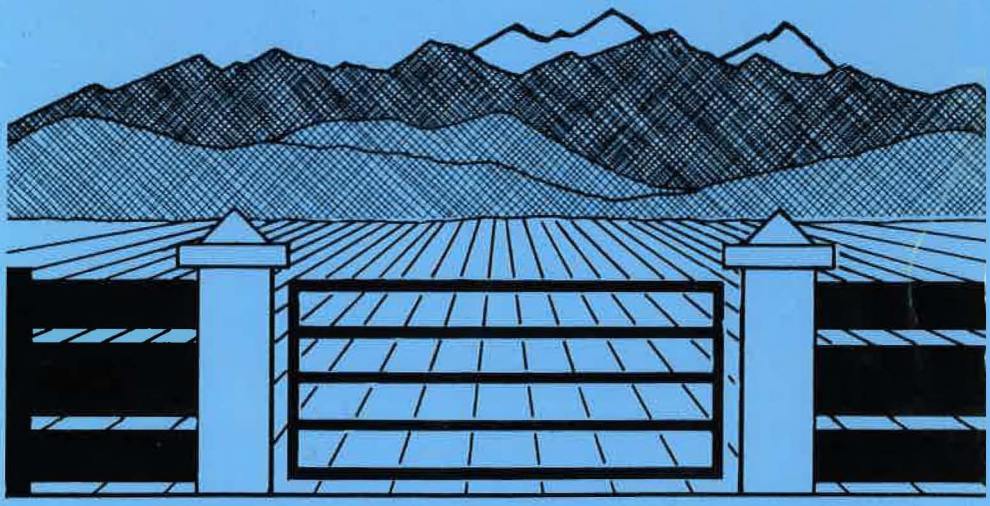
Lincoln College
Farm Management and Rural Valuation Department

1983 Farm Budget Manual



FINANCIAL Volume 1

1983 FARM BUDGET MANUAL

FINANCIAL

Volume 1
Sections 1 – 4

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PREFACE

The 1983 edition is published in two parts, Technical and Financial, each being two volumes. Both manuals have been extensively revised and updated, and some new material incorporated.

Prices quoted in these Manuals are those pertaining to the period from late 1982 to early 1983. These are likely to alter during the coming year, so that the Manual should be used as a guide only.

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.

We would like to express our grateful thanks to Mr R.J. Diprose, the previous editor of these Manuals, for his contribution towards the revision of the Technical Manual. We would also especially thank Miss Elizabeth Burtt for her conscientious work in supervising and co-ordinating the revision and updating of the Manuals, and also to Mr Robert Webster and Mr Prem Singh for gathering and collating information for the Financial Manual. Thanks also to Marion Mischler and Miss Sue Gill for their secretarial services.

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

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

M.B. Clark
G.P. Rennie
EDITORS
March 1983

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_2O -

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_2O:
Nor will my barley ever thrive
Without some more P_2O_5.
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 M.A.F. AgLinks Rural Industry Incentives, 1982-83, FPP 670-673.

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 Duties, contains details of how these Duties are determined for the current financial year, supported by worked examples.

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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. AgLinks: FPP 670, FPP 671, FPP 672, FPP 673 and other contributions.

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. An experienced, bona fide farm worker such as a shearer or fencer, who has a proven record of thrift and initiative, may be granted a loan to purchase a suitable smaller unit, provided the total loan commitment as well as the farm running and living expenses can all be met by the total income.

[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, to 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 the 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;
- have never 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 5 years at date of settlement.

Applicants must also hold one of the following educational qualifications:

* A successfully completed four week course in each of 2 years in basic husbandaries and farm management to an acceptable standard,
* The Trades Certificate in Farm Management,
* An appropriate Massey or Lincoln diploma.

Persons born before 1946 may elect to sit an 'assessment course' to establish the extent of their knowledge - details available from the nearest office of the Department of Lands and Survey.

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

Lands Settlement Board finance is available 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 of their own, can be opened with the Post Office Savings Bank, a trustee savings bank, a private 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.

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 husband or wife of a depositor.

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

In order to obtain a grant or to retain any tax rebates received, the account must operate for at least 36 months from the date on which the balance last reached $250. other criteria also must be met when the savings are to be withdrawn, and the withdrawal must be for an approved project. A prospective depositor should be familiar with all these requirements before opening an account.

Before taking possession of any land or purchasing any stock, the account holder is required to lodge with the Rural Bank a formal application to withdraw the necessary funds.

(i) Grant Option

The 'farm ownership account' 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.

(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 depos-

itor'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 new 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/her 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 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, and 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:

- neither the applicant nor the applicant's wife or husband, either individually or jointly, can 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 scheme aims to assist suitably qualified and experienced farmers to purchase their first farm by encouraging the outgoing farmer to invest in the industry. The retiring farmer has 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 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 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 grants a mortgage to the purchaser in the normal way.

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, 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's mortgage may be 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 (which may be on a first, second or subsequent security) may be on a flat or table basis, or it may be on demand if provision is made for repayment over (or at the expiry of) a term of not less than 7 years.

- for a minimum of 7 years the interest rate 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.

- the purchaser(s) must neither hold nor 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 settlement as a full time farm and must also personally occupy and farm the property.

- the purchaser(s) 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 Development Finance

Any reasonable need for development finance may qualify for a loan, including clearing, grassing, fencing and top-dressing; housing and farm buildings; roading, planting and water supply and 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]

1.3.2 Development Expenditure

Refer to Taxation Section.

1.3.3 First-Year Taxation Allowances - Buildings, Plant and Machinery

Refer to Taxation Section.

1.3.4 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 the basis of first instrument by way of security over the stock (and, if necessary, the plant).

(ii) Long Term (10 to 25 years):

These loans are available for stock to be purchased or increased (through retention of stock that would normally be sold) in association with development or the purchase of additional land; and for the purchase of stock for diversification, where the new stock is more costly per unit or where a change from dry stock to breeding stock is being made. Loan limits and security are flexible.

[Rural Banking and Finance Corporation]

1.3.5 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]

1.3.6 Purchase of Plant and Machinery

Loans for the purchase of plant and machinery may be 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.

Importance will be attached to essential requirements, concerned with land development work, rather than the purchase or normal replacement of tractors and plant required by farmers to continue with existing farming systems.

A loan that, generally does not exceed two-thirds of cost of tractors, plant and farm machinery (excluding road transport vehicles and aircraft) can be considered. The term will be up to 5 years. A loan 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. The security arrangements are flexible, but a mortgage over land would normally be required, in addition to a first fixed charge over the machine.

The availability of this type of finance from the Rural Bank is limited. It is intended to complement and not to replace the many other sources of credit that are available. Because of this essentially complementary role, farmers and agricultural contractors will generally need to rely on their traditional sources of finance for their plant and machinery requirements. Applications to refinance debts incurred with other lenders or hire purchase arrangements cannot be entertained.

[Rural Banking and Finance Corporation]

1.3.7 Refinancing of Farm Debts

The funds available to the Rural Bank for refinancing are very limited, and mortgages (including both second and subsequent and the institutional types) will not normally be refinanced, even though they may have become overdue.

Some consideration will, however, be given to an otherwise efficient, credit worthy farmer whose productive develop-

ment has caused severe liquidity problems which are hindering further progress and restricting production.

[Rural Banking and Finance Corporation]

1.3.8 Seasonal Finance

Seasonal finance, on a current account basis, is available to tobacco growers, to pip-fruit growers, and (as the need arises) to 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 available from other traditional sources.

[Rural Banking and Finance Corporation]

1.3.9 'Nil' Livestock Values for Taxation

Refer to Taxation Section.

1.3.10 Energy Conservation Expenditure

The 1982 Budget abolished, 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, was introduced. The present tax concession will, however, continue in respect of qualifying expenditure that was incurred after 1 April 1982 in cases where a binding contract had already been entered into prior to that date.

Particulars of the new loans scheme can be obtained from the Ministry of Energy, Private Bag, Wellington.

[Ministry of Energy]

1.3.11 Farm Mortgage Guarantees

To encourage lenders to invest in farm mortgages, the Rural Bank will guarantee a farm lenders against loss should the borrower ultimately fail to repay a loan.

The mortgage which qualify for guarantee are those raised for any 'acceptable' farming purpose, including purchase of land, development and 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 comp-

anies 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 further subsidy is available.

[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 having deducted the 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's store, or its port of entry to the farm gate. The rates are:

First 40 kilometres -	6 cents per tonne per kilometre
Next 210 kilometres -	7 cents per tonne per kilometre
Kilometres in excess of 250 -	8 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 but (as problems of security and equitable distribution of debts between participants can arise in such arrangements) the Bank will also 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.

Fertiliser that is carried by light aircraft within these areas is subsidised at the rate that applies to normal ground transport.

When 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

From 1 April 1983 expenditure on forestry is eligible for cash grants equal to 45% of qualifying costs. No formal approval is required but persons intending to apply for the grant should inform the N.Z. Forest Service of details of proposed operations by 30 June in the year before expenditure is to take place in order to be assured of payment. There is no limit on expenditure and no maximum or minimum area of annual or total planting but such planting must be of recognised commercial wood production species. Eligible landholders include individuals, partnerships, trusts, companies, societies, boards and local authorities.

Qualifying costs include:

- Land clearing and preparation.
- Fencing (new fencing, adequate for protection of the tree crop).
- Tree stock, planting, blanking and releasing.
- Pruning and thinning.
- Chemicals and fertilisers and their application.
- Disease and pest control (insect, fungal and animal).
- Temporary roads and tracks, including associated culverts and bridges, of a minimum standard necessary for establishing and tending one crop of trees.
- Fire protection and suppression (does not include capital items, e.g. lookout towers, fire engines or rubber dams).
- Temporary forest huts.
- Hiring or leasing of plant or equipment.
- Repairs and maintenance to:
  - Temporary roads, access tracks, culverts and bridges.
  - Plant and equipment used wholly or primarily in land preparation, planting, tending and maintaining the tree crop.
  - Fences and temporary forest buildings.
- Depreciation of plant or machinery acquired on or after 1 April 1983 which is used wholly or principally in land preparation or planting, tending or maintaining the tree crop.
- Professional forestry services or advice.
- Rent, rates, land tax and insurance premiums.
- Interest on loans for forestry, including interest on money borrowed for land purchase.
- Subscriptions to a farm forestry association and/or a forest owners assocation.
- Directors fees.
- Administration expenses.
- The value of the owner's labour or of his/her family

at no higher rate than that of payment for workers in the N.Z. Forest Service known as Forest Hand 1.
(Note:
(i) Up-to-date rates can be obtained from the N.Z. Forest Service.
(ii) Payment for such labour is regarded as income for the recipient for the year in which received and is taxable.)

Claims for grant payment should be submitted to the N.Z. Forest Service within three months of 31 March or other financial balance date and must be certified by a chartered accountant. Late claims or claims which have not been subject to prior operation advice may be held over until the following year. Where claims are considered excessive or unreasonable payment may be reduced or deferred until an inspection of operations or related accounts has been made.

Grants are not available for areas of forest planted for erosion control with the assistance of catchment authorites.

[New Zealand Forest Service]

1.5.2 Protection/Production Grants

Production plantings with a major soil protection element are eligible for 66.66% grants towards establishment costs, reverting to 45% for tending and maintenance. Such grants are administered by the N.Z. Forest Service but concurrence of district catchment authority officers will be a condition of payment at the higher rate. other conditions applying are the same as for 45% grants.

[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 'unimproved' value), the value of any timber trees or trees for shelter or amenity purposes is exempted by statute from inclusion in property valuations for the purpose of levying rates. In addition the timber value

of standing trees is exempted from estate duty.

[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 and none of their cost is recoverable. 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 - works with the greatest 'off-site' benefits will generally attract the highest grants. Assistance is provided on condition that the farmer will contribute, as appropriate, to the maintenance of the works.

Such works are promoted through the appropriate catchment authority, from each of which a specialised service is available 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 systematic manner.

- Community drainage schemes involving drainage channels, outfalls, and pumping structures.

An individual farmer's soil and water conservation plans (which may include erosion-control fencing; the provision of alternative grazing for severely eroded country that is to be retired; and planting, over-sowing, and topdressing specifically to control severe erosion).

[Catchment Authorities]

1.6.3 Rural Water-Supply Schemes

Assistance is available toward approved community rural water-supply schemes which include at least four farms and will service at least 800 hectares. A 1:1 grant is made toward most of the eligible 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 Department of Health. The policy itself is administered by the Ministry of Works and Development.

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

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

Brucellosis and cattle tuberculosis are subject to official control schemes that ae funded partly out of the Consolidated Fund and partly by the farming industry. The diseases are being controlled in an effort to ensure continuing returns for out beef and dairy-produce exports.

The disease-eradication schemes are carried out under the Animals Act 1967 and the Cattle Brucellosis and Tuberculosis Control Regulations.

The farmer is responsible for presenting the cattle for testing when called upon to do so. The government contributes to the cost of the testing (either by providing MAF staff to do the work or by paying the farmer's own veterinarian) and pays compensation for (and the disposal costs of) any reactors.

MAF administers the schemes, organises the identification of the infected animals, and implements procedures to minimise the spread of diseases. Farmers are obliged by the Animals Act to co-operate in these measures as and where required.

Any animals that are infected with either disease are destroyed and compensation paid to their owners. This compensation is 75% of a market value agreed upon by the owner and by MAF, but within maximum limits (relating to animal types and classes) set by the Meat Producers Board and the Dairy Board.

Where a 'cull' animal is discovered at the works to have tuberculosis and is therefore condemned (so that the owner will receive nothing for it from the works), 90% of an average carcass is paid as compensation.

[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.

Further information can be obtained from your local

noxious plants officer.

[Ministry of Agriculture and Fisheries]

1.7.3 Noxious Plant Eradication - Temporary Employment

Under the government's public sector job creation programmes, district noxious plant authorities are empowered to undertake short-term weed eradication projects through the Department of Labour. On approved projects the district authority is reimbursed for the cost of wages and some of the overheads for the workers engaged through the Department of Labour.

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 approved 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.

A farmer arranges with the local county to carry out a MAF approved control programme. On its completion, the county pays the subsidy and is itself reimbursed by MAF.

[North Island Local Authorities]

1.7.6 Pest Control

Pest destruction boards are charged with the control of rabbits, opossums, and other pests on all rateable land. Their income derives from rates levied on farmers, which are supplemented by Government grants. In addition, district grant payments, approved by the Minister of Agriculture on the recommendation of the Agricultural Pests Destruction Council, are made after evaluating the annual budgets from all the pest destruction boards.

[Pest Destruction Boards]

1.8 ADVERSE-EVENTS RELIEF

1.8.1 Adverse Events - Taxation Relief

Taxation relief may be claimed by 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 provided it is not more than 3 years later.

Farmers should apply for this 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 disturbance such as drought, hail or 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, and actual living expenses.

[Rural Banking and Finance Corporation]

1.8.4 Adverse Events - Temporary Employment

The Government's public sector job creation programme provides 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

A school boarding bursary may be granted to a pupil, either primary or secondary, who is obliged to live away from home in order to be educated.

Eligibility is determined by the distance from 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.

At present the school boarding bursary is at the rate of $750 per annum per eligible child but, this rate is to increase to $900 per annum as from the beginning of the 1983 school year.

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 a specified academic or technical course that is 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, the assistance may take the form of a transport subsidy rather than a course bursay.

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.

The present rate of this scholarship is $900 a year, but it will increase to $1,050 as from the beginning of the 1983 school year.

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 government 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.

Such a pupil is required to make his/her own way up to 1.6

kilometres to a bus stop but transport assistance is provided for longer distances.

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 transport 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

A pupil who is prevented (by distance from a school or a school-bus route, by inaccessability, by chronic sickness, or by some other special circumstance) from attending a school daily may be eligible for enrolment with the Department of Education's Correspondence School.

More detailed information regarding the criteria for enrolment can be obtained from your local education board or from the Registrar, Correspondence School, Private Bag, Wellington.

For a full-time pupil, most of the course material (text-books, audio-cassette tapes, and such like) is loaned by the School for the duration of the course.

[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.

[Federated Farmers]

1.9.7 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]

1.9.8 Assistance for Training

In order to promote the training (or retraining) of anyone whose work skills are inadequate, whose existing skills have become outmoded, or who is otherwise in need of 'updating', several types of government assistance, as set out below, are at present available.

Young persons' training programme: Assistance with a young person's training programme is available.

* Emphasis is given to training those who are not already equipped with any work skills to make them readily employable.

* The training is given in a field which will provide reasonable job prospects when the course has been completed.

* The training programme must not have been set up to fill vacancies that have been created by the discharge or non-replacement of other workers.

Under the work-based section of the programme, employers are asked to provide training places for young persons (individually or in small groups) in one of the following categories.

Job exploration
Some of the young people who have enrolled with the Department of Labour have little or no idea of work opportunities that are available to them. Before they could be offered employment in any particular enterprise however they will need to undergo a period of training, during which the Department of Labour will be paying them a 'training allowance'. This training (in agriculture, commerce, fishing, horticulture, or any other industry) should occupy no more than 3 weeks, and should be designed to introduce the trainee(s) to the particular skills that will be required.

Work-based operator training
Where a full-time instructor-supervisor provides training that has been designed in accordance with the needs of the trainees, an allowance toward the cost of that training is available to the firm or organisation concerned. The amount of the allowance is from $24-$32 a week for each trainee, and it is payable for a maximum of 20 weeks, although 6-10 weeks would normally be sufficient.

Under this scheme also the trainees are eligible for a training allowance.

Training-in-employment
As an alternative to providing work-based training by an operator, an employer may elect to train young persons in actual employment.

An employer who agrees to pay full wages to such trainee(s) may claim a $75-a-week wage subsidy for each trainee for a maximum of 20 weeks, although a 6-10 week training period will usually be sufficient.

Adults' retraining programme
This programme is aimed at assisting two types of worker.

* A subsidy to assit workers who have been involuntarily displaced from their employment and who lack other relevant work skills.

