\$12.43	Bags \$1.52
12 mm Pre-mix	\$12.63	Bags \$1.54
18 mm crushed metal	\$11.60	Bags \$1.48
11 mm crushed metal	\$11.60	Bags \$1.48
Plastering sand	\$25.23	Bags \$2.26

## Mortar Ex Yard

Per cubic yard (0.76 cubic metres)	\$43.32	Bags \$3.60
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## Fletchers Concrete Piles and Posts

30 cm	\$1.65
38 cm	\$1.85
45 cm	\$2.19
53 cm	\$2.46
60 cm	\$2.87
69 cm	\$3.74
76 cm	\$4.76
90 cm	\$6.24

Fletchers Ready Mix (per cubic metre)	\$71.85
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## (viii) Steel

665 mesh	10 metres square	\$40.18
668 mesh	10 metres square	\$25.72
6 m x 9 mm	RM steel	\$ 3.35
6 m x 12 mm	RM steel	\$ 4.68

## 4.29 DRAINAGE

### 4.29.1 Drainage Materials

#### (i) Field Tiles

McSkimming (.5 m lengths)	Cost per Metre
100 mm	\$1.20
150 mm	\$1.78

(ii) Novaflow/Novacoil Pipe

Drain Flow (A.H.I.)

65 mm	150 metre coils	\$100
110 mm	100 metre coils	\$160
160 mm	45 metre coils	\$316

(iii) Backfill Shingle

(Per cubic metre) \$6 to \$7 in the trench. One cubic metre backfills approximately 15 metres of drain.

(iv) Sump Pumps

Davies N and NC Series, with Float Switch.

.18 kW 230 V 2.54 cm Delivery	\$534
.18 kW 400 V 2.54 cm Delivery	\$518
(Plus 10% sales tax)	

#### 4.29.2 Trenching Costs

Trenching (under average conditions) about \$30 to \$40 per 20 metres. Cartage costs are extra.

#### 4.29.3 Mole Drainage

Rate of work approximately 2.5 hours/ha. Hire of suitable tractor \$38.50 per hour. Approximate cost \$96.25 per hectare.

#### 4.29.4 Well Drilling

Wells are now undertaken on a "schedule of rates" basis, with the screen-in-place development and test pumping charged separately.

This means that the overall "per metre" rate quoted is approximate only, as follows:

150 mm	\$190
200 mm	\$220
250 mm	\$250
300 mm	\$300

Unit rates are:

	150 mm	200 mm	250 mm	300 mm
To supply and drive well casing	\$151.25	\$178.75	\$198.75	\$247.50
To supply and install 3 m stainless steel screen	\$385.56	\$526.23	\$720.00	\$960.00
Development work - per hour	\$ 55.00	\$ 55.00	\$ 55.00	\$ 55.00

Test pumping:

includes pump and generator, etc. - per hour.

- up to 5 kW pump	\$ 55.00
- up to 15 kW pump	\$ 65.00
- up to 35 kW pump	\$ 75.00
- over 35 kW pump	\$ 85.00

Larger diameter wells, test drilling and all work outside our normal retail areas shall be upon quotation according to location, site conditions etc.

#### 4.30 IRRIGATION

##### 4.30.1 Basic Equipment

- (i) Aluminium Pipes and Couplings  
(complete, 7.5 m lengths)

Diameter	Price of Lengths
50 mm	\$ 53.00
75 mm	\$ 77.80
100 mm	\$ 99.80
125 mm	\$145.20

- (ii) Sprinklers

From \$13.50 to \$25.50 each

Naan	213/98 Glass house	\$ 8.20
	233/96 Frost protection	\$16.80
	322/34 11° part circle	
	3.5 mm nozzle	\$17.40

- (iii) Buried Mains

Pipes only. Does not include trenching and laying.

Class B for standard Roll Line, Angle Tow and Hand Shift



Systems. Working Pressure 600-900 kPa.

Class C for high pressure Travelling Irrigator and Centre Pivotal Systems. Working Pressure 900-1030 kPa.

Diameter	Class B	Class C
Fibrolite (price per metre complete)		
150 mm	\$14.19	\$19.50
200 mm	\$19.31	\$27.09
PVC Z-Joint (price per metre)		
125 mm	\$ 6.95	\$ 9.86
150 mm	\$ 9.90	\$14.19
200 mm	\$15.14	\$21.90

(iv) Outlets

(Cast iron, complete with T-Joint, Valve and hydrant)

150 mm x 150 mm x 100 mm	\$185 each
200 mm x 200 mm x 100 mm	\$200 each

(v) Pumps

Pumps for irrigation systems fall into 3 main categories:

Diesel: 4 and 6 cyclinder models are available and vary in price from \$8,000-\$10,000

Power take-off: These types of pumps cost in the vicinity of \$2,000-\$25,000.