* Subsidies on worked-based operator training and training in employment to encourage the employment of such workers (see also under 'Young persons training

programme', above).

* A subsidy to retain or 'upskill' workers who are already in employment.

* A wage subsidy of $75 a week for up to 20 weeks to assist employers to retrain or 'upskill' inadequate employees. This assistance is available on condition that the employer also recruits a worker who has enrolled with the Department of Labour's Employment and Vocational Guidance Service to fill the vacancy that has been created by the newly retrained, 'upskilled' worker. This option could apply in conjunction with the Farm Employment subsidy.

[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 themselves responsible for providing 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, these basic 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
	Initial	Revised	SMP	Total Payout	Supple-ment
1976/77	135.7	-	-	152.7	-
1977/78	143.9	-	-	167.4	-
1978/79	165.7	-	180.0	172.9	6.7
1979/80	176.9	185.0	185.0	208.0[2]	-
1980/81	218.0	230.0	230.0[1]	264.0	-
1981/82	268.0	285.0	280.0	330.0	-
1982/83	318.0	-	325.0		
1983/84	-	-	(325.0)		

[1] Initially set at 265.0 but later revised.
[2] Includes 4.0 cents paid retrospectively.

Notes: The average producer receives 'NZDB Total Payout' plus 'N.Z. Government Supplement'.
Company payouts to individual suppliers fluctuate about this total for various reasons including product mix, manufacturing cost levels, and capital formation decisions.
Season ends 30 June.

1.10.3 Meat Industry

Under the N.Z. Meat Producers Board Minimum Prices Scheme, the Meat Export Prices Committee establishes 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 (before supplementation) 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 these minimum prices by making industry funded supplementary payments via exporters schedules; purchasing the meat itself; or doing both.

If the Government SMP price for any benchmark grade is above the NZMPB minimum, and the average 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, Government-funded, supplementary payments via exporter's schedules.

The Board's move to purchase all lamb and mutton as from October 1982 was consistent with its minimum prices scheme in that exporter's schedules at the time were below minimum levels. The Board's October 1982 announcement that such purchasing would be compulsory for two seasons was, however, a radical development. Despite this, the operation of the minimum prices scheme should remain essentially similar under the new regime.

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	116.0	145.0	160.0	123.7	23.1
	1982/83	114.0	146.0	155.0		
	1983/84		(146.0)			

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	46.6	7.0
	1982/83	42.0	51.0	63.0		
	1983/84		(51.0)			
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	133.4	10.2
	1982/83	128.0	147.0	175.0		
	1983/84		(147.0)			
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	100.2	24.7
	1982/83	98.0	(125.0)	145.0		
	1983/84		(125.0)			
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	129.0	14.0
	1982/83	127.0	147.0	175.0		
	1983/84		(147.0)			

Notes: Average producer receipts from selling on lowest regional schedule equals "average market realisation" plus "average combined supplement" or minus "average levy". Pelt and Wool payments excluded. Season ends 30 September.

* NZMPB trading losses/profits not allowed for.

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 puchasing. 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, neither the AWASP quotation, or the actual auction average, is currently a reliable guide of free-market demand or returns. (A "market indicator" quotation has recently been introduced to overcome this.) 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 percentage 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)

('000 bales)

Season	NZWB Min. (Target)	NZ Govt. SMP	NZWB Trigger	Auction Average	AWASP	Average NZWB Suppl. (Levy)	Average SMP Suppl.	Net Wool Purch -ases
1976/77	136.0	-	195.0	219.6		(9.8)	-	+ 54
1977/78	150.0	-	215.0	190.4		nil	-	+ 98
1978/79	170.0	205.0	250.0	218.8		nil	0.5	- 121
1979/80	200.0	235.0	300.0	265.1		nil	0.1	+ 38
1980/81	215.0	235.0	330.0	247.5	249.7	nil	nil	+ 225
1981/82	250.0	320.0	400.0	255.7	259.3	6.2	56.0	+ 78
1982/83	250.0	320.0	400.0					
1983/84		(320.0)						

Notes: Average wool producer receives "Auction Average" plus "Average N.Z.W.B. Supplement" (or minus "Levy") plus "Average SMP Supplement".
Season ends 30 June

1.10.5 The Pipfruit Industry

The Government's SMP scheme does not extend outside the products of the meat, wool and dairy industries. In the pipfruit industry all price smoothing continues to be operated solely by the industry itself via the N.Z. Apple and Pear Marketing Board (NZAPMB).

Under its 1948 Act, NZAPMB is obliged to purchase at set prices all fresh apples and pears offered by producers and meeting certain quality standards. The average of the prices to be paid by the Board for bare fruit is determined annually by the independent Apple & Pear Prices Authority prior to the main harvest period. The Board also pays for packing costs, incentives etc. The "annual average price" can be revised mid-season. Normally it can not exceed 115% of last season's level.

As from 1981/82, the board has announced a "supplementary price" prior to the main harvest period. This price is normally calculated as the average of the market return received for last season and expected for the coming season.

Should the Board make a trading profit, the first charge against this profit is a "capital charge" set by the Board to fund capital development. In addition, capital charges set for previous, trading-loss, years can also be charged against this profit. Provided the supplementary

price exceeds the average price, the next charge against this profit is a distribution to growers sufficient to increase the total payout to the level they would have got had the "annual average price" been set equal to the "supplementary price". If undistributed profit still remains, 50% is paid to growers and 50% is retained by the Board to meet future trading losses (Price Stabilisation Account).

Price Smoothing in the Pipfruit Industry
Apples
cts/kg (bare fruit)

	Initial Annual Ave.	Revised Annual Ave.	Supplementary Price	Capital Charge	Total Grower Payout
1976/77	8.7	-			11.5
1977/78	9.5	-			13.8
1978/79	10.4	-			13.9
1979/80	14.4	-			19.6
1980/81	15.8	-	20.9	1.0	15.8
1981/82	15.8	18.2	14.6	1.5	
1982/83					
1983/84					

Note: Season ends 30 September.

1.10.6 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.

The amount of wages claimed by the farmer for income tax purposes should be reduced by $50 per week for each worker and by the $500 bonus(es).

[Department of Labour,
Inland Revenue Department]

1.13 GENERAL

1.13.1 Estate Duty

Within its available funds the Rural Bank of New Zealand will assist 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 suchlike.

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 but whose markets can be added to 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 Agricultural Contractors Loans

Loan assistance is given to established agricultural contractors who are engaged full-time in the business and who derive the bulk of their gross income from farm contracting. Term loans, usually 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 and loans for the purchase of plant and machinery are also available.

Typical of the contractors helped so far are weed sprayers, well drillers, and harvesters.

[Rural Banking and Finance Corporation]

1.13.7 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.

No subsidy is available on short extensions, that is under 1 kilometre, or where the annual subsidy is estimated to be under $4000. 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]

1.13.8 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 Department of Trade and Industry in Christchurch or Dunedin.

[Department of Trade and Industry]

1.13.9 Safety Frames on Tractors

Refer to Taxation Section.

1.13.10 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. Inquiries as to the current rate of interest should be made from the Rural Bank's nearest office.

[Rural Banking and Finance Corporation]

1.13.11 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]

NOTES

NOTES

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

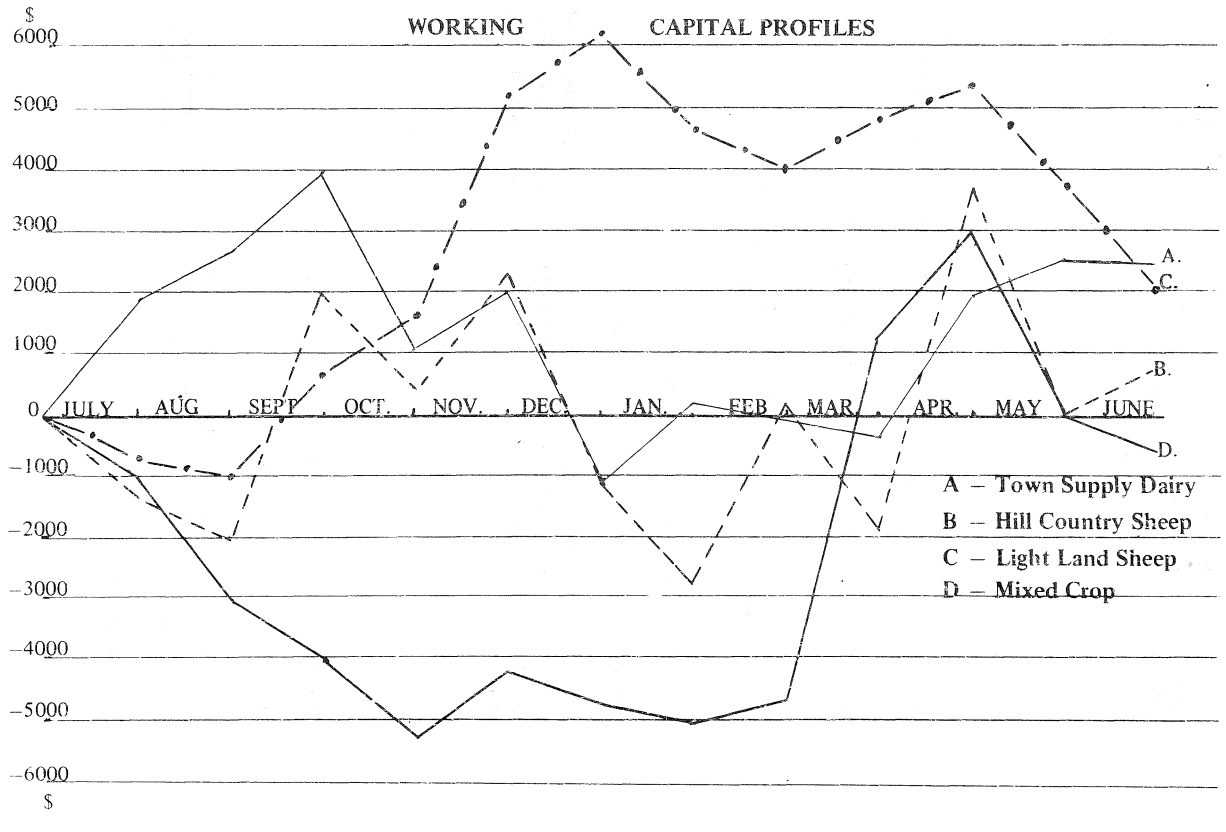
Farm Types	Percentage of Value of Land, Building Stock and Plant
Dairying (Intensive)	2%
Dairying and Mixed	2%-4% depending on comparative size of dairy enterprise
Sheep and Cropping	3%-5% depending on amount of crop and small seeds
Sheep (Intensive Fat Lamb)	4%-6%
Sheep (Hill Country Store)	5%-6%
Poultry	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.


WORKING CAPITAL PROFILES
$
6000
5000
4000
3000
2000
1000
0
−1000
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JULY
AUG
SEPT
OCT.
NOV.
DEC.
JAN.
FEB
MAR
APR.
MAY
JUNE
A.
C.
B.
D.
A – Town Supply Dairy
B – Hill Country Sheep
C – Light Land Sheep
D – Mixed Crop

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. For a local society the interest rate is between 16 and 17% for a term of 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 in the region of 13 to 15%.

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.

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 valuation, 10-30 year table mortgage at 16%. The mortgagor is 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% (maybe rebated to 7.5% for first 3 years), reviewed every 3 years.

Amount - Up to 2/3 security margin within the following guidelines.
Sheep and cattle farms $180,000 to $230,000.
Dairy farms $110,000 to $140,000.
Mixed cropping farms $180,000 to $230,000.
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% (maybe rebated to 7.5% for first 3 years).
Amount of loan is flexible but normally no greater than $40,000 for a one man unit or $60,000 for a two man unit.

(iv) Development

Policy - Medium to long term table mortgage lending to most development propositions (5-20 years).

Terms - Interest 9 to 14%.

(v) Irrigation

Policy - 10 to 15 years for approved irrigation schemes.

Terms - For the first 3 years interest only is charged (at 9%), but this is deferred and capitalised. The total loan is then repayable over a further 10 year term (flexible).

(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 to 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 17% and 20%.

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 the 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% to 14.75%.

Savings Bank Loan:

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

Personal Loans:

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

Lease Finance:

- Term - 5 years.
- Rates 14% to 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% to 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 mort-

gage, 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 $600 to $1,200.

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 1982)

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 $48.00 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 $58.00 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 $58.00 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 per hour by negotiation with a minimum charge of $240.00 for attendance.
Minimum fee $33.00 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.

Lincoln College has established the Property Management Service as an independent body to promote farming agreements. It performs three main functions related to both sharefarming and partnership agreements.

* Maintains a register of both Land Owners and investors and potential Sharefarmers and Management Partners and assists with the selection of compatible parties.

* Draws up a draft agreement to meet the particular

requirements of the parties and the property concerned. This agreement is then referred to the parties' solicitors for final approval.

* Provides a supervisory service to ensure the agreement operates in the way it was intended and that the asset is preserved and also assists conciliation in the case of any dispute.

Further information and registration forms may be obtained from the Deputy Director, Property Management Service, Lincoln College, Canterbury.

Fees:

1.	Registration Fee	$ 35.00
2.	Agreement Fee	$750.00

The Agreement 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.

Work related to supervision of agreements is charged on the basis of the time involved.

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

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 assign-

ments 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

Morgagee'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			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 High 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 mortgagees 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. Minimum Scale of Charges

(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.
	Above $1,000,000	$1,292.50 for the first $1,000,000 plus $1.00 per $1,000 or part thereof thereafter.
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.
	Above $1,000,000	$1,541.25 for the first $1,000,000 plus $1.25 per $1,000 or part thereof thereafter.

(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 is not equitable, 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.

- High 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.

- District Court, Land Valuation Tribunal 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 as per clause (vi) above. Additional mileage is to be charged at the maximum State Services rate.

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 share-milking, and many are now themselves employing share-milkers. 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
* Roading
* 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

Return			$
140 kg MF/cow	@	280c/kg	392
.80 Bobby calf	@	$12/head	9.60
Total Income			$401.60

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

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

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 postion.
: 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.]

NOTES

NOTES

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 17 January 1983.

Grade	Weight Range (kg)	Auckland c/kg	Rest of N.I. c/kg	South Island c/kg
Lambs				
PL	8.0-12.5	130.5	135.5	133.5
PM	13.0-16.0	144.5	148.5	145.5
PX	16.5-19.5	147.5	150.5	146.5
PH	16.5-19.5	134.5	137.5	133.5
PHH	20.0-25.5	130.5	133.5	128.5
OL	8.0-12.5	127.5	132.5	130.5
OM	13.0-16.0	140.5	144.5	141.5
YL	8.0-12.5	126.5	131.5	129.5
YM	13.0-16.0	144.5	148.5	146.5
A	To 12.5	121.5	128.0	129.5
F	8.0-12.5	89.5	92.0	89.5
C1	8.0-12.5	83.5	87.0	85.5
C1	13.0 & over	113.5	117.0	114.5
C2	All weights	81.5	85.0	82.5
M	All weights	33.0	33.0	33.0
Hoggets				
HL	To 22.0	57.0	61.0	64.0
HM	22.5-26.0	71.0	74.0	75.0
HX	To 22.0	44.0	48.0	49.0
Mutton				
ML1	To 22.0	46.0	50.0	53.0
ML2	22.5-26.0	54.0	57.0	58.0
MH1	26.5-30.0	52.0	55.0	54.0
MH2	30.5-36.0	34.0	36.0	35.0
MX	To 26.0	35.0	39.0	40.0
MM	All weights	11.0	16.0	15.0
MF	All weights	21.0	24.0	24.0
MP1	To 26.0	10.0	13.0	11.0
MP2	All weights	14.0	17.0	15.0
Rams				
RAM	All weights	11.0	14.0	12.0

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 18th and Wednesday 19th January 1983 are shown below.

Prime Lambs
Heavy lambs - $26.80.
Medium lambs - $20.00 to $23.00.
Light lambs - $16.00 to $19.00.

Store Lambs
South Suffolk wethers - $14.00 to $19.40.
Coopworth Corriedale cross wethers - $13.00 to $16.40.
Coopworth Corriedale cross ewes - $9.00 to $13.70.
Down cross wethers - $11.20 to $19.00.
Romney ewes - $12.00 to $14.70.
Romney and Romney cross wethers - $11.20 to $15.30.
Corriedale and Halfbred wethers - $10.40 to $16.80 (some to $20.20).
Coopworth wethers $8.40 to $14.40.
Coopworth ewes - $12.50 to $14.00.
Perendale ewes - $17.50.
Corriedale and halfbred ewes $9.00 to $14.70.

Prime Sheep
Best hoggets - to $20.60.
Medium hoggets - $16.00 to $18.50.
Light hoggets - $14.00 to $15.80.
Best old ewes - to $9.60
Medium old ewes - $6.20 to $7.40.
Light old ewes - $4.00 to $6.00.

Store Ewes
5 year Corriedale - $10.70 to $11.10.
5 year Half breds - $9.20.
Border Corriedales (m.a.) - $14.60.
Corriedale 2ths - $17.90 to $19.40.
Older ewes - up to $14 (some down to $6).

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 7th January 1983.

Description	Weight Range (kilograms)	New Zealand cents per kilogram
PL	8.0 - 12.5	240.2
PM	13.0 - 16.0	240.2
PX	16.5 - 19.5	221.1
PH	16.5 - 19.5	211.5
PHH	20.0 - 25.5	205.5
YL	8.0 - 12.5	231.8
YM	13.0 - 16.0	231.8

3.1.4 Store and Breeding Stock Prices

Store sheep prices were similar to the 1980/81 season, again reflecting the lower price for wool and the drought conditions, especially in Canterbury.