Electric: The prices for electrically powered pumps range about \$4,500.

It must be noted that the type and capacity of pump will depend on the scale of the irrigation system.

For information on the pump(s) required for any irrigation system, consult a pump specialist firm, e.g. Andrews & Bevan, Harvin Engineering, D.H. Davies & Co., Brown Brothers Engineers, John Burns Engineering, A.M. Bisley & Co., Mono Pumps or Masport-Onga to name but a few.

(vi) Suction-Delivery Equipment

The prices for this equipment can only be determined once the system requirements are known. However, as a guide, prices range from \$500, depending on how far the water must be raised from the source and how far it has to travel to the spraylines.

(vii) Controllers (Harvin)

Rain clog	RC 7A	\$ 340
	RC 12B	\$2,301
	RC 18B	\$2,622
	RC 23B	\$2,796
Internal Pump start		\$ 48
Remote Pump start kit		\$ 190
Series Controller AG 7		\$ 790
	MC 4	\$ 256
	MC 8	\$ 398
	MC12	\$ 508
	MC18	\$1,014

(viii) Connectors (Harvin)

PT - 104 (per bag of 10)	\$ 9.50
ST - 103 (per bag of 10)	\$ 9.50
PT - S5 (per tube)	\$11.00

(ix) Valves

Harvin:

No. 3 quick coupling	\$30
valve key	\$14
hose swivel 20 mm	\$14
No. 5 quick coupling	\$37
quick coupling with athletic top	\$44
valve key	\$26
hose swivel 20 mm	\$16
Gate Valve key	\$ 7

Rainbird:

Electric remote control (range available)	\$ 66-\$281
Hydro rain valves	\$ 49-\$196
Anticontamination control electric valve	\$ 95-\$252
Pressure reducing electric valve	\$125-\$271
manual valve	\$110-\$257
Heavy duty electric valves	
25 mm - 250 mm	from \$1,500
Hydro sense controller plastic	
- 1 station valve	\$228-\$362
- 5 station valve	\$260-\$394

(x) Rotors (Harvin)

Model 27	\$146
Model 47	\$146
Model 51	\$113
Model 61	\$110
Model 62	\$111
Model 63	\$114

Model 64	\$115
Model 81 B	\$340
Model 87	\$372
Model 15103 Mini Pour	\$ 30
Model 15111 Pop-a-way	\$ 51
Model At Athletic Top Add	\$ 11

(xi) Spray Heads (Harvin)

171 Pop up	\$14.95
171 Stream Spray Pop up	\$16.60
2200 Flower bubbler	\$ 5.35
2400 Full: square or part circle	\$ 4.40
2400 Strip and three quarter	\$ 5.05
2400 Flat	\$ 5.35
A7 Adapter	\$ 1.95

(xii) Impact Sprinklers (Harvin)

25 AFP	\$ 20.70
35 ADJ	\$ 54.10
40 EFCH	\$ 31.45
80 ETNT	\$128.00
70 EW	\$ 75.00
140 70 WH	\$ 30.00
P5 Blackbird	\$ 14.70
85 E	\$164.00

(xiii) Irrometers (Soil moisture indicators - Harvin)

15 cm Model R	\$50	Model RA (automatic)	\$ 83
30 cm Model R	\$51	" " "	\$ 84
45 cm Model R	\$52	" " "	\$ 85
60 cm Model R	\$53	" " "	\$ 86
90 cm Model R	\$54	" " "	\$ 88
120 cm Model R	\$56	" " "	\$ 90
150 cm Model R	\$58	" " "	\$ 92
30 cm Model TG	\$66	Model T.G.A. (automatic)	\$110
45 cm Model TG	\$67	" " "	\$112

(xiv) Swing Joints (Harvin)

150 mm x 25 mm	\$16.25
225 mm x 20 mm	\$17.30

#### 4.30.2 Irrigators

It is important to realise that few irrigation systems can be bought 'off the rack' to perfectly suit all properties. Thus it is unrealistic and unfair to compare prices of the following irrigators directly. The only real comparison

can be made when the whole system, of which the irrigators are only a part, is costed out.