1982 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)	30.00	26.00	22.00	17.00	20.00	14.00
Te Kuiti (Jan)	30.00	25.00	20.00	17.00	20.00	15.00
Hawkes Bay (Jan)	35.00	28.00	24.00	18.00	25.00	18.00
Canterbury (Feb)	25.00	19.00	20.00	14.00	17.00	11.00
Dunedin (Feb)	28.00	23.00	25.00	21.00	20.00	18.00
Invercargill (Feb)	44.00	35.00	28.00	23.00	20.00	15.00

Source: "Annual Review of the Sheep and Beef Industry, 1981/82", 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	$60-$ 75
Dorset Down	$60-$100
South Dorset Down	$60-$100
Hampshire	$60-$110
South Suffolk	$70-$100
Suffolk	$60-$100
Romney	$60-$100
Corriedale	$80-$120
Perendale	$90-$140
Border Leicester	$90-$150
Borderdale	$90-$140
Coopworth	$90-$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 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 1982/83 season commencing on October 1, 1982.

The prices were set as follows, with those for 1981/82 in parentheses:

Benchmark grades	Minimum Price	Trigger Price (cents/kg)
Lamb - PM (13.0-16.0 kg)	114 (116)	155 (160)
Mutton - ML (22.0 kg & under)	42 (43)	63 (65)
Beef - Cow M (145.5-170 kg)	98 (100)	145 (150)
- Bull (220.5-245 kg)	127 (124)	175 (175)
- Steer PL (245.5-270 kg)	128 (125)	175 (175)

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)	146 (145)
Mutton - ML (22kg & over)	51 (50)
Prime Beef - PL Steer (220.5-270 kg)	147 (143)
Manufacturing Beef - M Cow (140 kg & over)	125 (125)
- Bull (220.5 to 245.0 kg)	147 (-)

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 1981/1982 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 (37F2J)							
	Fl.	2 Sh.	Fl.	2 Sh.	Fl.	2 Sh	Fl.	2 Sh.
Dunedin	395	372	350	344	388	365	374	355
Timaru	391	368	360	346	377	364	360	343
Inv'gill	380	358	351	377	366	370	N/A	333
Auckland	378	337*	N/A	331	N/A	340***	301	342
Napier	401	382	360	332	391	369	N/A	339

Chch	401	372	367	347	392	356	371***	350
Well'ton	379	347	357	331	369	342	N/A	336***
Wanganui	371*	341*	361	338	390	360	N/A	336***

56's Strong Halfbred B Fleece (28F2W)

Timaru	424	444	460	N/A
Chch	442	441	489	474
Dunedin	434	460	494	488
Napier	418*	427**	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
*** April

SOURCE:
N.Z. Meat and Wool Boards' Economic Service "Annual Review of the Sheep and Beef Industry, 1981/82".

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

	All Styles and Types			All Qualities	Total Greasy Auction Sale Value	Estimated Total Value of Wool Prod.
Micro-meters	19-22**	25-27**	35***			
SEASON	(cents per kg greasy)				($ m)	($ m)
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
1981/82	425.8	293.5	222.4	255.7	654.3	928.2

SOURCE:
N.Z. Meat and Wool Boards' Economic Service "Annual Review of the Sheep and Beef Industry, 1981/82

* = 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 1981/82 WOOL SELLING SEASON (July-June)

DISPOSALS:

		1980/81	1981/82
1. Sales			
(a) At Auction			
(i) Greasy	: tonnes actual	258,575	255,909
	: av. price (c/kg)	247.48	255.72
(ii) Scoured	: tonnes actual	3,561	2,854
	av. price (c/kg)	327.90	336.60
TOTAL CLEAN TONNES SOLD AT AUCTION		197,699	193,429
(b) Privately (clean tonnes)			
(i) Brokers		2,098	776
(ii) Private buyers & WMA		53,962	45,174
(iii) Extra Choice		213	490
TOTAL SOLD PRIVATELY			
- clean tonnes		56,273	46,440
- value $		169,699,456	148,082,311
2. Growers' Shipments (clean tonnes equivalent)			
(a) Greasy		539	353
(b) Scoured		5,176	4,472
TOTAL GROWERS' SHIPMENTS			
- clean tonnes		5,715	4,825
- value $		18,655,532	15,964,090

3. Slipe Disposals		
Freezing companies and fellmongers		
- clean tonnes	30,008	29,713
- value $	89,344,019	92,832,165
TOTAL DISPOSALS		
(a) clean tonnes	289,695	274,407
(b) value $	928,146,149	920,889,464
SCOURING: (clean tonnes)		
(a) On account growers	7,916	6,493
(b) On account buyers	137,114	132,806
(c) On account manufacturers	13,854	16,649
TOTAL SCOURED	158,884	155,948
EXPORTS; (clean tonnes equivalent)		
(a) Greasy	96,737	98,514
(b) Scoured	133,641	134,716
(c) Slipe	15,100	15,300
TOTAL EXPORTS	245,478	248,530
FOB Value $	766,382,316	807,598,235
LOCAL MILL PURCHASES:		
(clean tonnes)	16,423	20,683
BOARD MARKET ACTIVITIES (N.Z. & U.K.)		
(a) Purchases - Bales		
(i) Intervention	314,090	189,457
(ii) Extra Choice	1,868	3,603
(iii) Other	37	-
- Value all purchases $	111,147,653	65,875,448
(b) Sales - all		
(i) Bales	91,958	112,918
(ii) Value (realisation)$	34,335,278	41,260,839

SOURCE: New Zealand Wool Board, 'WOOLNEWS', Vol. 10, No. 2, August 1982.

3.2.2 Wool Prices 1982/83

The 1982/83 wool selling season opened in Christchurch on August 12 with prices for cross bred fleece higher than expected, but there was a considerable drop of 7.5 to 10 per cent on half bred skirtings and oddments. There was a general cheapening at the Napier sale on August 13 with cross bred oddments dropping by as much as 10 per cent. The market indicator which was up 8 cents on that of June,

close to 259c per kg greasy at Christchurch, slumped by 9c to 250c at Napier.

The market was barely steady at Dunedin on 19 August and the Timaru sale on 26 August. Another fall to 244c per kg occurred at the Invercargill sale on 27 August. At the Wellington/Wanganui sale on 10 September prices for ewe and hogget fleece were steady compared with the Invercargill sale while second shear was slightly cheaper. The market indicator was 245c per kg (up 1c on the previous sale). At the Dunedin sale (16 September) price movements were variable and the market indicator rose 3c to 248c per kg. Prices were unchanged (apart from a fall of 2.5 to 5 per cent for poor and short length crutchings) at the Napier/Auckland sale of 24 September. The market indicator was 249c per kg. The Christchurch sale of September 29 saw prices fluctuate again and the market indicator rose to 254c per kg. Overall October was a relatively stable month with the market indicator standing at 248c per kg on October 1 at Christchurch. The month ended with the combined indicator for the Auckland, Wanganui and Timaru sales on October 29 moving up 1c to 249c per kg. This rose again to 250c per kg at the Napier sale on November 4 but at subsequent sales the indicator fluctuated from 244c per kg (Wanganui/Wellington on November 11)to 249c per kg at Dunedin (November 25). The lowest point of the season to date occurred at the Auckland sale on November 26 when the indicator dropped to 242c per kg.

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
1982/1983	.....	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)

			Chch 12/8	Nap. 13/8	Dun 19/8	Tim 26/8	Inv. 27/8	Well/Wang 10/9	Dun 16/9
21	F2W	Merino B Fleece							690
22	F2W	Merino B Fleece	700						672
24	F2W	Quarter Bred B Fleece							590
25	F2W	Ex Fine Half Bred B Fleece			524	548			510
26	F2W	Fine Half Bred B Fleece	505		491	494			467
27	F2W	Med. Half Bred B Fleece	480		442	446			424
28	F2W	Med. Half Bred B Fleece	450		426	422			396
29	F2W	Strong Half Bred B Fleece	427		404	398			396
30	F2W	Strong Half Bred B Fleece	407		396	392			395
31	F2W	Ex Strong Half Bred B Fleece	402		392	387			402
32	F2E	Fine XBd-B Fleece	400		402	388			398
34	F2D	Fine XBd-B Fleece	387	385N	386	378		380	383
35	F2D	Med. XBd-B Fleece	376	374	378	368	362	365	377
37	F2D	Coarse XBd-B Fleece	376	374	364	362	354	356	359
37	G3F	Coarse XBd Av.Inf.Soft Cotts			327				
35	P3G	Med. XBd Av.Inf. Pieces	335	301	326	325			313
37	F2L	Coarse XBd B 2nd Shear	340	329	332	332	320	328	337

N = Nominal Quotation.

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

			Auck/Nap 24/9	Chch 29/9	Dun 14/10	Nap 15/10	Inv 22/10	Auck 29/10	Tim 29/10
21	F2W	Merino B Fleece		685	692				696
22	F2W	Merino B Fleece		661	653				655
24	F2W	Quarter Bred B Fleece		565	576				561
25	F2W	Ex Fine Half Bred B Fleece		502	508				508
26	F2W	Fine Half Bred B Fleece		467	462				460
27	F2W	Med. Half Bred B Fleece		420	418				420
28	F2W	Med. Half Bred B Fleece		407	404				396
29	F2W	Strong Half Bred B Fleece		405	400				387
30	F2W	Strong Half Bred B Fleece		409	400				385
31	F2W	Ex Strong Half Bred B Fleece		411	398				386
32	F2E	Fine XBd-B Fleece	386	411	399	392	380	376	383
34	F2D	Fine XBd-B Fleece	382	395	389	376	370	367	371
35	F2D	Med. XBd-B Fleece	375	383	376	373	365	365	367
37	F2D	Coarse XBd-B Fleece	361	369	365	362	363	363	364
37	G3F	Coarse XBd Av.Inf.Soft Cotts		354			350		
35	P3G	Med. XBd Av.Inf. Pieces	295	337		295	310		
36	F2L	Coarse XBd B 2nd Shear	344	332		342	336	346	335

N = Nominal Quotation.

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

			Nap 4/11	Chch 5/11	Wang/Well 11/11	Inv 18/11	Nap 19/11	Dun 25/11	Auck 26/11
21	F2W	Merino B Fleece		670				686	
22	F2W	Merino B Fleece		654				660	
24	F2W	Quarter Bred B Fleece		560				550	
25	F2W	Ex Fine Half Bred B Fleece		502				504	
26	F2W	Fine Half Bred B Fleece		459				459	
27	F2W	Med. Half Bred B Fleece		416				418	
28	F2W	Med. Half Bred B Fleece		396				405	
29	F2W	Strong Half Bred B Fleece		385				395	
30	F2W	Strong Half Bred B Fleece		386				392	
31	F2W	Ex. Strong Half Bred B Fleece		383				386	
32	F2E	Fine XBd-B Fleece	383	386	368	376	386	382	377
34	F2D	Fine XBd-B Fleece	370	370	360	356	370	370	370
35	F2D	Med. XBd-B Fleece	365	364	358	355	359	360	357
37	F2D	Goarse SBd-B Fleece	358	361	356	353	354	354	351
37	G3F	Coarse SBd Av.Inf.Soft Cotts							
35	P3G	Med. XBd Av.Inf.Pieces	312		298	305	307	300	300
37	F2L	Coarse XBd-B 2nd Shear	336		329	331	328	328	327

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 1982/1983 season is 400 cents per kilogram. This is the same as for 1981/82.

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

1. The 'trigger' price for 1982/83.....400c/kg
2. A.W.A.S.P. at a sale.....450c/kg
3. Difference.....50cents
4. 'Specified Percentage' Retention

$$\frac{0.5 \times 50}{450} \times 100 \ldots\ldots\ldots\ldots\ldots 5.56\%$$

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 very active in supplementary prices and buying in during the first half of the 1982/83 season.

(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 1982/83 wool selling season. This price is based on an average of 250 cents/kilogram (greasy) on the auction floor in New Zealand.

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 1982/83 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 1981/82 Season

(i) PRODUCTION: Despite the increase in sheep numbers, total wool production in the 1981/82 season declined by 4.6% to 363.0 thousand tonnes or 17.7 thousand tonnes less than in 1980/81.

The decrease in production was due to the reduced

per head wool clip as a result of the poor feed conditions and reduced health status of the national flock. The dry autumn of 1981 in the North Island and the difficult summer/autumn feed situation in the south Island, particularly in Canterbury, resulted in lower sheep liveweights and consequently a lower lambing percentage. This, coupled with the widespread facial eczema outbreak in 1981, significantly reduced the per head wool clip for the 1981/82 season. The total production figure of 363 thousand tonnes includes greasy, scoured and slipe wool, together with wool on sheep skins, all converted to the greasy equivalent. The amount of greasy and scoured wool (on a greasy basis) decreased to 317.1 thousand tonnes compared to 333.3 thousand tonnes in the previous year.

A reature of the 1981/82 wool selling season was the decrease in greasy wool sold at auction (by 0.8 per cent) and the significant reduction (by 17.8 per cent) in private sales of greasy wool.

The volume of wool sold at auction was up by between three and five per cent on the previous season in Napier, Dunedin and Invercargill. In all other sale centres the volume was down with the largest reduction of 13.9 per cent in Wellington.

The amount of wool scoured decreased by 13.4 per cent compared with the previous season. This is the third successive year in which a decrease in scoured wool has been recorded. In the case of slipe wool and wool on sheepskins, on a greasy basis, the 3.2 per cent decrease in production for these wools was less than the overall decrease in wool production, despite the fact that the Government's supplementary minimum prices did not apply to slipe wool.

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 1981/82 is shown in the following table.

N.Z. WOOL PRODUCTION 1981/82 (Total and Per Sheep Shorn)

District	Sheep No. June 1980 (millions)	Total Prod'n (000 tonnes)	% Change	Production per head (kg)	Change (kg)
Auckland	11.7	53.9	- 7.7	4.61	-0.65
Napier	12.8	78.2	- 0.9	6.11	-0.21
Wanganui	5.7	28.6	- 3.2	5.02	-0.36
Wellington	7.3	31.3	- 12.8	4.27	-0.72
North Island	37.5	192.0	- 5.3	5.12	-0.47
Christchurch	9.2	44.3	- 10.1	4.81	-0.45
Timaru	5.6	30.1	- 3.2	5.38	+0.36
Dunedin	8.5	42.5	+ 2.2	4.95	-0.01
Invercargill	9.3	54.1	- 3.4	5.82	-0.19
South Island	32.6	171.0	- 3.9	5.25	-0.23
NEW ZEALAND	70.2	363.0	- 4.6	5.17	-0.37

The above table shows that the national per head clip declined by 0.37 kg or 6.7 per cent, compared with the 1980/81 season. A similar trend was evident in all regions although the Dunedin hinterland showed virtually the same per head clip as in 1980/81.

(ii) WOOL PRICES: The average price of greasy wool sold at auction in New Zealand during the 1981/82 season was 255.72 cents per kilogram. This represents an increase of 3.3% on the 1980/81 season's average price of 247.48 cents per kilogram.

The 1981/82 wool selling season opened at Napier on August 7 with prices slightly below the closing level of the 1980/81 season. The opening AWASP of 266.93 c/kg was 1.6% below the closing level of 271.15c/kg for the 1980/81 season.

The market firmed in August and September with the highest AWASP for the season of 274.78c/kg at Dunedin on September 17. From early October the market weakened continually to December with the lowest AWASP for the season of 254.94c/kg being reached at the Wellington/Auckland sale on December 10.

The AWASP remained around 256c/kg until early February. Then the market strengthened temporarily to a secondary seasonal peak with an AWASP of 272.17c/kg at Christchurch on March 5. From there

the market sagged and by early april the AWASP was back to 260c/kg. it remained at that level until the closing sale of the season on June 30 at Auckland with an AWASP of 258.91c/kg, 3.0 per cent below the season's opening level.

As the market weakened earlier in the season there was a steady and increasing call on the Wool Board's Minimum Prices Fund. This meant that the AWASP, which included Board supplementation, became less accurate as a market indicator. From the first sale of 1982 the Wool Board published an official Market Indicator for all greasy wool sold at auction.

The Market Indicator is calculated in the same way as the AWASP except Wool Board price supplementation up to the Board's minimum is excluded. The Market Indicator therefore more accurately reflects the 'wool market' than the AWASP.

Throughout the 1981/82 wool selling season prices at auction remained substantially below the Government's Supplementary Minimum Price of 320c/kg and Government supplementation was required after every sale.

The seasonal pattern of prices reflected the weak commodity market situation with consumer spending dampened by the economic recession and rebuilding of stocks discouraged by high interest rates and volatile exchange rates. During the season it was reported that commercial stocks were at their lowest level for more than a decade and that re-stocking, when it occurs, will prove a considerable force. The greater strength in the Japanese and European economies was offset by the slow growth in the United States and United Kingdom.

(iii) COMPETITION: A significant feature of the pattern of wool exports during 1981/82 was the increase in purchases by Japan to become the major buyer taking 13.2 per cent of all exports. The total export to Japan of 42.5 thousand tonnes (greasy equivalent) represents an increase of 53 per cent on the previous season.

Equally significant was the decline in exports to China from 36.3 thousand tonnes in the previous season to 26.7 thousand tonnes in 1981/82; a decrease of 26 per cent.

Of the other major buyers, the exports in 1981/82, in comparison with the previous year, were United Kingdom up 17 per cent; U.S.S.R. up 32 per cent; France down 7 per cent; Netherlands down 2 per cent; West Germany down 14 per cent; Italy up 4 per cent and Iran down 63 per cent.

Purchases by New Zealand mills increased by a substantial 22 per cent over the previous season as a result of the strength in retail trade demand, particularly for carpets, early in the year. Purchases by local mills in total (on a greasy equivalent basis) represented 7.7 per cent of the season's production.

(iv) INTERVENTION: For the period August through November 1981 Wool Board Purchases were generally low at around 5 per cent of auction offerings. From December, Board purchases increased substantially to be between 18 and 56 per cent of offerings in the North Island and 4 to 21 per cent in the South Island.

From early February the Board reduced its intervention level and purchases subsequently dropped to less than 10 per cent. Board purchases were negligible through late February and March but increased again from early April. The level of purchases remained at between 5 and 10 per cent of offerings for the remainder of the season.