- (i) Harvin 'Wade Rain' Hydrostatic Powerroll 400 metre line

(All prices ex Factory, Christchurch)

Pipe diameter	100 mm		125 mm	
Wheel diameter	145 cm	190 cm	145 cm	190 cm
	\$	\$	\$	\$
1 x Hydrostatic mover	2,120	2,175	2,750	2,810
1 x End adaptor	40	40	50	50
1 x End plug	40	40	50	50
2 x Stabilisers	110	130	120	140
	-----	-----	-----	-----
	2,310	2,385	2,970	3,050
2 x 6 m T/T lengths (complete)	300	300	280	280
32 x 12 m T/T lengths (complete)	8,580	9,075	8,960	9,600
	<u>11,190</u>	<u>11,760</u>	<u>12,210</u>	<u>12,930</u>

Line up hydraulic wheel  
roll sprinkler positioner  
and brake

\$295.00

Torque Tube Lengths

Per 12 metre length

100 mm 125 mm

Complete with FSTD Coupler,		
Drain valve and Ring lock	\$180	\$250
As above plus 145 cm wheel	\$245	\$315
As above but with 190 cm wheel	\$280	\$350

#### Miscellaneous

In-line Powerroll reducer 12.5 cm (F)	
x 10 cm (M)	\$50
12.5 cm (M) x 10 cm (F)	\$50

Centre Feed Male x Female  
(For 48 Series)

10 cm M x F	\$80
12.5 cm M x F	\$90

Hub size 10 cm wheel diameter	145 cm	\$70
	190 cm	\$95
Hub size 12.5 cm wheel diameter	145 cm	\$70
	190 cm	\$95

Fibreglass engine cover for 70	
Series Mover	\$110
Riding stand for 70 Series Mover	\$60

(ii) Harvin 'Omme' Travelling Irrigator

Retail price (complete): \$25,460-\$26,860  
 Irrigating width: 120 metres  
     (arms 25 m)  
 Irrigating run: 660 metres (unit  
     carries 300 m x 114 mm hose)  
 Double head sprinklers: 2.6-4.6 kPa  
 Output: 81 cubic metres per hour  
 Three travel speeds: water powered self  
 propulson system.

(iii) Briggs 'Roto Rainer'

Model	125	175	250
Price (\$)	25,000	31,000	32,000
Hose length (m)	200	200	200
Hose Int. Dia. (mm)	103/90	112	125
Drum Rope (m)	440	440	440
Boom Length (m)	43/30	68	68
Irrigating width (m)	75/60	100	100
Area Covered/Run (ha)	3/2.4	4	4

Optimum Working Pressure (all models) 280 kPa.

Model 205L Linear-Rain Fixed  
 Boom Travelling Irrigator \$35,000

(iv) Andrews & Beaven 'Water Winch'

These irrigators are driven by an Ag-Rain radial in-flow turbine. A 3 speed transmission combined with variable speed control enables the unit to move at many different speeds as required. All 3 models operate at between 480-620 kPa in normal conditions but will operate at 345 kPa.

No filtration equipment is required and the 'Water Winch' can handle water containing solids up to 6.4 mm in size.

All models are fitted with Nelson 'Big Gun' sprinklers. Applications of between 6.3 mm and 178 mm per hour are possible by varying the travel speed.

Model	T30	T35	T45
Delivery range (LPM)	14350-18150	18500-21600	21700-23650
Hose size (mm)	76.2/88.9	88.9/101.6	101.6/114.3 /127.0
Hose lengths (m)	100/150/200	200	200

Price (depending  
on accessories)

Prices range from \$22,050-\$26,250

(v) Andrews & Beaven 'Higromatic Centre-Pivot'

Basic unit - 60 m long with end gun, approx.	\$19,500
Additional spans - per tower	\$ 6,000
- per metre	\$ 90.00

The area covered by these irrigators can vary from 3 ha per shift to almost 200 ha, depending on length of the line.

The unit is water-driven, and can handle undulating country quite easily.

(vi) Waterwide Irrigation Ltd

Waterwide Irrigation System	\$37,000
Specifications:	

Maximum wetted width	203 m
Overall boom width	143 m
Weight (empty)	5.5 tonnes
(water filled)	6.5 tonnes

(vii) Trickle Irrigation

Homershams

L.D. Tubing

Cut Lengths

20 mm	200 m	0.60 m	\$ 45.00
25 mm	200 m	0.76 m	\$ 72.20
32 mm	200 m	0.93 m	\$110.00
40 mm	200 m	1.08 m	\$150.66
50 mm	150 m	1.39 m	\$275.00

Lateral Tubing

13 mm	300 m	0.20 m	\$ 69.00
	100 m	0.20 m	\$ 23.00
15 mm	300 m	0.23 m	\$ 80.10
	100 m	0.23 m	\$ 26.70

Southern Cross

Microjets - full circle	\$29.90 per hundred
- half circle	\$29.90 per hundred
Micromist jets	\$43.60 per hundred
Rotating X Series	\$ 0.58 each
Line Filter 12.5 mm	\$ 3.41 each
19.0 mm	\$3.68 each

## 4.31 MICRO-COMPUTERS

### 4.31.1 Farmers Requirements

A survey carried out in Australia two years ago gave the following farmer ranking of the future uses of their on-farm computer. These are, in decreasing order:

- farm financial record-keeping/analysis.
- farm physical record-keeping/analysis.
- farm decision analysis, e.g. investment analysis, linear programming, etc.
- breeding records.
- communication with other computers to gather information; or
- communication with other computers to execute market transactions, e.g. order machinery parts, sell produce, etc.
- games for teaching and family use.