Cumulative additions to stocks during the 1981/82 season of 77,764 bales represent a 22.6 per cent increase on the opening stocks.

(v) MINIMUM PRICES: During the 1981/82 season the Wool Board's minimum price was set at 250c/kg compared to 215c/kg in the previous season. Payments from the Wool Board's Minimum Prices Fund were made throughout the season and as the market weakened the Board's scheme operated to an increasing extent. Total Wool Board supplementation for the season amounted to $20.48 million.

During the season the minimum prices funding levy remained at 1% of the gross proceeds of wool sold for the first time.

(vi) WOOL INCOME RETENTIONS: Throughout the 1981/82 season wool prices remained below the 400c/kg set as the trigger price, 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 1981/1982".

3.3 SKINS

The skin payments as at 17 January 1983 were as follows:

		Auckland	Hawkes Bay	Rest of N.I.	South Island
		cents	cents	cents	cents
Lambs					
Wooly -	0.5kg	115.0	160.0	160.0	145.0
	0.8kg	175.0	220.0	220.0	205.0
	1.0kg	215.0	260.0	260.0	245.0
	1.2kg				
	1.5kg				
Shorn -	0.2kg	64.0	99.0	99.0	104.0
	0.5kg	100.0	135.0	135.0	140.0
	0.8kg	137.0	172.0	172.0	177.0
	1.5kg				
Sheep -	0.5kg	117.0	173.0	173.0	159.0
	1.0kg	246.0	299.0	299.0	268.0
	1.5kg	376.0	426.0	426.0	383.0

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 1983 harvest are as follows:

		$ per tonne
Aotea, Kopara and equivalent		204.00
Hilgendorf		234.60
Arawa		193.80
Karamu	N.I. plus Marlborough	188.70
	S.I. excluding "	173.40

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 1983 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 1983). 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 15.0% of the basic Aotea price; it amounts to $30.60 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 $10.20 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 $15.30, while in the South Island, excluding Marlborough, the discount is 15%, or $30.60.

3.4.2 Barley

The Canterbury Malting Company contract price for No. 1 Grade Malting barley for the 1983 harvest is $165 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.).

Where the malting company requires the contracted grower to store the barley, a storage increment will be paid at the rate of $5.50 per tonne for delivery during the month of May and a further $2.75 per tonne per month thereafter.

Where the company requires the barley to be stored, the contract price will be paid following delivery and grading.

Contract price for seed barley in 1982/83 is about $185 per tonne for Basic and $180 per tonne for first 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 $150 per tonne delivered Christchurch.

3.4.3 Oats

The price offered for good quality feed grade oats this season is between $140 and $180/tonne (bulk). No premium will be paid for Taiko oats (black oats).

3.4.4 Peas

The prices offered for field dressed peas in bulk grown under contract for the 1983 harvest are:

	Contract Price
(i) Field peas - (per tonne)	
Huka	$260
Blue (Marrowfat) Varies depending on the degree of "bleaching"	
0-5% bleached	$315
6-19% bleached	$285
11% or over bleached	$260
(Rondo)	$260
Maple (Whero)	$280
(ii) Garden peas -	
Greenfast, Victory Freezer, D.S.P., New Victory, Patea, Pugets, Puki, Pania	
Small Sieve and Onward	$300 per tonne
Aldermans	$350 per tonne
Culverdon Wonder	$400 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 $300.00 per tonne.

3.4.6 Sprouting Brocolli

Sprouting brocolli 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 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.

3.4.10 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 $200 per tonne, but may go as high as $325 per tonne. Bitter blue lupins would fetch between $400 and $450 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 end of January 1983, many prices had not been finalised

and those shown below are estimated values only, for first generation certified seed.

Grass Seed:	$
Ruanui Ryegrass	.80- .83
Nui Ryegrass	.87- .90
Ariki Ryegrass	1.30
Manawa Ryegrass	1.40
Paroa Italian Ryegrass	1.30-1.40
Tama Ryegrass	1.55-1.80
Moata Ryegrass	2.00-2.20
Apanui Cocksfoot	2.50
Crested Dogstail	1.40-1.50
Matua Prairie Grass	1.50
Browntop	2.00-2.20
Clover Seed:	
Huia White	2.90
Turoa Montgomery Red	2.25
Hamua Broad Red	2.00-2.30
Lucerne:	
Wairau	4.00-5.00
Rere	4.50
Saramac	3.50
Kale:	
Medium Stemmed	3.50
Giant	2.60
Turnips:	1.00

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 North Island c/kg	South Island c/kg	Supplement c/kg
Steers:					
P1	160.5-220.0	137.0	131.5	124.0	11.0
	220.5-245.0	147.0	141.5	134.0	11.0
	245.5-270.0	153.0	147.5	140.0	11.0
	270.5-295.0	159.0	153.5	146.0	11.0
	295.5-320.0	161.0	155.5	148.0	11.0
	320.5-345.0	167.0	161.5	154.0	11.0
	345.5 and over	170.0	164.5	157.0	11.0
G	160.5-220.0	128.0	122.5	115.0	11.0
	220.5-245.0	138.0	132.5	125.0	11.0
	245.5-270.0	144.0	138.5	131.0	11.0
	270.5-295.0	150.0	144.5	137.0	11.0
	295.5-320.0	152.0	146.5	139.0	11.0
	320.5-345.0	158.0	152.5	145.0	11.0
	345.5 and over	161.0	155.5	148.0	11.0
L1	160.5-220.0	143.0	137.5	130.0	11.0
	220.5-245.0	147.0	141.5	134.0	11.0
	245.5-270.0	153.0	147.5	140.0	11.0
	270.5-295.0	159.0	153.5	146.0	11.0
	295.5 and over	166.0	160.5	153.0	11.0
L2	160.5-220.0	143.0	134.0	120.0	23.5
	220.5-245.0	147.0	138.0	124.0	23.5
	245.5-270.5	151.0	142.0	128.0	23.5
	270.5-295.0	157.0	148.0	134.0	23.5
	295.5 and over	164.0	155.0	141.0	23.5
T	160.5-270.0	135.0	129.0	122.0	11.0
	270.5-295.0	141.0	135.0	128.0	11.0
	295.5 and over	145.0	139.0	132.0	11.0
E	160.5-270.0	125.0	119.5	112.0	11.0
	70.5-295.0	131.0	125.5	118.0	11.0
	295.5 and over	135.0	129.5	122.0	11.0
M	145.0 and under	114.0	105.0	91.0	23.5
	145.5-170.0	135.0	126.0	112.0	23.5
	170.5-195.0	139.0	130.0	116.0	23.5
	195.5-220.0	144.0	135.0	121.0	23.5
	220.5 and over	148.0	139.0	125.0	23.5

Heifers:					
P1	160.5-195.0	130.0	124.5	117.0	11.0
	195.5-220.0	137.0	131.5	124.0	11.0
	220.5-245.0	147.0	141.5	134.0	11.0
	245.5-270.0	153.0	147.5	140.0	11.0
	270.5 and over	160.0	154.5	147.0	11.0
G	160.5-195.0	121.0	115.5	108.0	11.0
	195.5-220.0	128.0	122.5	115.0	11.0
	220.5-245.0	138.0	132.5	125.0	11.0
	245.5-270.0	144.0	138.5	131.0	11.0
	270.5 and over	151.0	145.5	138.0	11.0
L1	160.5-195.0	138.0	132.5	125.0	11.0
	195.5-220.0	143.0	137.5	130.0	11.0
	220.5-245.0	147.0	141.5	134.0	11.0
	245.5-270.0	153.0	147.5	140.0	11.0
	270.5 and over	159.0	153.5	146.0	11.0
L2	160.5-195.0	138.0	129.0	115.0	23.5
	195.5-220.0	143.0	134.0	120.0	23.5
	220.5-245.0	146.0	137.0	123.0	23.5
	245.5-270.0	151.0	142.0	128.0	23.5
	270.5 and over	157.0	148.0	134.0	23.5
T	160.5-270.0	135.0	129.5	122.0	11.0
	270.5-295.0	141.0	135.5	128.0	11.0
	295.5 and over	145.0	139.5	132.0	11.0
E	160.5-270.0	125.0	119.5	112.0	11.0
	270.5-295.0	131.0	125.5	118.0	11.0
	295.5 and over	135.0	129.5	122.0	11.0
M	145.0 and under	114.0	105.0	91.0	23.5
	145.5-170.0	135.0	126.0	112.0	23.5
	170.5-195.0	139.0	130.0	116.0	23.5
	195.5-220.0	144.0	135.0	121.0	23.5
	220.5 and over	148.0	139.0	125.0	23.5
Cows:					
P1	160.5-195.0	125.0	119.5	112.0	11.0
	195.5-220.0	133.0	127.5	120.0	11.0
	220.5-245.0	136.0	130.5	123.0	11.0
	245.5-270.0	143.0	137.5	130.0	11.0
	270.5 and over	149.0	143.5	136.0	11.0
G	160.5-195.0	120.0	114.5	107.0	11.0
	195.5-220.0	128.0	122.5	115.0	11.0
	220.5-245.0	131.0	125.5	118.0	11.0
	245.5-270.0	138.0	132.5	125.0	11.0
	270.5 and over	144.0	138.5	131.0	11.0

T	160.5-270.0	128.0	122.5	115.0	11.0
	270.5-295.0	135.0	129.5	122.0	11.0
	295.5 and over	139.0	133.5	126.0	11.0
E	160.5-270.0	120.0	114.5	107.0	11.0
	270.5-295.0	128.0	122.5	115.0	11.0
	295.5 and over	131.0	125.5	118.0	11.0
M	145.0 and under	114.0	105.0	91.0	23.5
	145.5-170.0	135.0	126.0	112.0	23.5
	170.5-195.0	139.0	130.0	116.0	23.5
	195.5-220.0	144.0	135.0	121.0	23.5
	220.5 and over	148.0	139.0	125.0	23.5
Bulls:					
M	195.0 and under	128.0	122.5	115.0	15.0
	195.5-220.0	145.0	139.5	132.0	15.0
	220.5-245.0	153.0	147.5	140.0	15.0
	245.5-270.0	157.0	151.5	144.0	15.0
	270.5-295.0	161.0	155.5	148.0	15.0
	295.5-320.0	164.0	158.5	151.0	15.0
	320.5-345.0	169.0	163.5	156.0	15.0
	345.5 and over	175.0	169.5	162.0	15.0
Veal:					
P	All weights	38.0	38.0	38.0	
L	All weights	28.0	28.0	28.0	
M	All weights	28.0	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, 18th, Wednesday 19th and Tuesday 25th January 1983.

Prime Steers:
Heavy - to $624.
Medium - $375 to $450.
Light - $260 to $350.

Prime Heifers:
Heavy - to $384.
Medium - $248 to $310.
Light - $200 to $240.

Prime Cows:
Heavy - to $450.
Medium - $260 to $296.

Light - $190 to $230.

Vealers:
Good quality veal sold well but there was little demand for poor stock. Prices for the better animals ranged from $200 to $220 with one heifer making $276. Medium veal sold from $175 to $195. Bobby calves sold from $5 (Friesian bulls) to $20 (Hereford cross).

Store Cattle:
Cattle in a forward condition were in strong demand. Well grown stock sold well but smaller animals, particularly heifers were harder to sell. 18 month steers sold for between $222 and $252, 15 month steers from $232 to $236 and 2 year heifers from $180 to $230. One lot of 20 second and fourth calvers with calves at foot were sold at $320.

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 puchase 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 adjustement for the year is made in August,

although some companies make interim payments.

The whole milk price as set by the Prices Authority is 318 cents/kilogram milkfat for 1982/83, but there is also a Government guaranteed minimum price of 325 cents/kilogram milkfat for the season, and will be no less than this in 1983/84. This guarantee scheme means that there will be either a retrospective adjustment during the season, or an end-of-season payment, of at least 7.00 cent/kilogram milkfat.

The Tai Tapu Central Co-op Dairy Company Ltd for 1982/83 payout is as follows:
The basic values for the 1982/83 season remain at 224c kg milkfat and 94c kg SNF, totalling 318c/kg milkfat in wholemilk at farm gate.

The following advance payments for cream will operate effective June 1982.

Finest	193 cents per kg
First Grade	180 cents per kg
Second Grade	148 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	274 cents per kg
First Grade	254 cents per kg
Second Grade	210 cents per kg

The penalty for antibiotics will be 64c per kg and penalty for added water 30 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 1981/82 production year and is reviewed annually. As at January 1983 the new supplement for 1982/83 had not been set. This is normally paid over the winter months only (March to August). The national average advance town milk price, for the year ending 31st August 1983 is 21.9165 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 1982/83

		Quota Milk Cents per litre			Surplus Milk Cents per litre		
Month	Full Price Paid for: (% of quota)	Finest	First	Second	Finest	First	Second
Sept. 82	115	21.869	21.293	19.907	12.5	12.104	10.538
October	105	17.707	17.311	15.745	12.5	12.104	10.538
November	105	17.707	17.311	15.745	12.5	12.104	10.538
December	105	17.707	17.311	15.745	12.5	12.104	10.538
Jan. 83	105	17.707	17.311	15.745	12.5	12.104	10.538
February	115	17.707	17.311	15.745	12.5	12.104	10.538
March	115	21.869	21.473	19.907	12.5	12.104	10.538
April	115	21.869	21.473	19.907	12.5	12.104	10.538
May	120	28.112	27.716	26.150	12.5	12.104	10.538
June	125	28.112	27.716	26.150	12.5	12.104	10.538
July	125	28.112	27.716	26.150	12.5	12.104	10.538
August	120	28.112	27.716	26.150	12.5	12.104	10.538

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

Total Milk Solids (weight/volume) - frequency as above.

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

Milkfat (weight/volume) - 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 has 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

"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 1981/82 season are shown below:

CANTERBURY DAIRY FARMERS LIMITED
Milk Prices 1981/82

Month	Full Price Paid for: (% of quota)	Quota Milk Cents per litre Finest	First	Second	Surplus Milk Cents per litre 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

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 1982/83 season of 325 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 1982/83.

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 325 cents/kg, if the combined basic price plus 50% of the 1982/83 individual trading surplus of milkfat and S.N.F. are less than 325 cents/kg. Regardless of the actual percentage payout of the Board of any trading surplus for 1982/83 the level of any supplement paid by the Government will be based on an assumed payout of 50%. The 325 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 325 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 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	1	$475	$440	$320
	2	$350	$390	-
	3	$300	$350	$320
	4	$260	$280	-
March	1	$500	-	$320
	2	$360	-	-
	3	$320	-	$320
	4	$275	-	-
May	1	$490	$450	$380
	2	$350	$420	-
	3	$350	$400	$380
	4	$290	$360	-
July	1	$500	$460	$420
	2	$400	$410	-
	3	$300	$440	$420
	4	-	$410	-

September	1	$600	$550	$425
	2	$550	$500	-
	3	$400	$480	$425
	4	$250	$450	-
November	1	$500	$500	$350
	2	$450	$440	-
	3	$400	$370	$350
	4	$250	$300	-

** 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 1982.

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 Pork 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 3 January 1983

Note: Weight ranges and payments based on "hot" scale weight, head and feet on.

Hot Weights

27.5 - 45 kg	PRIME	225 cents per kilogram
	CHOICE	195 cents per kilogram
	STANDARD	100 cents per kilogram
	MUTILATED	100 cents per kilogram
45.5 kg - 72 kg	PRIME	205 cents per kilogram
	CHOICE	190 cents per kilogram
	STANDARD	110 cents per kilogram
	MUTILATED	110 cents per kilogram
72.5 kg - 83 kg	PRIME	180 cents per kilogram
	STANDARD	100 cents per kilogram
	MUTILATED	100 cents per kilogram

Premiums

27.5 - 45 kg	PRIME	10 mm and less	10 cents per kg
45.5 - 54 kg	PRIME	12 mm and less	10 cents per kg
54.5 - 63 kg	PRIME	14 mm and less	10 cents per kg
63.5 - 72 kg	PRIME	16 mm and less	10 cents per kg

Manufacturing

All weights 100 cents per kilogram

These prices are subject to change at short notice.

Deductions:

Levies -

Pork Industry Council Administration	1.05)	
Pork Marketing Board Stabilisation Levy	1.20)	$2.26/pig
Federated Farmers Levy	.01)	

3.8.2 Live Pig Sales

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 saleyards.

The following prices were obtained at the Addington sale held on 19 January 1983:

Light porkers	$80 to $90
Medium/Heavy porkers	$90 to $100
Light baconers	$105 to $115
Heavy baconers	to $131
Light choppers	$130 to $150
Heavy choppers	$170 to $195

There was a small yarding of store pigs, and values were the lowest for at least 12 months. Poorly presented pigs were hard to sell. Values were $5 to $6 lower than the previous week. No breeding stock was sold. At the sale of 25 January 1983 a young sow and litter of 10 sold for $272.

Small weaners	$16 to $21
Good weaners	$25 to $35
Slips and small stores	$38 to $48
Large stores	to $60

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 Chevon Production

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 $1.00/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 Goats Milk Production

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 60c per litre. The 500 ml sachets through the retail shop are priced between 40c and 60c.

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 Mohair

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	$8/kg
Purebred Buck	$4/kg
Purebred kid	$10/kg
Crossbred Doe	$6/kg
1st & 2nd Cross	$8/kg

Around 10,000 kg of Mohair has been pooled from the 1982 season.

Mohair is also sold privately at auctions in Australia and Bradford (U.K.). 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.

New and lucrative markets for Angora cross bred fibre have been established in Japan.

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 (Registered)	$1,000-$2,500

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 24 January 1983 were as follows:

Super A Grade	$120.00 to $130.00/kg
A Grade	$105.00/kg
B Grade	$ 70.00 to $ 75.00/kg
C Grade	$ 20.00 to $ 30.00/kg
D Grade	$ 8.00 to $ 10.00/kg

No pool system of sale is available for the 1982/83 season.

3.10.3 Venison

Prices paid for venison vary widely but one quoted price is $2.10 for stags and $2.00 for hinds (inclusive of all by-products).

The following schedule is for farmed red deer killed at the Hokitika or Mossburn deer slaughtering premises (Stag Corporation Ltd).

AL grade, under 65 kg and under 3 years of age, good muscle conformation, no defects, $4 per kg.

AH grade, over 65 kg or over 3 years of age, good muscle conformation, no defects, $3.50 per kg.

AD grade, over-fat all ages, poor muscle conformation, defects caused by disease, bruising or damaging to any primal cut, $2.50 per kg.

AM grade, manufacturing only, meat not suitable for export as primal cuts, $1.50 per kg.

Fallow deer are similarly graded but have a weight criteria of 25 kg and the rates are 15 per cent below those of red deer.

Prices include all by-products and are based on an on-hook cold carcase weight.

Canterbury Venison (N.Z.) Ltd announced the following schedule for deer killed at its Ashburton deer slaughtering plant.

GRADE	PRICE PAID PER KG
AL	$4.50
AH	$4.25

AD	$3.50
AM	$2.00

A transport subsidy of between $4 and $7 may also be paid to suppliers north of the Hurunui River, south of the Waitaki River and west of Arthur's Pass and the Lewis pass.

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	$3.00 (depending on weight and quality)
Sinews	Wet - 50c per set
Eye Teeth	Stags - $6.00 to $10.00 per pair
	Hinds - $4.00 to $8.00 per pair
Hard Antler	$6.00 per kg
Pizzles	$4.00

3.10.5 Stock Prices

Deer values estimated at January 1983.

Hinds:	C.F.A.	$300-$500
	Mixed age	$900-$1,100
	Yearling	$1,200 (possibly up to $1,500 plus after roar)
	Weaners	$800-$900
Stags:	Breeding	$2,000-$15,000
	Mixed age	$200-$300 (increase towards velveting)
	Spiker	$200
	Weaners	$150

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 February 1983, was approximately 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 1982 were as follows:

	Apples per kg	Apricots per half case (20 lb)	Avocados per tray (14 in a tray)
Jan. 1982	37c-$1.55	$2.00-$6.00	$20.00-$32.00

Feb.	41c-55c	$1.50-$8.00	$30.00
Mar.	48c.-87c	$6.00-$7.50	$30.00-$35.00
April	48c-66c	-	$30.00
May	48c-88c	-	-
June	50c-75c	-	$35.00-$42.00
July	50c-80c	-	-
Aug.	50c-85c	-	$22.50-$31.20
Sept.	50c-75c	-	$10.00-$13.00
Oct.	81c-$1.46	-	$10.00-$13.00
Nov.	90c-$1.00	-	$14.00-$20.00
Dec. 1982	-	$19.40	$20.00-$38.00
Jan. 1983	$1.70-$3.00	$17.00-$21.00	$20.00-$45.00

	Boysenberries (per punnet)	Cherries (per kg)	Grapefruit (per 18 kg)
Jan. 1982	70c-80c	-	$18.00-$22.00
Feb.	90c-$1.00	-	-
Mar.	-	-	-
April	-	-	$12.50-$16.00
May	-	-	$12.00-$16.00
June	-	-	$10.50-$12.50
July	-	-	$10.00-$16.00
Aug.	-	-	$10.00-$13.00
Sept.	-	-	$ 9.00-$15.00
Oct.	-	-	$ 7.00-$13.00
Nov.	-	$2.00-$3.50	$11.00-$18.00
Dec. 1982	85c-$1.20	$2.00-$5.00	$14.00-$15.00
Jan. 1983	75c-$1.00	$5.00-$8.00	$15.00-$28.00

	Grapes (per tray 2 kg)	Kiwifruit (per tray 20 in a tray)	Lemons (kg)
Jan. 1982	-	-	-
Feb.	$ 8.00-$12.00	-	60c-80c
Mar.	$ 3.00-$ 5.00	-	-
April	$10.00-$12.50	$ 4.00-$ 7.00	60c-80c
May	-	$ 7.00-$ 9.00	-
June	-	$ 5.50-$15.00	40c-60c
July	-	$ 6.50-$11.00	80c-$1.00
Aug.	-	$10.00-$12.00	60c-80c
Sept.	-	$ 7.00-$ 9.50	50c-70c
Oct.	-	$ 7.50-$18.00	60c-80c
Nov.	-	$ 8.00-$10.00	60c-90c
Dec. 1982	$18.00-$23.00	$ 9.00-$12.00	$1.80-$2.50
Jan. 1983	$17.00-$22.00	$ 9.00-$12.00	80c-$1.00

	Mandarins (per kg)	Nectarines (per tray (30-48 in a tray)	Oranges (per kg)
Jan. 1982	-	$ 2.50-$ 8.10	-
Feb.	-	$ 2.80-$ 7.50	-
Mar.	-	$ 4.50-$ 6.50	-
April	-	$ -	-
May	$1.00-$1.20	-	-
June	90c-$1.30	-	-
July	$1.50-$2.30	-	$1.10-$1.40
Aug.	70c-$1.10	-	$1.10-$1.40
Sept.	70c-$1.50	-	$1.00-$1.30
Oct.	70c-$1.50	-	$1.00-$1.20
Nov.	70c-90c.	-	90c-$1.10
Dec. 1982	$1.50-$2.00	$14.00-$19.00	$1.10-$1.50
Jan. 1983	-	$15.00-$19.00	$1.10-$1.50

	Peaches (per tray 10-24 in a tray)	Plums (per half case) (20 lb)	Strawberries (per punnet)
Jan. 1982	$2.00-$4.60	$4.00-$5.00	$1.00-$1.20
Feb.	$2.20-$5.20	$2.50-$5.00	$1.10-$1.50
Mar.	$2.50-$6.00	$5.00-$7.00	70c-$1.20
April	$4.00	-	90c-$1.10
May	-	-	-
June	-	-	-
July	-	-	-
Aug.	-	-	-
Sept.	-	-	-
Oct.	-	-	-
Nov.	-	$6.00-$9.00	60c-$1.00
Dec. 1982	$5.00-$9.00	$8.00-$12.00	$1.30-$2.60
Jan. 1983	$3.50-$6.00	$3.00-$12.00	$1.00-$1.70

	Tamarillos (per 8 kg)	Tangelos (per kg)
Jan. 1982	-	86c-$1.10
Feb.	-	-
Mar.	-	-
April	$13.00-$15.00	-
May	$10.00-$14.00	-
June	$ 7.00-$10.00	-
July	$ 7.00-$ 9.00	-
Aug.	$11.00-$15.00	$1.20-$1.50
Sept.	$11.00-$15.00	80c-$1.20
Octo.	$11.00-$16.00	80c-$1.20
Nov.	$ 5.60-$12.00	80c-$1.00
Dec. 1982	-	$1.10-$1.50
Jan. 1983	-	$1.20-$1.80

3.13 VEGETABLE PRODUCTION

The Prices paid to growers by Christchurch Markets in 1982 were as follows:

	Asparagus (bunch 250 gm)	Beans (per kg)	Beetroot (per bunch 3 per bunch)
Jan. 1982	-	70c-$1.30	10c-20c
Feb.	-	80c-$1.20	15c-20c
Mar.	-	70c-$1.10	15c-20c
April	-	$1.50-$2.20	15c-20c
May	-	$4.00	15c-20c
June	-	-	-
July	-	-	25c-35c
Aug.	85c-$1.05	-	-
Sept.	60c-75c	-	20c-25c
Oct.	60c-85c	-	-
Nov.	$1.30	-	25c-40c
Dec. 1982	$1.30	$3.00-$4.50	25c-40c
Jan. 1983	-	80c-$1.20	20c-45c

	Broccoli (per kg)	Brussel Sprouts (per kg)	Cabbage (per 8s)
Jan. 1982	80c-$1.20	$1.80-$2.20	$2.50-$3.80
Feb.	80c-$1.20	$1.80	$3.00-$5.50
Mar.	60c-80c	$1.00-$1.40	$3.50-$5.00
April	$2.50-$3.50	70c-$1.30	$2.50-$4.00
May	60c-90c	50c-$1.00	$1.60-$2.30
June	$1.50-$2.00	30c-75c	$2.50-$4.00
July	$3.50-$4.20	45c-80c	$2.50-$4.20
Aug.	60c-$1.50	50c-75c	$2.00-$4.50
Sept.	90c-$1.10	35c-80c	$1.50-$4.00
Oct.	$4.50-$5.50	$1.00-$1.80	$3.50-$7.50
Nov.	$3.00-$4.50		$3.50-$6.00
Dec. 1982	$2.00-$3.50	-	$3.50-$5.00
Jan. 1983	$1.50-$2.60	-	$2.00-$4.50

	Capsicum (per kg)	Carrots (per 20 kg)	Cauliflower (per 8s)
Jan. 1982	$1.00-$1.40	$6.00-$7.50	$3.80-$8.50
Feb.	40c-$2.00	$4.50-$12.50	$2.20-$5.20
Mar.	60c-80c	$5.50-$7.80	$3.00-$5.80
April	$1.00-$2.50	$4.00-$6.00	$3.40-$6.20
May	$2.00-$3.50	$1.50-$3.50	$1.60-$4.80
June	$3.00-$5.00	$2.50-$5.00	$2.00-$5.00
July	$8.00-$14.00	$2.00-$5.50	$2.50-$8.00
Aug.	-	$3.60-$5.80	$1.20-$7.00
Sept.	$3.50-$4.80	$9.00-$11.00	$2.50-$5.50

Oct.	$5.00-$8.00	$8.00-$11.00	$2.50-$6.00
Nov.	$7.50-$14.00	$7.50-$12.00	$4.00-$6.00
Dec. 1982	$2.00-$3.00	$10.00-$37.00	$4.00-$13.00
Jan. 1983	$2.00-$3.00	$2.50-$4.00	$7.00-$13.00

	Celery (12 bundles in a case)	Courgettes (per kg)	Cucumbers (10 in a case)
Jan. 1982	$6.00-$9.00	40c-60c	$2.50-$4.00
Feb.	$5.00-$8.00	70c-90c	$1.50-$3.20
Mar.	$4.00-$7.50	60c-$1.20	$1.50-$3.50
April	$3.50-$6.00	$8.50	$1.50-$3.50
May	$3.00-$6.00	$5.00-$6.00	$4.00-$9.00
June	$4.00-$6.00	$5.50-$7.00	$4.00-$7.00
July	$3.60-$7.00	$6.00-$6.50	$6.00-$10.00
Aug.	$8.00-$10.00	-	$6.00-$10.80
Sept.	$6.00-$8.50	-	$7.20-$12.60
Oct.	$7.00-$9.00	-	$10.40-$15.30
Nov.	$3.00-$20.00	$4.00-$5.00	$3.00-$6.00
Dec. 1982	$7.00-$20.00	$2.00-$3.50	$10.00-$12.25
Jan. 1983	$4.00-$11.00	$2.00-$3.50	$3.00-$6.00

	Garlic (per 100g)	Kumera (per 15 kg)	Leeks (per 10s)
Jan. 1982	50c-60c	-	-
Feb.	40c-50c	$35.00-$42.60	-
Mar.	40c-50c	-	$2.40-$3.00
April	50c-60c	-	$2.60-$4.00
May	70c-80c	$13.00-$15.00	$1.20-$7.00
June	70c-80c	$12.00-$15.00	$3.00-$7.50
July	70c-90c	$13.00-$18.00	$1.20-$2.00
Aug.	50c-70c	$18.00-$26.00	$1.00-$1.50
Sept.	50c-70c	$10.00-$23.00	$1.50-$2.00
Oct.	12c-30c	$10.00-$23.00	$2.00-$5.50
Nov.	60c-70c	$21.00-$25.00	$4.00
Dec. 1982	60c	$15.00-$36.00	-
Jan. 1983	20c-50c	$40.00-$60.00	-

	Lettuce (per 8s)	Marrows (each)	Mushrooms (per 2.25 kg)
Jan. 1982	$1.00-$2.50	10c-15c	$9.00-$10.50
Feb.	$3.50-$7.00	10c-20c	$7.50-$ 9.50
Mar.	$3.50-$6.00	15c-20c	$6.00-$ 8.00
April	$2.50-$3.50	15c-20c	$9.50-$12.50
May	$1.20-$4.00	-	$9.00-$12.00
June	$1.80-$3.30	-	$6.50-$ 7.50
July	$3.00-$6.00	-	$8.00-$12.50
Aug.	$3.50-$6.00	-	$7.50-$12.00
Sept.	$3.00-$7.00	-	$7.00-$ 9.00

Oct.	$2.00-$8.00	-	$7.00-$10.50
Nov.	$2.00-$3.80	-	$7.00-$ 9.00
Dec. 1982	$3.00	65c-90c	$8.00-$11.50
Jan. 1983	80c-$2.00	20c-30c	$6.50-$ 9.00

	Onions (per 20 kg)	Parsley (per kg)	Parsnip (case - 6 kg)
Jan. 1982	$5.50-$7.00	$2.40-$4.00	$6.30
Feb.	$4.00-$7.00	$2.40-$3.00	-
Mar.	$4.00-$6.00	$1.20-$3.00	$3.00-$4.00
April	$4.00-$6.00	$1.80-$4.60	$2.50-$6.00
May	$2.50-$4.00	80c-$3.20	$2.50-$3.00
June	$2.50-$4.00	$1.20-$4.00	$2.00-$2.50
July	$2.00-$4.00	$3.20-$6.00	$2.20-$3.00
Aug.	$2.00-$4.00	$6.00-$10.00	$3.00-$3.80
Sept.	$3.00-$5.50	$8.00-$12.00	$2.80-$4.00
Oct.	$2.00-$3.50	$3.20-$6.00	$4.00-$5.60
Nov.	$1.00-$2.50	$3.00-$5.00	-
Dec. 1982	$1.00-$2.50	$6.00	-
Jan. 1983	$1.50-$6.00	$4.00-$6.00	$6.00-$9.50

	Peas (per kg)	Potatoes (per 10 kg)	Pumpkins (per 20 kg)
Jan. 1982	-	$3.50-$5.00	$3.50-$7.00
Feb.	-	$3.50-$5.00	$4.00-$6.00
Mar.	-	$3.00-$4.00	$3.50-$7.00
April	-	$3.00-$5.00	$3.00-$5.50
May	-	$1.80-$5.50	$2.50-$5.00
June	-	$2.50-$4.00	$3.00-$6.50
July	-	$2.80-$3.80	$3.50-$6.00
Aug.	-	$3.00-$5.50	$7.00-$9.00
Sept.	-	$4.00-$5.00	$9.00-$15.00
Oct.	-	$14.00-$20.00 new	$3.00-$18.00
Nov.	$3.00-$4.00	$2.50-$4.00	$15.00-$40.00
Dec. 1982	$2.00-$2.50	$2.30	$20.00-$25.00
Jan. 1983	-	$2.00-$2.50	$40.00-$50.00

	Radish (per bunch 6 per bunch)	Rhubarb (per bunch 6 per bunch)	Silverbeet (per case 5 kg)
Jan. 1982	20c-35c	10c-12c	$2.50-$4.50
Feb.	15c-30c	-	$3.50-$5.00
March	8c-15c	-	$1.50-$4.50
April	15c-20c	-	$4.70-$6.80
May	25c-30c	-	$1.50-$5.50
June	20c-35c	-	$2.00-$4.50
July	35c-45c	40c-50c	$3.70-$6.00
Aug.	25c-40c	80c-$1.00	$5.00-$9.00

Sept.	25c-40c	40c-50c	$3.00-$5.00
Oct.	35c-50c	35c-45c	$3.00-$6.00
Nov.	10c-20c	40c-50c	$4.00-$6.00
Dec. 1982	35c	25c	$3.50-$8.00
Jan. 1983	20c-60c	10c-20c	$2.50-$12.00

	Spinach (per bunch 6 per bunch)	Spring Onions (per bunch 6 per bunch)	Swedes (per 20 kg)
Jan. 1982	70c-90c	15c-35c	$2.50-$5.00
Feb.	-	40c-45c	-
Mar.	40c-45c	15c-35c	$2.50-$6.50
April	45c-55c	15c-25c	$3.50-$4.50
May	10c-35c	35c-50c	$4.00-$4.70
June	30c-55c	25c-50c	$2.00-$3.50
July	80c-$1.00	35c-45c	$3.00-$3.50
Aug.	45c-60c	35c-50c	$3.00-$4.00
Sept.	25c-35c	25c-40c	$3.50-$5.00
Oct.	40c-55c	25c-40c	$3.50-$4.50
Nov.	20c-30c	25c-40c	-
Dec. 1982	45c-60c	35c-50c	-
Jan. 1983	75c-$1.00	35c-50c	$8.00-$10.00

	Sweetcorn (per cob)	Tomatoes (per 4.5 kg)	Yams (per 3 kg)
Jan. 1982	15c-20c	$2.50-$5.00	-
Feb.	15c-18c	$1.50-$5.20	-
Mar.	10c-15c	$2.00-$5.50	-
April	10c-15c	$5.00-$15.00	-
May	-	$3.50-$8.50	$2.00-$3.00
June	-	$4.50-$12.00	$2.40-$3.00
July	-	$4.50-$14.00	$7.50-$10.00
Aug.	-	$5.00-$17.00	$1.00-$1.30
Sept.	-	$12.00-$26.00	$6.00-$9.00
Oct.	-	$8.00-$26.80	-
Nov.	-	$3.50-$7.50	-
Dec. 1982	30c-40c	$2.50-$5.00	-
Jan. 1983	30c-45c	$3.50-$9.00	-

SECTION 4

FARM EXPENDITURE

4. FARM EXPENDITURE

4.1 WAGES

4.1.1 Farms and Stations (Dairy Farms) (as from 10.8.81)

(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 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

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 (8th June 1982)

(i) Shearers Rates (minimum with rations)

Machine shearing base rate (sheep)	$53.13/100
Machine shearing base rate (lambs)	$47.82/100
Machine shearing with cover comb	$59.35/100
Blade shearers	$79.30/100

All sheep with metal ear tags, other than stud sheep, are to be shorn at a premium of $2.43 per 100.