### 4.31.2 Guides for Purchasing a Farm Micro-Computer

Three questions should be answered before making a final decision to purchase a micro-computer. These are:

- What are the current requirements and problems on the property?
  - Can these be best fulfilled or overcome using a micro-computer or are there other least cost alternatives available, e.g. secretarial services or mail-in services?
  - The final question is - the choice of system to be purchased. This final question will be discussed under the following three headings.
    - (a) General Criteria.
    - (b) Hardware.
    - (c) Software.
- (a) General Criteria.
- (i) What is the total price of the complete system installed on the property, in working order?
  - (ii) What are the repayment terms and conditions of contract?

- (iii) What assurances are given regarding delivery, and installation dates, guarantees and maintenance.
- (iv) What is the cost of the service contract after the warranty expires?
- (v) Is the dealer likely to stay in business?
- (vi) If programs are especially written for you, who owns them? Can copies be sold to third parties?
- (vii) Is the firm's hardware and software likely to change? What is the fully maintained life expectancy of their products?

(b) Hardware

- (i) Is there sufficient capacity, in terms of memory and permanent storage, to handle the data to be processed? This is particularly important as the operating system and language reduce the usable memory.
- (ii) Has the particular make and model of computer got a good name for reliability?
- (iii) In the event of a breakdown how quickly can the machine be repaired, i.e. does the dealer stock spare parts?
- (iv) Is replacement equipment provided while yours is being repaired?
- (v) Is the printers speed and quality suitable for your requirements?

(c) Software

- (i) Are the programs written in a language which the computer can handle?
- (ii) Do the programs meet the requirements of the farm or farmer?
- (iii) Are the programs technically correct?
- (iv) Are the programs user orientated?



- (v) Is there adequate back-up support if problems occur, or the farmer changes his policy or legislation changes, e.g. tax changes?
- (vi) Are the data required to run the programs readily available?
- (vii) Can a farmer write the programs himself?

#### 4.31.3 General Guidelines

1. Require 48-64K RAM (random access memory). Remembering that the operating system and language uses some of the RAM, the memory available for programs should be 24-30K.
2. Need two disk drives to increase backing storage.
3. Visual display unit (V.D.U.) with 24 lines by 80 characters.
4. The choice of printer will depend on the end use of the computer output. The general rule is that the cost of the printer is related to its speed and the quality produced. [The higher the quality and speed the more expensive the printer will be.] The printer should be capable of handling 132 characters across a page.
5. The cost of software will vary according to the requirements of the farmer. A general example (using approximate costs only) would be:

Three gross margin programs	\$ 700
Cash recording program	\$ 600
Cash budget program	\$1,000

plus

Odds and ends (e.g. investment appraisal, paddock and livestock recording system, feed budget etc)	\$700-\$1,200
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TOTAL COST	\$3,000-\$3,500
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#### 4.31.4 Models Available

The following table contains a range of micro-computers available as at December 1981.

Manufacturer	Model	C.P.U.	ROM	RAM	Colour	Screen Lines	Screen Characters	Operating System	Disk Drives Size of Disks	Disk Drives Amount of Memory	Price	Printer Price	
Ohio Scientific	C2-OEM	MC6502	Boot	32K	B/W	32	x	64	Own	2 x 8"	800K	\$13,500	Incl.
Sord	M23 III	280A	4K plus languages plus DOS	128K	B/G	25	x	80	Own	2 x 5"	656K	\$ 6,000	\$1,500
Tandy	TRS-80 I	280	16K	32K	B/W	16	x	64	CP/M	2 x 5"	300K	\$ 6,398	\$2,095
Tandy	TRS-80 II	280A	Boot	32K	B/W	24	x	80	CP/M	2 x 8"	777K	\$13,145	\$2,095
Tandy	TRS-80 III	280	Boot	32K	B/W	16	x	64	CP/M	2 x 5"	300K	\$ 6,849	\$2,095
Hewlett Packard	HP83A		32K	32K	B/W	16	x	32	Own	2 x 5"	540K	\$10,343	\$1,900
Southwest Technical Products		MC6809	Boot	40K	B/G	16	x	82	Own	2 x 5"	740K	\$10,563	\$2,177
Vector Graphic	III	280A	Boot	32K		24	x	80	CP/M	2 x 5"	1200K	\$11,548	\$1,366
Apple	II+	MC6502	14K	48K	B/G	24	x	40	Own	2 x 5"	300K	\$ 6,432	\$1,350
Canon	CX-1	MC6809	4K	32K	B/G	24	x	80	Own	2 x 5"	640K	\$ 8,617	\$3,320
Sharp	PC3201	280	32K	64K	B/G	25	x	80	CP/M	2 x 5"	568K	\$ 8,500	Incl.
Zenith	Z89	280	8K	48K	B/G	24	x	80	CP/M	2 x 8"	2000K	\$11,742	
BMC	IF800-20	280A	Boot	32K	Colour	24	x	80	CP/M	2 x 5"	560K	\$11,483	Incl.
Microprocessor Developments	2205II	280A	Boot	30K	B/W	24	x	80	CP/M	2 x 5"	800K	\$ 9,257	\$1,385
Measurement Systems	SYSTEM2812	280A	Boot	30K	B/W	24	x	80	CP/M	2 x 8"	1250K	\$ 8,970	\$1,140
North Star	ADVANTAGE	280A	Boot	30K	B/G	24	x	80	CP/M	2 x 5"	720K	\$ 7,950	\$1,140
North Star	HORIZON	280A	Boot	30K	B/W	24	x	80	CP/M	2 x 5"	720K	\$ 9,445	\$1,140