The shearing rate for stud sheep, stud lambs and hogget rams is 1.5 times the base rate, i.e. $79.69 per 100.

The shearing rate for other rams is double base rate, i.e. $106.26 per 100.

Double-fleeced sheep and rams castrated after maturity are shorn at 1.5 times the base rate.

An allowance of $4.54 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 25.8 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 $1.03 cents per 100 sheep shorn.

(ii) Crutching Rates (minimum)

	per 100
Full belly, full crutch, flank and eye wig	$26.57
Full belly, full crutch, eye wig	$23.90
Full belly, tail crutch, eye wig	$19.48
Full belly, full crutch	$22.49
Full belly, tail crutch	$18.06
Half belly, full crutch, flank and eye wig	$23.90
Half belly, full crutch, eye wig	$21.25
Half belly, full crutch	$19.82

Full crutch, eye wig - sheep	$17.71
- lamb	$15.94
Full crutch - sheep	$16.29
- lamb	$14.66
Tail crutch, eye wig - sheep	$14.68
- lamb	$13.22
Tail crutch - sheep	$13.27
- lamb	$11.95
Eye wig only	$13.27

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 $5.46 per hour. Shedhands with a three weeks or more experience, shall be paid not less than $6.26 per hour. Shedhands holding a wool handling certificate shall have their hourly rate increased by 28 cents. Daggers shall be paid not less than $6.62 per hour, or $5.63 per 100.

Pressers shall be paid not less than $6.62 per hour.

For cooking for 18 persons and under, cooks shall be paid not less than $57.17 per day. For over 18 persons a cook's assistant shall be engaged and shall be paid not less than $5.59 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 (as from 11 November 1981)

(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 8 March 1982)

(i) Permanent Workers
Minimum rates of wages:

	Per week
Managers	$202.62
Foremen (persons responsible to the workers for the day to day running of establishment)	$190.23
Adult workers 19 years and over	$173.95
Junior workers 18 years and under 19	$156.56
17 years and under 18	$139.16
16 years and under 17	$121.77
Under 16 years	$104.37

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 7.0 cents per hour. After 2 years this is increased to 14.0 cents per hour. After three years this is increased to 21.0 cents per hour.

(ii) Casual Workers

Minimum rates of wages per hour
Grade 2 rates are payable to inexperienced workers. After 500 accumulated hours or on completion of a harvest season of four months, the worker shall be automatically regraded to Grade 1. However, nothing in this definition will prevent a worker from being regraded prior to this time.
Grade 1 rates are paid to experienced workers who have fulfilled the conditions of Grade 2.

	Grade 1	Grade 2
Adult workers 19 years and over	$4.13	$4.01
Junior workers 18 years & under 19	$3.72	$3.61
17 years & under 18	$3.30	$3.21
16 years & under 17	$2.89	$2.81
Under 16 years	$2.48	$2.41

(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.

Service Allowance.
Adult casual workers who complete consecutive seasons as required with the same employer shall have their hours of service accumulated and when this equates to one year's service (1900 hours) the worker shall be paid 7 cents per hour extra; two years' hours of service the worker shall be paid 14 cents per hour extra; three years' hours of service the worker shall be paid 21 cents per hour extra. The above allowances shall not be cumulative but shall count for the purpose of calculating overtime.

4.1.7 **Nurserymen and Gardeners**
(as from 26 April 1982)

Minimum rates of wages.

		Per Week
(i)	Nursery technicians	$235.00
(ii)	Grade 1 Workers: - Landscape or garden adviser, or hire plant adviser - Propagation assistant, class (a) - Florist - Journeyman/nurseryman	$221.00
(iii)	Grade II Workers - 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	$202.00
(iv)	Grade III Workers: - 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)	$190.00
(v)	Grade IV Workers: - Nursery assistant, class (c) - Propagation assistant, class (c) - Potter - Floral worker - Packer - Hire plant assistant class (b) - Workers not elsewhere specified.	$178.00

(vi) Extra rates for Qualifications Held.

A nurseryman or gardener holding a trade certif-

icate in Horticulture or gardening shall be paid 18.3 cents extra per hour.

Workers who have completed their apprenticeship shall be paid an additional 17.7 cents per hour. Extra rates for the holder of certificates issued under the R.N.Z.I.H. Act 1953 are:

	Per Week
Junior	$3.48
Intermediate or National Certificate	$5.22
Full Diploma	$6.95

Holders of the Diploma of Horticulture (Massey or Lincoln) shall be paid an extra $2.37 per week.

(vii) A foreman or leading hand in charge of 3 or more workers shall be paid $7.35 per week extra.

(viii) Service allowances

For continuous service with the same employer exceeding:

	Per Week
One year	$3.95
Two years	$7.91
Four years	$11.86
Ten years	$15.81

N.B. This award only operates throughout the Northern, Taranaki, Wellington, Marlborough, Nelson, Westland, Canterbury and Otago Industrial Districts.

4.1.8 Greenkeepers, Sextons (As at 14 December 1981)

Custodians and caretakers in charge of playing areas, motor camps or recreation grounds, but excluding golf courses.	$193.91
Gardeners or plant propagators and Golf Course Greenkeepers - after serving an apprenticeship, or who has been employed for not less than 5 years.	$226.99

A worker who holds a trade certificate in horticulture and gardening, or golf course greenkeeping shall be paid an additional $8.32 per week.

A worker who holds a certificate issued

under the Royal New Zealand Institute of Horticulture October 1953 shall be paid the following allowance per week.

Junior or subjects 1-9	$3.23
Intermediate or National Certificate	$4.33
Full Diploma	$6.43

Gardeners, or greenkeepers who have not served an apprenticeship $195.24 per week.

Garden labourers,i.e. solely employed for mowing, weeding and cleaning up grounds. $191.45

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	29.0 cents per sheep
500 to 1,050	27.0 cents per sheep
1,050 to 2,050	25.0 cents per sheep
2,050 to 4,000	24.0 cents per sheep
Over 4,000	23.0 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 $18.00-$30.00 per 100 head. (Fly protection)

Lice Protection: $15.00 per 100 ($25.00 per 100 if less than 500).

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.	$526.02	10 l	Plunge	1:2000	$5.26
Ked					1:4000	$2.63
Fly				Shower	1:2000	$5.26
					1:4000	$2.63
				C.R.		
				Shower	1:1280	$8.22
					1:2560	$4.11
Lice	Asuntol	$313.01	20 l	Plunge	1:2000	$1.57
Ked						
Fly				C.R.		
				Shower	1:2000	$1.57
Lice	Diaz-O-					
	Spray	$511.77	10 l	Plunge	1:4000	$2.56
Ked	D.F.F.				1:8000	$1.28
Blowfly				Shower	1:4000	$2.56
					1:8000	$1.28
				C.R.		
				Shower	1:2000	$5.12
					1:4000	$2.56
Lice	Numix	$83.02	5 kg	Plunge	1kg:1000 l	$3.32
Ked				Shower	1kg:1000 l	$3.32
				C.R.		
				Shower	1kg: 750 l	$4.43

(C.R. shower denotes continuous replenishment)

From the above guide it can be seen that cost per 100 head on average varies from $1.18 to $8.22 with an average overall cost of $3.39 per 100 head.

4.2.4 Sheep and Cattle Dips, Sprays and Dressings

Trigon D.F.F. Powerpack	3 litre	$170.57
Trigon D.F.F.	10 litre	$526.02
Diaz-O-Spray D.F.F. Powerpack	3 litre	$161.69
Diaz-O-Spray D.F.F.	10 litre	$511.77
Supreme D.F.F. Powerpack	3 litre	$210.18
Supreme D.F.F.	10 litre	$643.35
Bacteriostat Powder	600 g	$ 12.20
Diazotas	5 litre	$ 71.72
	20 litre	$282.66

Diazotas Dust	25 kg	$ 55.33
Diazotas 40%	20 litre	$447.93
40% Jerrycan	10 litre	$235.00
Diazotas Concentrate (60%)	5 litre	$165.38
Grenade	2 litre	$ 83.00
	5 litre	$203.75
	10 litre	$407.50
Diazinon 40%	5 litre	$ 55.00
	10 litre	$105.00
	20 litre	$195.00
Asuntol Powder (Bayer)	4 x 1 kg	$112.98
Asuntol liquid (Bayer)	200 ml	$ 6.23
	5 litre	$ 96.28
	20 litre	$313.01
Celbar 10%	100 ml	$ 12.00
Summer Dip Powerpack	3 litre	$166.62
Summer Dip	10 litre	$508.54
Diazinon 80%	10 litre	$447.47
Bash Sheep Pour-on	2.5 litre	$ 60.64
	10 litre	$220.50
Cythion (cattle)	5 litre	$ 44.04
	20 litre	$167.35
Warbex (cattle)	1 litre	$ 23.31
	5 litre	$104.87
Tiguvon Pour-on	5 litre	$ 32.98
Tiguvon Spot-on	500 ml	$ 22.48
	2.5 litre	$101.14
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	$ 10.06
Bactas	500 gm	$ 12.13
Banmag	500 ml	$ 12.25
Combat	1 litre	$ 16.89
	5 litre	$ 61.43
	20 litre	$237.23
Combat Jerrycan	10 litre	$250.03
Combat Concentrate 75%	5 litre	$214.37
Parasite spray	50 ml	$ 2.01
	5 litre	$ 34.50
Taslin	5 litre	$ 37.50

4.2.5 Sheep and Cattle Drenching Guide

(i) Drench

Systamex	10 litre	$167.95
	25 litre	$399.00

Panacur	5 litre	$ 78.64
	20 litre	$300.77
	30 litre	$439.88
Valbazen	25 litre	$385.00
Thibenzole	5 litre	$ 75.18
	20 litre	$274.80
	30 litre	$384.00
Thibenzole Plus	20 litre	$276.83
Nilverm	5 litre	$ 92.22
	12 litre	$205.54
	24 litre	$397.95
	45 litre	$726.78
Nilverm Dairy Farmers Pack	5 litre	$ 92.22
Concentrate kit	1 x 625 ml	$ 82.96
Injection	500 ml	$ 28.55
Nilzan	2 litre	$ 50.54
	5 litre	$120.49
	12 litre	$277.72
Nilzan Tapeworm Pack	24 litre	$522.51
	5 litre	$120.49

(ii) Sheep Drenching

Nilverm

Weight Range	Dose	Pack Size	Cents Per Dose
Sheep up to 22.5 kg	4 ml	45 litre	6.46
Sheep up to 22.5 kg	4 ml	24 litre	6.63
Sheep up to 22.5 kg	4 ml	12 litre	6.85
Sheep up to 22.5 kg	4 ml	5 litre	7.43
Sheep 22.5-34 kg	6 ml	45 litre	9.69
Sheep 22.5-34 kg	6 ml	24 litre	9.95
Sheep 22.5-34 kg	6 ml	12 litre	10.28
Sheep 22.5-34 kg	6 ml	5 litre	11.15
Sheep 34 kg & over	8 ml	45 litre	12.92
Sheep 34 kg & over	8 ml	24 litre	13.27
Sheep 34 kg & over	8 ml	12 litre	13.70
Sheep 34 kg & over	8 ml	5 litre	14.87

Panacur

Type of Animal	Weight Range	Dose Rate	Pack Size & Cost of Pack 30l	20l	5l
			$439.88	$300.77	$78.64
			(cents per dose)		
Lambs	15kg	3 ml	4.40	4.51	4.72
Lambs & Hoggets	21-30kg	6 ml	8.80	9.02	9.44
	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 30l	20l	5l
			$384.00	$274.80	$75.18
			(cents per dose)		
Lamb	Up to 20kg	4 ml	5.12	5.50	6.01
Lambs & Hoggets	21-30kg	6 ml	7.68	8.24	9.02
Hoggets	31-40kg	8 ml	10.24	10.99	12.03
Sheep	Over 41kg	10 ml	12.80	13.74	15.04
Rams		15 ml	19.20	20.61	22.55

Thibenzole Plus

Type of Animal	Weight Range	Dose Rate	Pack Size & Cost of Pack 20l
			$276.83
			(cents per dose)
Lamb	Up to 20kg	5 ml	6.92
Lambs & Hoggets	21-30kg	7.5ml	10.38
Hoggets	31-40kg	10 ml	13.84
Sheep	Over 41kg	12.5ml	17.30

Rintal - 2.5% suspension

Type of Animal	Weight Range	Dose Rate	Pack Size & Cost of Pack 20l	2.5l
			$271.78	$38.24
			(cents per dose)	
Lambs	Up to 25kg	5 ml	6.79	7.64
Hoggets	25-35kg	7 ml	9.51	10.71
Adults	Over 35kg	9 ml	12.23	13.80

(iii) Cattle Drenching

Nilverm

Weight Range	Dose	Pack Size	Cents Per Dose
Cattle up to 100 kg	20 ml	45 litre	32.30
		24 litre	33.16
		12 litre	34.26
		5 litre	37.17
Cattle 100-200 kg	40 ml	45 litre	64.60
		24 litre	66.32
		12 litre	68.52
		5 litre	74.35
Cattle 200-300 kg	60 ml	45 litre	96.90
		24 litre	99.48
		12 litre	102.78
		5 litre	111.54
Cattle over 300 kg	80 ml	45 litre	129.20
		24 litre	132.64
		12 litre	137.04
		5 litre	148.68

Thibenzole

Weight Range	Dose Rate	Pack Size & Cost of Pack		
		30l	20l	5l
		$384.00	$274.80	$75.18
		(cents per dose)		
Up to 50 kg	17ml	21.76	23.36	25.56
51- 75 kg	25ml	32.00	34.35	37.59
74-100 kg	35ml	44.80	48.09	53.00
101-125 kg	45ml	57.60	61.83	67.66
126-150 kg	55ml	70.40	75.57	82.70
151-175 kg	65ml	83.20	89.40	97.74
176-200 kg	75ml	96.00	103.05	112.76
201-225 kg	85ml	108.80	116.79	127.81
226-250 kg	95ml	121.60	130.53	142.85
251-275 kg	105ml	134.40	144.27	157.87
276-300 kg	115ml	147.20	158.01	172.91

Rintal 10% Suspension

25 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	$ 45.87
	200 litre	$415.67
(S.I.)	20 litre	$ 49.69
	200 litre	$433.97
Bloatas	200 litre	P.O.A.
Bloatenz Two in One	20 litre	$113.84
	200 litre	$870.00
Bloatenz L	20 litre	$113.84
	200 litre	$870.00
Bloatenz Premix Drench	200 litre	$410.00
Redene Bloataid	20 litre	$ 95.40
	200 litre	$785.00
Bloateric Two in One	20 litre	$114.50
	200 litre	P.O.A.
Bloateric Premix	60 litre	$170.10
	200 litre	P.O.A.
Teric Bloatblocs	15 kg	$ 23.43

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

4.2.8 Vaccines

Mannings	Size of Pack	Cost
Black leg - Malignant Oedema	100 ml	$ 5.80
	200 ml	$ 7.95
	500 ml	$17.20
Black leg - Malignant Oedema and black disease	200 ml	$10.15
	500 ml	$22.00
Pulpy-Kidney	100 ml	$ 5.15
	200 ml	$ 5.65
	500 ml	$12.25

P.K. ATS	100 ml	$10.80
	200 ml	$19.15
	500 ml	$41.60
	1000 ml	$74.90
P.K. Tetanus	100 ml	$ 6.30
	200 ml	$ 8.75
	500 ml	$19.10
Triple (BL-MO-PK)	200 ml	$11.95
	500 ml	$25.95
Trip-Tet (BL-MO-PK-TET)	100 ml	$ 7.50
	200 ml	$13.25
	500 ml	$28.75
	1000 ml	$51.75
5-in-one (BL-MO-PK-TET-BD)	100 ml	$ 8.60
	200 ml	$15.20
	500 ml	$33.05
	1000 ml	$59.50
Foot Abcess	200 ml	$20.00
Scabby Mouth	125 doses	$ 4.70
	250 doses	$ 7.35
ICI-Tasman		
BL-MO	100 ml	$ 4.16
	200 ml	$ 7.57
	500 ml	$17.22
Convax 5	200 ml	$14.80
(BL-MO-PK-8O-TET)	500 ml	$33.63
PK	100 ml	$ 3.63
	200 ml	$ 5.42
	500 ml	$12.32
PK-ANTITET	100 ml	$10.17
	200 ml	$18.65
	500 ml	$42.38
PK TET	200 ml	$ 8.94
	500 ml	$20.31
QUAD (BL-MO-PK-TET)	200 ml	$12.80
	500 ml	$29.09
Triple (BL-MO-PK)	200 ml	$11.74
	500 ml	$26.67
Nilvax 5	500 ml	$38.70
Scabivax	125 doses	$ 5.20

BL = Blackleg
MO = Malignant Oedema
PK = Pulpy kidney
BD = Black Disease
TET = Tetanus

4.2.9 Antibiotics

	Size of Pack	Price
Durapen 3 in 1	20 tubes	$16.45
Procal 100	20 tubes	$11.15
Procal 500	20 tubes	$13.25
	40 tubes	$23.85
Procal 1500	10 tubes	$10.80
P.U.I. 100	20 tubes	$ 9.75
	40 tubes	$17.55
Adpen 100	20 tubes	$10.50
Penetha-Pen 100	20 tubes	$10.50

4.2.10 Disinfectants

Hibitane MCC (ICI)	25 l	$143.50
	5 l	$ 32.65
Hibitane MCC Plus	25 l	$153.07
Hibitane MCC Plus	5 l	$ 34.83
Syvel	200 l	$482.55
	5 l	$ 15.93
Anisep	20 l	$ 63.00
	5 l	$ 17.63

4.2.11 Metabolics

ICI - Tasman Borophos	450 ml	$ 4.75
Calcium Borogluconate	450 ml	$ 3.85
Boromag Plus	450 ml	$ 4.36
	350 ml	$ 2.48
Sulphamag Injectable	350 ml	$ 1.55

4.2.12 Poultry Remedies

Antibiotics	Tylan 100 Premix	10 kg	$238.00
		20 kg	$433.00
	Tylan soluble	100 gm	$ 27.00
Anticoccidial	Elancoban	20 kg	P.O.A.
Anthelmintic	Hygromix - 8	22.68 kg	$149.00

4.2.13 Stock Identification

(i) Eartags

'Allflex' Plastic Delta Plastics Ltd

	Blank ¢ each	Numbered ¢ each
Small tag 1/2	.23	.27
Single - medium 4/1	.29	.37
Double - medium 4/3	.35	.51
Maxi Tag 7/1	.46	.56
Medium maxi 7/3	.52	.70
Large maxi 7/5	.60	.79
Single large 6/1	.37	.46
Medium large 6/8	.43	.60
Double large 6/5	.51	.69
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 (including spaces) available.

Tags plain	$10.40 per 100
Stamped	
One standard price for stamped tags whether named, numbered, or both.	$16.20
Applicator pliers	$10.60

Ritchey Eartags	
Ritchey Sheep tags - blank	.27
- numbered front	.35
Ritchey Cattle tags- blank	.42
- numbered front	.50
Fluid	1.75
Inserting tools	2.00

'Farm-Acy'

Brass eartags stamped with year date, consecutive numbers and station/stud name.

Stamped	$12.00 per 100
Stamped, nickel plated	$15.50 per 100
Ear punch	$10.20
Tag Closing pliers	$ 3.50

Aluminium 'Kurl-lock' eartags stamped with prefix or name to 12 letters or figures, and year date and consecutive numbers to 9999.

Stamped	$10.00 per 100
Applicators	$ 9.75
Farm-Acy Earmarkers - sheep	$31.20 - $56.90
- cattle	$39.30 - $64.00

(ii) Brands and Tattoos

'Farm-Acy' stainless Steel Fire Brands set 0-8	$113.00
Tattoo Outfit - Basic outfit	$36.50

(iii) Raddles and Markers

Raddle stick chalk	.88
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	$ 9.87
Ram Harness Bell Booth	$15.98
Stafix Crayons (Red, Blue, Green, Yellow, Orange, Black)	$ 1.72
Chinball Mating Harness	$50.40

Chinball Mating Harness Fluid 1 litre	$ 8.25
Sire Sine Ram Harness	$16.35
Sire Sine Ram Harness Crayon	$ 2.95

4.2.15 Lambing and Calving Requisites

Maskit Aerosol	$ 3.99
'Acceptron' Aerosol	$ 4.75
Bay Lambing Instrument	$ 3.45
'Lamb-Dry' lamb covers (roll of 100)	$ 20.59
twin marked (per roll)	$ 22.95
Stafix Stadry Lamb Covers	$ 20.95
'Lambjel' Ewe Ointment (per tube)	$ 2.80
'Lamblac' Ewe Milk Replacer 3 kg	$ 12.50
Denkavit 20 kg	$ 31.72
Ancalf 20 kg	$ 33.25
Anlamb 10 kg	$ 22.13
Monojet lamb feeders	$ 2.40
Lamb teats	$ 1.80
Dankum Lamb Warmers	
Portabox for Motor Bike	$116.45
Max. hold 15 lambs	$160.50
Midi hold 6 lambs	$143.75
Mini hold 5 lambs	$205.00
Shepherds Lambing Belts	$ 35.70

4.2.16 Miscellaneous Animal Health Equipment

Footrot shears - Arnolds	$ 25.85
Footrot shears - Ahrem	$ 34.11
'Farm-Acy' frustrators - curved	$ 3.50
- calf	$ 3.25
Docking irons - gas (LPG or Acetylene)	$170.90
Rockgas Searo iron	$ 50.30
'Farm-Acy' Daroux Emasculators	$ 39.95
Burdizzo Emasculator 225mm	$ 93.70
300mm	$ 93.95
NZIG 'Jason' Lambtailer	$ 59.50
with hoses, regulators and spanner	$118.00
Moualt Tailer	$ 67.70
Footrot Spray	$ 5.95
Rubber Docking Rings (per packet of 500)	$ 7.25
ICI-Tasman-P20 Drench Gun (Auto) 20 ml	$ 60.62
-P60 Drench Gun (Auto) 60 ml	$ 64.35
-P20 Injection Attachment	$ 6.47
P4 Drench Gun non-auto 60 ml	$ 44.55
P14 Drench Gun non-auto 120 ml	$ 46.41
Lypor Gun (each)	$ 57.92
P120 Auto Drenching Gun 120 ml	$ 80.02
P74 Vaccinator Auto 5 ml	$ 33.00

ICI Tasman Back Pack	5 ml	$ 14.06
Nilverm Drencher/Injector	12.5 ml	$ 41.55
Nilverm Drench Gun	12.5 ml	$ 37.06
Flutter valve		$ 1.95
MSD Cattle Gun	120 ml	$ 58.00
MSD Sure-Shot Drench Gun	15 ml	$ 45.00
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 - Cooper		$ 4.90
Vaxigun (ICI-Tasman)	5 mls	$ 5.95
Automatic Drencher - Injector	I.S.	$ 68.95
'Farm-Acy' Hoofcutters		$ 44.80
Heavy Duty Hoof Cutter		$ 69.35
True Freunde Footrot shears		$ 17.82
'Farm-Acy' Calf dehorners		$ 15.00
Hoof porer		$ 26.85
Hoof pincers		$ 25.75
Anvil		$135.15

4.2.17 Miscellaneous Animal Health Products

'Hornex' dehorning paste (per tube)		$ 2.00
'Vigest' Predigested Tonic	2 litre	$ 14.40
'Dexolyte' Enteritis & Diarrhoea Remedy	3 kg	$ 10.98
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	$ 4.20
'Seleen' Suspension non-specific dermatoses control	125 ml	$ 4.75
Flystrike Dressing (Aerosol can)		$ 3.50
Formalin	20 litre	$ 41.40
	200 litre	$302.67
'Ban Mag'	500 ml	$ 12.25
Fleaban	110 g	$ 3.90
Flea powder	100 g	$ 1.80
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
Systamex	25 l	$399.00
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
Lucijet - Blow Fly control	1 l	$ 30.20
ICI-TASMAN		
Sleptosil injectable iron		$ 25.55
Vitamin E50	500 gm	$ 21.25
	2 kg	$ 80.05
Vitamin K	1 kg	$ 8.75
Carophyll Orange	1 kg	$168.75
Carophyll Yellow	1 kg	$138.51
Carophyll Red	1 kg	$170.00
Rovisol Oral	1 litre	$ 37.15
Ephocal	2.5 kg	$ 13.50
	10 kg	$ 31.50
Equine Iron Tonic	5 litre	$ 20.32
Furone	2.5 kg	$ 31.00
Tascat	130 gm	$ 3.50
Tasdog	250 gm	$ 5.10
	1 kg	$ 11.70
	10 kg	$ 60.35
Tasvite Plus	2 litre	$ 12.65
	5 litre	$ 31.62
Vitamin A, B2 & D3 Supplement	25 kg	$ 60.65
Lysine	25 kg	$187.50
Methionine	25 kg	$148.13

4.2.18 Veterinary Club Membership

Veterinary club charges are varied, depending on the club. A typical membership fee would be $25.00 to $35.00.

Consultation, initial in call	$ 9.00
out call	$ 13.50
Medium visit	$ 12.00
Long visit	up to $60.00
X-Ray	$ 25.00
Additional plate	$ 5.00
Anaesthetic extra	$ 15.00

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 $55.00 plus $9.80 per cow. The seventh week, if required, is at cost. Nominated service $3.00 reduction per cow.

Cow Numbers	Cost
10	$153.50
20	$251.00
30	$349.00
40	$447.00
50	$545.00
60	$643.00
70	$741.00
80	$839.00
90	$937.00
100	$1,035.00
110	$1,133.00
120	$1,231.00
130	$1,329.00
140	$1,427.00
150	$1,525.00
160	$1,623.00
170	$1,721.00
180	$1,819.00
190	$1,917.50
200	$2,015.00

With two free returns, and subsequent returns at $2.50 each.

4.3.2 Herd Testing Charges

(i) Dairy Cows

Cow No.	Monthly	Alternate Monthly	Production Ranking Test
	Herd Fee $90 Plus $9.50 Per Cow	Herd Fee $60 Plus $6.20 Per Cow	Herd Fee $50 Plus $3.50 Per Cow
30	$375.00	$246.00	$195.00
50	$565.00	$370.00	$225.00
60	$660.00	$432.00	$260.00

70	$755.00	$494.00	$295.00
80	$850.00	$556.00	$330.00
90	$945.00	$618.00	$365.00
100	$1,040.00	$680.00	$400.00
110	$1,135.00	$742.00	$435.00
120	$1,230.00	$804.00	$470.00
130	$1,325.00	$866.00	$505.00
140	$1,420.00	$928.00	$540.00
150	$1,515.00	$980.00	$575.00
160	$1,610.00	$1,052.00	$610.00
170	$1,705.00	$1,114.00	$645.00
180	$1,800.00	$1,176.00	$680.00
190	$1,895.00	$1,238.00	$715.00
200	$1,990.00	$1,300.00	$750.00

(ii) Goats

15 (minimum) Same Fees as cows.

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

Sack capacities are as follows:
Clovers in double 116 cm sacks holding 50 kg M/D seed.
Browntop, Timothy, brassicas and lucerne, 116 cm sacks of 50 kg M/D.
Ryegrasses are mainly sold in 116 cm sacks holding 50 kg M/D but may be sold in 122 cm sacks also holding 50 kg M/D seed.
Cocksfoot and Prairie grass sold in 122 cm sacks holding 35 kg M/D seed.
Field Peas in 116 cm sacks holding 75 kg.
Garden Peas in 116 cm sacks holding 50 kg.
Grain as follows:

M/D seed wheat, seed lupins, tares, ryecorn and maize	75 kg	116 cm
M/D seed barley	70 kg	116 cm
M/D seed oats	60 kg	116 cm
M/D seed beans (small seed)	50 kg	116 cm
(large seed, e.g. Scarlet, Broad)	40 kg	116 cm

Sack sizes are designated in centimetres. Sizes are unchanged from imperial. Prices are new (ex store). A 48 inch, 3 stripe sack is now 122 cm, cost $1.53. A 46 inch standard sack is now 116 cm, cost $1.27. A 37 inch sack is now 94 cm and costs $1.06.
N.B. A bale holds 250 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 Box Hire

Box capacities are as follows:

Peas	1.3 tonne
Ryegrass	700 to 800 kg
Clover	1.0 tonne

Hire varies markedly between companies but on average would be in the region of $5 to $10.

4.4.3 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.

4.4.4 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.

4.4.5 Herbage Seed Levy

This levy is imposed on herbage seed collected by the M.A.F. seed testing station on all lines of herbage seed submitted for first testing.

The following is a list of the more common seeds with the level of levy applying for 1983:

	Levy per Kilogram	Levy per Sack	Levy per 100 Sacks
White Clover			
Huia) Pitau)	0.63c	31.5c	$31.50
Red Clover			
Turoa) Montgomery)	0.41c	20.5c	$20.50
Pawera	0.72c	36.0c	$36.00
Ryegrass			
Nui) Ellett)	0.18c	9.0c	$ 9.00
Ruanui	0.16c	8.0c	$ 8.00
Ariki	0.23c	11.5c	$11.50
Tama) Paroa) Moata) Manawa)	0.27c	13.5c	$13.50
Cocksfoot	0.4c	14.0c	$14.00

4.4.6 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	4.25 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 Ryecorn	$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.

4.4.7 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 $44.49 per header metre front per hour.

2.4m header	$106.78/hr
3.0m header	$133.47/hr
3.6m header	$160.16/hr
4.2m header	$186.86/hr

Wheat:	When the crop runs 2.35 tonnes/ha or over, $29.30/tonne.
Barley:	When the crop runs 1.95 tonnes/ha or over, $35.20/tonne.
Oats:	When the crop runs 1.55 tonnes/ha or over, $44.00/tonne.
Peas and Lupins:	When the crop runs 2.0 tonnes/ha or over, $38.20/tonne.
Linseed and Clover:	$96.40/ha or hourly rates according to the size of header, whichever is the greater.
Grass Seed:	$86.90 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	$35.00 per hour
- Disc mowing	$42.00 per hour
Raking, once over	$36.00 per hour
Baling hay or straw	$ 0.59 per bale
Half tonne bales (round)	$ 7.90 per bale
Sledging by contractor	$ 0.04 per bale
Picking up bales (hay or straw)	$ 0.40 per bale
Collecting bales	$ 0.04 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

$52.20 per ha for 10 cm and above, $54.20 with conditioner. $54.20 per ha under 10 cm, $56.20 with conditioner.

4.5.4 Potato Contracting (1982)

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	$101.30 per hour, or $27.70 per tonne plus extra labour.

Note: These costs are for an average crop in reasonable conditions.

4.5.5 Cultivation Contracts

(i) Wheeled Tractors

P.T.O. Power kW	P.T.O. (H.P.)	Hourly Rate or Hire
Up to 21	(Up to 29)	$27.50
22 - 30	(30 - 40)	$30.00
31 - 37	(41 - 49)	$33.50
38 - 44	(50 - 59)	$35.50
45 - 51	(60 - 69)	$39.50
52 - 58	(70 - 79)	$42.50
59 - 63	(80 - 85)	$45.50
64 - 70	(86 - 99)	$49.50
71 - 88	(100 - 110)	$56.50
89 - 103	(102 - 140)	$65.00
104 - 119	(141 - 160)	$67.50

(ii) 4 Wheel Drive Tractors

Up to 15	(Up to 20)	$26.00
16 - 30	(21 - 39)	$30.50
31 - 40	(40 - 54)	$36.50
41 - 48	(55 - 65)	$38.50
49 - 55	(66 - 75)	$44.50
56 - 63	(76 - 85)	$45.00
64 - 74	(86 - 100)	$52.50
75 - 89	(101 - 120)	$59.00
90 - 100	(121 - 134)	$70.00
101 - 118	(135 - 160)	$77.50
119 - 133	(161 - 180)	$82.50
Over 133	(Over 180)	$102.00

(iii) Track Machines

23 - 41	(40 - 55)	$35.50
42 - 48	(56 - 65)	$48.50
Over 48	(Over 65)	$67.50

(iv) Extra Implements

Plus the following extra charges for implements.

Up to 30	(Up to 40)	$ 4.60
31 - 45	(41 - 60)	$ 5.20
46 - 60	(61 - 80)	$ 7.00
61 - 75	(81 - 100)	$ 8.70
Over 75	(Over 100)	$11.60

(v) Or plus the following extra charges for Rotary Hoes.

Up to 1.3 metres	$ 5.80
1.3 - 1.5 metres	$ 6.40
1.5 - 1.8 metres	$ 8.10
1.8 - 2.0 metres	$10.40
2.0 - 2.3 metres	$13.30
2.2 - 2.5 metres	$15.10
Over 2.5 metres	$19.70
Or sickle mowers	$ 5.20
Or disc mowers	$ 8.10
Or hay rakes	$ 4.60
Or hay tedder	$ 5.80

Special equipment by negotiation.

4.5.6 Horticultural Contracting

Rotary Hoeing	$100 to $120.00 per hectare
Discing	$ 36.00 per hectare
Subsoiling	$ 42.00 per hour
Direct drilling	$ 43.75 per hectare
Drilling	$ 33.00 per hectare

4.5.7 Miscellaneous

Gorse cutting	$34.60 per hour
Tree topping	$68.10 to $76.60 per hour.
Precision drilling	By arrangement.
Shelter belt and Hedge trimming	$55 to $60 per hour.

4.6 DAIRY SHED SUPPLIES

4.6.1 Milking Machines

National Dairy Association (N.D.A.)

17 Cluster Turn Style Milking System	$10,650.00
22 Cluster	$12,100.00
28 Cluster	$16,550.00
36 Cluster	$19,985.00
8 Cluster Herringbone Hiline Milking System	$ 6,490.00
10 Cluster	$ 7,365.00
12 Cluster	$ 8,080.00
14 Cluster	$ 8,830.00
16 Cluster	$ 9,310.00
18 Cluster	$10,515.00
20 Cluster	$11,135.00
20 Cluster Rotary System	$15,039.00
24 Cluster	$17,857.00
28 Cluster	$19,055.00
32 Cluster	$22,912.00
10 Cluster Bodmin New Pulse Milking System includes	$ 8,314.00
12 Cluster Milk Plant and Washing System	$ 9,196.00
14 Cluster	$10,152.00
16 Cluster	$11,031.00
18 Cluster	$11,031
20 Cluster	$12,725

Instalment costs vary from $900 to $2,700.

4.6.2 Milking Shed Equipment

Inflations -	Efco Monobloc No. 5	$ 3.05 each
	Monokura No. 6	$ 3.00 each
	Monobloc No. 15 (with petal mouthpiece)	$ 3.15 each
	Monokura No. 11 (with petal mouthpiece)	$ 3.20 each

N.D.A. Cups and Claws -	Monokura Cups Bare	$39.20 set
	Cluster Claws S/S	$33.80 each
	Look-in Claw S/S	$43.90 each
	Sight Cluster Clau S/S	$46.20
	AHI Milking Claw	$90.65

Claw (black and white) Rubber Tubing	
152 mm x 7.9 mm ID STD	$ 0.50c
173 mm x 7.9 mm ID	$ 0.45c

Air tubing	
1200 mm Air Tubing 9.5 mm 10	$ 3.60
1420 mm Air Tubing 9.5 mm 10	$ 4.40
1730 mm Air Tubing 9.5 mm 10	$ 5.65
4270 mm Air Tubing 9.5 mm 10	$13.30
Milk tubing	
1220 mm Milk Tubing 12.7 mm 10	$ 5.15
1420 mm Milk Tubing 12.7 mm 10	$ 6.35
1730 mm Milk Tubing 12.7 mm 10	$ 7.65
4270 mm Milk Tubing 12.7 mm 10	$18.45
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
Longtail Air Bends	$44.50-$121.90
Milk Pump Diaphrams	
Efco No. 18A (for Efco 228 mm pumps - male thread - moulded insert piston plate)	$13.35 each
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
Stainless Steel Milk Filters (complete)	$201.65
Filter Socks (100/pack)	
NDA	
Filter Element - Paper - Pack	$32.10
NDA 615 x 110 mm	$17.05

660 x 115 mm	$17.90
ALFA	$11.25-$16.75
EFCO	$11.50-$15.00

Exacta Plate Coolers N.D.A.