C.P.U. Central Processing Unit. This is the brain of a micro-computer. There are only two C.P.U. manufacturers in this list: Zilog (280, 280A), and Motorola (MC6502, MC6809).

R.O.M. Read Only Memory. All computers have some ROM. Boot ROM means just enough to get the computer going. K means 1024 bytes of memory, e.g. 4K means 4096 bytes. In the SORD there is 4K ROM plus Basic plus Operating System in ROM.

RAM Random Access Memory. This is the space available for programs etc. and can be written to and/or read from.

SCREENS Are either Black and White (B/W), Black and Green (B/G), or Colour (Col).

DISKS Are for permanent storage of programs and data. There are two standard sizes - 5.25 inch and 8 inch.

## FARM AIDS

## (i) Weighing Platforms

Hayes Cattle Weighing platform	\$ 703.90
With 3 point linkage	\$ 864.23
Sheep Weighing platform (squeeze)	\$ 562.48
Sheep/Pig Weighing platform (with crate)	\$ 586.99
Donalds Sheep and Pig Hydraulic weighing platform	\$ 615.00
Cattle weighing platform 1000 kg	\$ 765.00
Cattle weighing platform 1500 kg	\$ 885.00
3 point linkages for above - removable	P.O.A.
- forklift	P.O.A.
Donalds Grain weigher 120 cm x 66 cm	\$ 785.00
Fleece weigher	\$ 172.00
Model 1000 Hopper weigher	\$ 785.00
Model 1500 Hopper weigher	\$ 905.00

## (ii) Animal Crushes

Donalds Squeeze Cattle Crush (with sliding gate and walk-through head bail)	\$1,700.00
Sliding Gate	\$ 182.00
Head Bail Automatic Walk-through	\$ 545.00
Head Bail Gate Type	\$ 296.00
Calf Handler	\$ 455.00
Easybail Enterprises Combined:	
Headbail and Racegate	\$ 865.00
Hayes Tipping Cattle Crush and Table	\$1,825.16
Walk-through Cattle Head Bail	\$ 358.20
Squeeze Cattle Crush with Floor (no head bail)	\$1,192.28
Squeeze Cattle Crush with Head Bail (no floor)	\$1,436.86
Squeeze Cattle Crush with Head Bail and floor	\$1,528.99
Squeeze Cattle Crush with Head Bail, Floor and Rear Operating Attachment	\$1,622.51
Sliding Cattle Gates	\$ 232.56
New World Dehorning Bail	\$ 98.00

## (iii) Loading Ramps

Donalds Sheep Loading Ramps with walkway	
40 cm wide, 5.0 m long	\$ 820.00
50 cm wide, 6.0 m long	\$ 893.00

Springston Agri. Eng. Sheep Loading Ramps	
6.1 m long mobile height adjustable	\$ 800.00
6.1 m long stationary height adjustable	\$ 735.00

(iv) Sheep Cradles and Chutes

'Roydon' canvas Sheep Cradle	\$ 53.16
S.J. Gallagher Lamb Tailing Chute	\$ 301.00
Hayes 'Stevlyon' Single Lamb Cradle	\$ 53.16
Multilamb Cradle (4)	\$ 301.00
Hagerson Double Docking Cradles	\$ 37.50

Garth D. Stewart

Stewarts Revolving Docking Cradle

3 lamb	4 lamb	6 lamb
\$198.95	\$232.30	\$340.40

With Stand \$46 extra.

(v) Cyclone Docking Pens

Complete pen with single sided race	\$293.82
Complete pen with double sided race	\$342.43
Extra plain panel	\$ 42.91
Extra panel with drafting gate	\$ 61.68
Extra race gate	\$ 17.59
Pen size: 2.4 metres x 2.4 metres x 900 mm high	
Race length: 2.4 metres	
Panel length: 2.4 metres	

(vi) Miscellaneous

Johnstone Portable Deer Pen (including metal gate, trip mechanism and netting)	\$400.00
Hayes Cow Lifter	\$ 70.53
Bell Booth Hip-Lifter	\$ 54.70
Wasp Shepherd's Crook	\$ 7.45
Wooden Shepherd's Crook	\$ 7.95
Sav-a-Back Sheeploader (for utility trucks)	
4 sides, 2 gates	\$230.00
5 sides, 4 gates	\$300.00
5 sides, 5 gates, centre partition	\$340.00
Hayes Pulley Blocks - 50 mm single, 70 kg	\$ 7.95
50 mm double, 136 kg	\$ 10.58
75 mm single, 114 kg	\$ 34.45
75 mm double, 275 kg	\$ 46.68
75 mm triple, 430 kg	\$ 58.90
100 mm single, 160 kg	\$ 30.26
100 mm double, 410 kg	\$ 54.92
100 mm triple, 635 kg	\$ 72.03
Hayes Self locking Blocks 230 kg (with 18m rope)	\$ 59.43
Light Blocks 50 mm 136 kg (with 12m rope)	\$ 28.91

Hayes Snig Chains 10 mm-16 mm with Slip or Grab Hooks and with/without swivel	\$43.78-\$105.78
Hayes Dipping Crutch	\$ 14.81
Hayes Taper Lock Hitchpin	\$ 5.40-\$ 8.98
Hayes Standard Type Hitch pin	\$ 5.46-\$ 8.98
Hayes Scrub Puller	\$ 33.29
Hayes Slip hook for light chain	\$ 5.30
Hayes Slip hook for 10 mm chain	\$ 11.60
Hayes Grab hook for 13 mm chain	\$ 20.73
Gambrel (sheep)	\$ 4.62
Hayes Dog Chains - 9 gauge twisted link	\$ 6.97
- 12 gauge twisted link	\$ 6.22
Bay Lambing Instrument	\$ 3.45
Bale Hook - wool	\$ 5.88
Bale Hook - Bent Hook	\$ 6.40
Bag Hooks - narrow and wide	\$ 5.82
Animal Weight Banks	\$ 0.52
Sack Barrow	\$ 80.00
Springston Ag. Eng. 10 bail Calf feeder	\$400.00
Varteg Portable Saw Mill	from \$7,500 complete
Batten Mill	
- mechanical	from \$4,300 complete
- hydraulic	from \$5,500 complete
Wellsford Offal Cooker (oil fired)	\$120.00
Ace 63 litre boiler pail	\$230.00
200 litre boiler pail	\$460.00
Ace Electric offal cooker 14-200 litres	from \$150.00
Secateurs:	
Felco No. 2	\$ 18.90
Pradine	\$ 21.95
ARS 120B (super sharp precision blade)	\$ 10.93
Manual Pipe Bender	\$135.00
Mate Post Hole Digger	
85 cc Two stroke powerhead	\$398.85
100 cc Two stroke powerhead	\$455.60
Full range of augers and accessories available.	
Powerhead fits aqua-drilling kit and horizontal drilling platform.	
Fischbein Bag sewing machine	\$1,047.00
Ladders:	
1.8 m (Oregon)	\$ 35.00
2.1 m (Oregon)	\$ 47.00
2.4 m (Oregon)	\$ 57.00
Extension (to 13 m)	\$250.00

New World "Steeleeta" Power Hack Saw	\$375.00
Cyclone Rat Traps - rail freight paid	\$ 18.09
Cyclone Opossum Traps - rail freight paid	\$ 19.61

#### 4.33 PROTECTIVE EQUIPMENT AND CLOTHING

Gloves - light weight	\$0.96-\$4.26
- work gloves	\$2.37-\$4.93
- leather (heavy duty)	\$5.88-\$9.45
- Rubber	\$ 7.25
- Hay (Leather)	\$ 9.06
Safety spectacles (Wormald)	
- Dax a Vis	\$ 11.01
- Dax Visitors	\$ 10.96
Airstream Anti-Dust Helmet (Wormald)	
Complete with battery	\$395.00
Battery charger	\$ 53.25
Wormald Safety Helmet H46	\$ 9.13
Wormald Welding Equipment:	
Helmets - Hiderok lift up	\$ 23.88
- fixed front	\$ 20.22
- Nylerok	\$ 26.07
Goggles	\$ 8.00-\$ 12.50
Face Shield	\$ 21.51
See through Welding Curtain	\$ 34.69
Gloves	\$ 9.78-\$ 19.21
Aprons - Hay	\$ 27.23
- Dairy shed (with pocket)	\$ 14.81
- Fencing	\$ 17.20
Goggles- 'Gardwell'	\$ 5.50
- 'North'	\$ 5.75
Ear muffs	
- Wormald Silencer Mark II	\$ 16.00
Dust guard Masks	\$ 4.15
- Filler	\$ 0.72
Respirators	
- 'Agriculture' Single Filter	\$ 21.25
Double Filter	\$ 27.35
Hood	\$ 93.50
Filters (6 pack)	\$ 4.00

Overalls		
- Zip comb. Size 3- 8		\$ 23.00
Size 9-10		\$ 27.00
- Bib and brace		\$ 15.00
Boots - Steel cap		\$ 65.00
- Plain cap		\$ 58.00
Gumboots		
- Marathon Knee		\$ 38.00
- Redband Short		\$ 29.00
Shearers Moccasins (leather)		\$ 11.50
Parkas - Oilskin		\$ 55.00
- P.V.C. coated		\$ 50.00
Swandri Zip front jacket		\$ 60.00
- Bushshirt		\$ 35.00
Leggings		
- Oilskin		\$ 25.00
- P.V.C. coated		\$ 25.00
Picking aprons		
- Coppins		\$ 23.00
- Scott Williams small		\$ 17.88
large		\$ 18.50
Picking bags		
- Coppins		\$ 21.90
- Scott Williams small		\$ 21.90
large		\$ 22.00
Line 7		
P.V.C. Parka		\$ 66.93
P.V.C. Farmers Jacket		\$ 54.53
P.V.C. Overtrouser (tie waist)		\$ 32.25
P.V.C. Overtrouser (elastic waist)		\$ 32.25
P.V.C. Leggings		\$ 27.93
P.V.C. Ranger Nylon Jacket		\$ 63.30
P.V.C. Ranger Nylon Overtrouser		\$ 28.07

#### 4.34 PACKAGING MATERIALS

##### 4.34.1 Horticultural Packaging

Apple Bags: polythene with holes	per thousand	
Printed: 5 kg		\$ 88.13
10 kg		\$158.00
Plain: 5 kg		\$ 58.99
10 kg		\$108.80
Cellophane:		
255 x 255 pkt plain		\$ 11.56
300 x 400 pkt plain		\$ 61.60

Containers: Berry (ex factory)	per thousand
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L.M. Strawberry tray with 2 dividers	\$474.00
Export Strawberry Tray	\$941.00
3 kg bulk berry pack	\$153.00
Raspberry pack 6 lbs	\$300.00
9 kg gate sale box (white)	\$392.00
2.5 kg gate sale box (white)	\$188.00
4.5 kg tomato/stone fruit box and full liners	\$411.50

Punnets:	per thousand
----------	--------------

8 oz. No. 50	\$ 48.00
12 oz. No. 75	\$ 50.65
1.5 kg light	\$159.46
1.5 kg heavy	\$234.10

Strawboard liners: (per bundle of 200)	\$ 55.05
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Metal containers:	
5 litre	\$ 1.95
4 gallon (honey)	\$ 1.07
20 litre	\$ 2.30

Plastic containers:	
5 litre	\$ 1.45

Bag ties:	
10 mm x 19 g wire ties (per coil)	\$ 16.50
Twistits - 10 cm boxes	\$ 4.50
- 20 cm boxes	\$ 8.50
- 10 cm pkts (100)	\$ 0.45
- 20 cm pkt (100)	\$ 0.66

Shredded paper:	
55 kg (approx.) bales (per kg)	\$ 0.55

Sundries:	
Stamp pad	\$ 4.88
Stamp pad ink - 110 ml	\$ 1.45
Markers - radiant	\$ 1.60
- vivid	\$ 0.75



#### 4.35 HORTICULTURAL LEVIES

##### Berryfruit:

	Berryfruit Levy 1981	Special 15% Levy	Total Due
Less than 250 sq metres	Nil	-	-
250 sq m but not over 4000 sq m	\$ 44.00	6.60	50.60
Over 4000 but not over 8000 sq m	\$ 55.00	8.25	63.25
Over 8000 but not over over 1.2 hectares	\$ 66.00	9.90	75.90
1.2-1.6 hectares	\$ 77.00	11.55	88.55
1.6-2.0 hectares	\$ 88.00	13.20	101.20
2.0-2.4 hectares	\$ 99.00	14.85	113.85
2.4-2.8 hectares	\$110.00	16.50	126.50
2.8-3.2 hectares	\$121.00	18.15	139.15
3.2-3.6 hectares	\$132.00	19.80	151.80
3.6-4.0 hectares	\$143.00	21.45	164.45
4.0-4.4 hectares	\$154.00	23.10	177.10
4.4-4.8 hectares	\$165.00	24.75	189.75
4.8-5.2 hectares	\$176.00	26.40	202.40
5.2-5.6 hectares	\$187.00	28.05	215.05
5.6-6.0 hectares	\$198.00	29.70	227.70
6.0 hectares and over	\$200.00	30.00	230.00

##### Raspberries:

North Island raspberries under Berryfed. South Island raspberries divided into three regions, each with own levy system.

Canterbury: Levy of \$3.75 per decare, if a producer. To be a producer, must have a tenth of a hectare.

##### Stonefruit:

5c per container of any size taken off at the market by Stone Fruit Advertising Committee.

##### Pip Fruit:

Apple and Pear Marketing Board levies.

##### Citrus Fruit:

6c per bushel levy for promotion.

##### Flowers:

Subscription to the Flower Growers Association of:

\$ 67	(0-2 employees)
\$100	(3 employees)
\$200	(4-5 employees)
\$330	(6 employees)

Any producer may pay only \$34.00 in the first year of production.

Kiwifruit:

24c per tray (grower)  
16c per tray (exporter)

Vegetables:

Registration fee to Vegetable Federation.  
Fresh vegetables: 5% of purchasing price.  
Processed vegetables: .5625% of price at which vegetables are purchased for processing or canning.

Potato:

\$8 per hectare. No levy on early crop.

Orchards:

\$30 per year (for all properties over .1 ha).  
Collected by Fruit Growers Federation.

Nursery Registration:

\$10 per nursery.

Auction Rates:

Flowers: 15%  
Fruit: 10%  
Vegetables: 10%

Avocado:

Promotion levy 25c per tree (once) then 25c per carton.

#### 4.36 BEES

Hives - complete

A6	each	\$ 56.00
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Hive Mats

Hardboard with Wood Rim	each	\$ 2.59
	per 10	\$ 21.56
	per 100	\$196.00
Hardboard only	each	\$ 1.20
	per 10	\$ 10.07
	per 100	\$ 91.50

Roofs

With iron	each	\$ 8.33
	per 10	\$ 80.15
Iron only	each	\$ 3.23
	per 10	\$ 32.17

Queens:

Depending on number required and time of year:  
\$4.50 to \$7.00 each.

Nucleus Stock:

	3 frame	4 frame	4 frame and 2 queens
1-11	\$35	\$40	\$45
11 and over	\$32	\$37	\$42

Package bees:  
(prices per kg)

1-5 kg	\$20.00
5-30 kg	\$18.75
31 and over	\$18.50

Honey Extractors:

Bench Model - 2 frame non reversible with Stainless Steel Can	each	\$ 345.00
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Cappings Spinner:

30" Model, made by Maxant Industries, U.S.A.	each	\$1,595.00
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Honey Pumps:

'Ecroyds' 1.25" Gear Type	each	\$ 162.00
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Honey Tanks - Stainless Steel:

.25 tonne - fitted with 1.75" Nylon Honey Gate	each	\$ 222.00
.50 tonne - fitted with 2.50" Socket	each	\$ 330.00
1 tonne - fitted with 2.50" stocket	each	\$ 500.00

Honey Cartons:

500 g	per 100	\$ 15.58
	per 1000	\$128.17
900 g	per 100	\$ 22.84
	per 1000	\$184.33

Honey Containers - Plastic:

200 per carton		
2 kg - in carton lots	each	.39
less than carton lots	each	.47

Embedders:

Hand - spur type	each	\$ 4.53
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Fumidil B		
0.5 g bottle	each	\$ 7.56
9.5 g bottle	each	\$ 69.84
Hats		
Ventilated Bee Helmets	each	\$ 8.50
Smokers		
75 cm stainless steel	each	\$ 31.52
100 cm tin with shield	each	\$ 28.05
Replacement bellows for Dadant Smokers	each	\$ 9.30
Study Prints:	per set	\$ 27.40
25 cm plain uncapping knife	each	\$ 15.64
25 cm steamheated uncapping knife:	each	\$ 29.65
P.D.B. (Paradichlorbenzene):		
1 kg container	each	\$ 5.41
2 kg tin	each	\$ 11.65
Bulk plus container	per kg	\$ 4.24
Queen Rearing Materials:		
Plastic Cell Cups - Kenco	each	.10
	per 100	\$ 7.72
Bee Brushes:		
Double sided		\$ 6.85
Honey Refractometers:		
(complete)		\$210.00
Bee Feeders: (plastic)		
Holds 4 litres syrup		\$ 3.80



**Purchase orders to: Accounts Office,  
Lincoln College,  
Canterbury,  
New Zealand.**