Model M/W & MM/W	No. of Plates	Milk Cooled litres/hr	Water Required litres/hr	Cost $
200	17/33	900/ 900	2700/2700	$483/ 711
250	21/39	1150/1150	3450/3450	$513/ 770
300	23/45	1350/1350	4050/4050	$546/ 872
350	25/51	1600/1600	4800/4800	$580/ 976
400	29/57	1850/1850	4700/4700	$645/1080
500	35/67	2300/2300	5800/5800	$752/1251
600	41/79	2700/2700	6900/6800	$849/1458
700	47/-	3200/-	6400/-	
800	53/95	3700/3700	7200/7400	

Zelos Energy Converters (NZDIS) for water heating.

Standard Model A Stainless Steel	P.O.A.
Standard Model B Stainless Steel with recirculating pump	P.O.A.
Super Zelos	P.O.A.
Junior Zelos	P.O.A.

4.6.3 Dairy Hygiene

(i) Detergents and Sanitizers

Mycorinse	5 litre	$ 8.95
	20 litre	$ 34.20
Mycosan S	20 litre	$ 64.60
	180 litre	$547.20
Klenz-Iodophor	5 litre	$ 16.35
	20 litre	$ 60.43
	200 litre	$522.50
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

Teat Guard	5 litre	$ 31.16
	20 litre	$118.73
	200 litre	$1,013.00
Klenzaid	5 litre	$ 12.43
	20 litre	$ 40.80
	200 litre	$323.75
Stainless Steel Detergent	5 kg	$ 15.63
	6 kg	$ 23.79
	20 kg	$ 66.39
	25 kg	$ 71.17
Tri-Klenz	5 litre	$ 12.27
	20 litre	$ 44.94
	200 litre	$411.25
Klenzphos Super 60	5 litre	$ 21.79
	20 litre	$ 84.11
	200 litre	$745.00
Klenzphos H.C.	5 litre	$ 24.24
	20 litre	$ 91.50
	200 litre	$783.75
A.T.C. Step 1	5 litre	$ 12.49
	20 litre	$ 43.73
	200 litre	$372.50
A.C.T. Step 2	5 litre	$ 20.54
	20 litre	$ 72.00
	200 litre	$660.00

(ii) Dairy Ointments, Soaps and Teat Protectants

Redene - Teat Dip and Spray	5 litre	$ 20.75
	20 litre	$ 80.20
Teatspray Plus	5 litre	$ 28.75
	20 litre	$111.20
	200 litre	$978.00
Telmin RLT	5 litre	$ 82.00
	20 litre	$304.80
Mineralised Telmin RLT	5 litre	$ 92.90
	20 litre	$346.00
Topclip 40(B)	5 litre	$ 69.65
	10 litre	$131.40
	200 litre	$2,338.00
Redene udder cream	700 gm	$ 5.45
	3.25 kg	$ 15.77

	8 kg	$ 37.28
Elthamol Ointment	1.5 kg	$ 7.40
	4.5 kg	$ 18.90
	8.5 kg	$ 32.90
	17 kg	$ 61.75
Milkeeze Ointment	450 gm tin	$ 4.75
	1.75 kg tin	$ 13.20
	18 kg pail	$103.90
Hibitane Antiseptic Dairy Cream	3.5 kg	$ 16.08
	17 kg	$ 68.73
Elthamol Soap	100 x 85 gm	$ 23.30
Healex	4 litre	$ 13.75
Klenzade Teat Guard	20 litre	$118.73

(iii) Dairy Sanitizers

Redene Iodophor	20 litre	$ 59.20
Redene Milkstone Remover	5 litre	$ 15.35
	20 litre	$ 59.00
Redene Milkstone Remover HAF	5 litre	$ 20.90
Redene Multiflow	200 litre	$378.00
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	$ 14.56
Rubber Scraper 300mm - 750 mm	$ 13.81 to $24.50
Scrubbing Brushes - wooden handle	$ 4.00
- plastic handle	$ 7.68
Gumboots - Marathon knee	$ 37.81 per pair
- Redband short	$ 27.14 per pair
Dairy Aprons - with pocket	$ 14.81
- no pocket	$ 14.20
Buckets 23 litre - plastic	$ 10.98
- with lid	$ 11.30
- galvanized	$ 14.58
'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	0.14	22.12
Breeding	0.07	11.06
Herd testing	0.06	10.00
Shed expenses	0.06	9.48
Electricity (excluding irrigation)	0.11	17.38
Feed	0.17	26.86
Fertiliser	0.42	66.36
Freight	0.04	6.32
Repairs and maintenance	0.13	20.54
Vehicle running expenses	0.31	48.98
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 $69.13 p.a. Plus all units at 10.404c 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 54 litres capacity of the heat storage type used for culinary or ablutionary purposes. All waterheater installations on this tariff must comply with N.Z. Standard Specific-

ations 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 4.141c 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 3.196c each.

The Board will install and maintain an approved time switch or other means of control at a rental of $11.03 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 $69.13 p.a.

When installed load is over 5 kW (refer F.1) kVA is to be measured. Demand charge $3.82 per kVA with a minimum of 2kVA plus all units at 5.837c each.

(ii) Rates for Irrigation

Special rates may apply for electricity used for irrigation and with some thought in planning an irrigation system, or using an existing system, considerable savings in electricity charges can result. For example, in the C.C.E.P.B. area:

Night Rate Only - Demand Charge

Avoid usage of electricity on the "day" or "normal" dial of the two rate meter. That is, switch on only when the meter register pointer indicates "low" or "night", (8.00 p.m. to 6.30 a.m.) and be charged only under the Night Rate Tariff F3.

Irrigation - Part Period Demand Charges

The beginning and the end of an irrigation season are unlikely to coincide with regular meter readings. if the irrigation plant is used for a short period before or after a meter reading, a full two months demand charge will be incurred. The Board is prepared to render "Part period" accounts at the beginning and end of season to meet the situation at these times.

Irrigation Example:

50 kW motor - day and night use.

10.5 hours night rate x 60 days	=	630 hours
13.5 hours day rate x 60 days	=	810 hours

KVA Demand charge approximately 65 KVA	
F3 night usage, 630 hours	
x 50 kW x 3.196	$1,006.74
F4 day usage, 810 hours	
x 50 kW x 5.837	$2,363.99
KVA charge = 65 KVA x 3.82 x 2	$ 496.60
2 months	$3,867.33

Cost per day = $\frac{3,867.33}{60}$ = $64.46

Night Rate Only:

10.5 hours x 60 = 630 hours	
Cost - 630 hours x 50 x 3.196	$1,006.74
plus 2 KVA minimum charge	$ 15.82
	$1,002.56

Day Rate Only:

10.5 hours x 60 = 630 hours	
Cost - 630 x 50 x 5.837	$1,838.66
KVA Charge as above	$ 496.60
plus units as above	$1,838.66
	-$2,335.66
Less night rate cost	$1,022.56
Saving	$1,312.70

Note the significance of KVA charge, there are major savings from operating night rate only. Motors running lightly loaded will possibly incur a large KVA charge than a smaller motor. Power factor correction is required on new installations and can present a useful saving by application to existing fixtures. For further information contact the advisory service of your local electric supply authority.

(iii) 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.

4.8 FEED

4.8.1 Baler Twine

Heavy Sisal	4 spools conventional bales	$112.32
Medium Sisal	6 spools large round bales	$116.64
Superfilm Polypropylene		$ 81.28
Howard Big Baler		$127.00
Hesston 4800 baler twine		$127.00
Binder Twine (untreated sisal twine)		$ 84.00

4.8.2 Stock and Poultry Feeds

(i) Cattle

	Price per 40 kg bag	Price per tonne Bulk	Bagged
Peerless Calf Growa	$13.90		
Dairy Ration	$10.15		
Dairy Meal (30 kg)	$10.12		
Barley Meal	$12.88		
Beef Finisher	$11.19		
Fleming-NRM Calf Crumbles	$12.90	$269.70	$302.60
Hi Protein Dairy		$257.20	$290.10
Dairy Crumbs	$11.40	$230.60	$263.50
Cattle Nuts	$12.50	$257.20	$290.10

Tomoana Weenemon Calf Meal. F.O.R. Mataura add freight.

	Suggested Prices
Ex store - 40kg bag	$15.36 per bag*
Overline - 13 bags or more	$14.20 per bag*
Denkavit calf milk (20 kg)	
Ex store - up to 25 bags	$31.86 per bag
Ex store - 25 bags or more	$31.05 per bag
Overline - 25 bags or more	$29.97 per bag

(ii) Sheep

Peerless Sheep Nuts	$ 12.10
Hogget Grower Nuts	$ 12.10
Stud Exported Nuts	$ 12.10

Fleming-NRM Sheep Nuts (40 kg)	$ 12.20
(per tonne bagged)	$263.25
Sheep Nuts (Hi Protein)	$318.90

Moose Protected Protein Sheep Nuts

Overline - 10 bags & over $288.60 per bag*

Tomoana Sheep Nuts F.O.R. Mataura add freight

Overline - 20 kg bags - 25 bags or more	$310.80 per tonne*
Overline - 40 kg bags - 13 bags or more	$305.25 per tonne*

Denkavit Lamb Milk Replacer (5 kg)	
Ex Store - per 5 kg bag	$ 11.35 per bag
Ex Store - per 10 kg bag	$ 20.60 per bag

(iii) Pigs

Peerless Weena Growa

Pellets	$14.46
Porker Pellets	$14.52
Baconer Feed	$12.99
Fortified Pig Nuts	$13.10
Piglet Starter	$19.60
Pig Supplement	$21.19

Fleming-NRM

Pig Creep Crumble	$20.70	$463.80	$496.70
Weaner Meal	$15.40	$331.70	$364.60
Pig Weaner Pellets	$15.70	$337.70	$370.60
Grower Meal	$13.50	$282.20	$315.10
Pig Grower Pellets	$13.80	$288.20	$321.10
Finisher Meal	$12.60	$262.40	$295.30
Finisher Pellets	$13.00	$268.40	$301.30
Breeder Meal	$12.50	$256.80	$289.70
Pig Breeder Pellets	$12.80	$262.80	$295.70
Weaner Concentrate	$26.30	$604.70	$637.60
Grower	$21.80	$490.70	$523.60
Breeder	$19.20	$428.60	$461.50

ICI Tasman

Hi-Breed Sow Premix	25 kg	$143.75
Pig Breeder (10 x 2.5 kg)	25 kg	$103.75
	25 kg	$101.50
Pig Creep (5 x 5 kg)	25 kg	$ 88.12
Pig Grower/Finisher (10 x 2.5 kg)	25 kg	$108.12
	25 kg	$ 95.60
Pig Standard (10 x 2.5 kg)	25 kg	$ 72.50

(iv) Deer

Peerless Deer Nuts 1	$12.03	
Fleming-NRM Deer Nuts		$284.90

Tomoana Deer Nuts F.O.R. Mataura add freight
Overline - 13 bags or more $351.87 per tonne*

(v) Horses

	Price per 40 kg bag ex store	Price per tonne Bulk	Bagged
Peerless Horse Pellets	$13.13		
Fleming-NRM			
Stud horse pellets	$13.50		$314.80
Horse & Pony Pellets	$12.00		$277.80
Pony Meal	$ 7.30	(25kg)	$267.85
Racehorse Pellets	$12.70		$293.60

Tomoana Racehorse Pellets F.O.R. Mataura add freight

	Suggested Price
Ex Store - 40 kg bags	$14.38 per bag*
Overline - 13 bags or more	$13.76 per bag*
Tomoana Hack & Hunter Pellets	
Ex Store - 40 kg bags	$14.15 per bag*
Overline - 40 kg bags	
- 13 bags or more	$13.54 per bag*
Ex Store - 20 kg bags	$ 7.24 per bag*
Overline - 20 kg bags -	
25 bags or more	$ 6.93 per bag*

* F.O.R. Mataura (add freight)

(vi) Rabbits

Peerless Lactating Rabbit		$16.08
Peerless Rabbit Ration No. 1 (40 kg)		$14.46
Fleming Rabbit pellets -	10 kg	$ 4.40
	40 kg	$ 17.00
	bagged per tonne	$396.30

(vii) Dogs

Peerless Top Dog Nuts (10 kg)	$ 4.44
Shep Dog Biscuits (10 kg)	$12.20
Tux Dog Biscuits (30 kg)	$33.05

Tomoana Dog Crackers F.O.R. Mataura	add freight
Ex Store - 10 kg bags	$ 9.54 per bag
Ex Store - 20 kg bags	$17.75 per bag
Ex Store - 40 kg bags	$33.92 per bag
Overline - 40 kg bags	
for 13 bags or more	$28.80 per bag
for 7 bags	$30.72 per bag

(viii) Poultry

Peerless	
Chick Mash	$14.68
Chick Pex	$14.74
Grower Mash	$13.01
Grower Pex/Pellets	$13.06
Layer Mash	$12.84
Layer Pex/Pellets	$12.90
H.E. Layer Mash	$13.33
H.E. Layer Pex/Pellets	$13.39
Breeder Mash	$13.22
Breeder Pex/Pellets	$13.28
Hi Grain Foods	
Starter Broiler Feeders	$18.52
Finisher No. 1	$17.70
No. 2	$17.34
No. 3	$17.12
Turkey Feeds	
Turkey Pre Starter	$20.14
Turkey Starter Crumbles	$19.63
Turkey Grower Pellets	$18.00
Turkey Finisher Pellets	$17.13
Turkey Normal Starter	$14.74
Turkey Developer Pellets	$14.37
Turkey Breeder Pellets	$13.73
Turkey Male Breeder Pellets	$14.78

		Price per tonne	
		Bulk	Bagged
Fleming-NRM			
NRM Chick Mash		$319.50	
Chick Crumble	$15.30	$325.50	$358.40
Pullet Grower Mash	$12.20	$250.30	$283.20
Pullet Grower Pellets	$12.50	$256.30	$289.20
Pullet Rearer Mash		$255.80	
Hi-Lay Super Pellets		$281.10	
Hi-Lay Super		$275.10	
Hi-Lay Pellets	$13.20	$274.50	$307.40
Hi-Lay Mash	$12.90	$268.50	$301.40
Layer Pellets	$12.90	$265.90	$298.80

	Layers Mash	$12.60	$259.90	$292.80
	Meat Bird			
	Starter Crumbs	$19.30		
	Finisher	$16.70		
	ICI Tasman			
	Poultry Breeder		25 kg	$125.00
	Poultry Broiler		25 kg	$156.75
	Chick Starter (5 x 5 kg)		25 kg	$ 67.50
	Poultry Layer (10 x 2.5 kg)		25 kg	$ 89.12
			25 kg	$ 79.75
	Poultry Grower (10 x 2.5 kg)		25 kg	$ 86.87
(ix)	Miscellaneous			
	Molasses 250kg drum	$120.00		
	Agricultural Salt 50 kg	$ 11.50		
	Bran	$ 8.50		
	Summit Salt Blocks			
	Magnesium	$ 11.47		
	Copper Cattle	$ 10.73		
	Multi-Mineral	$ 11.21		
	Just Salt	$ 10.09		
	Standard Blocks	$ 10.41		
	Nutriex			
	Seawood Standard	$ 11.41		
	Nutriex Magnesium	$ 12.08		
	Rumevite Mineralised Salt Block			
	Ex Store	$ 11.60	per block	
	Overline - 25 blocks or more	$ 10.23	per block	
(x)	Medication and Feed Supplements			
	I.C.I. - Tasman (Tasmix)			
	Dog Food Supplements		10 kg	$62.61
	Pig Products			
			25 kg	$ 70.85
	Sol Min Pig		20 kg	$ 49.20
	Tas Sel		25 kg	$ 33.44
	Nilverm Pig Wormer		200 gm	$ 8.95
			1 kg	$ 37.30
			5 kg	$169.23
			20 kg	$567.87
	Furone		2.5 kg	$ 31.00
	Gleptosil Iron Injection		100 ml	$ 25.25
	Vitamin E50		500 gm	$ 21.25
			2 kg	$ 80.05
	Vitamin K		1 kg	$ 8.75
	Rovisol A.D.E.C.		1 l	$ 37.15
	Vitamin A, B2, D3		25 kg	$ 60.65
	Lysine		25 kg	$187.50

Horse Products		
Hl, E, Sel	1 kg	$ 26.45
Ephocal	2.5 kg	$ 13.50
	10 kg	$ 31.50
Equine Iron Tonic	5 l	$ 20.32
Horse Supplement	1 kg	$ 12.18
	2.5 kg	$ 22.52
	10 kg	$ 82.19
Rovisol A.D.E.C.	1 l	$ 37.15
	2 l	$ 12.65
	5 l	$ 31.62
Poultry Products		
Methionine	25 kg	$148.13
Furone	2.5 kg	$ 31.00
Tas Sel	25 kg	$ 33.44
Carophyll Orange	1 kg	$168.75
Yellow	1 kg	$138.51
Red	1 kg	$170.00
Tasmix Calf Supplement for Calves, Sheep, Goats, Dairy and Beef Cattle	2.5 kg	$ 13.50
	10 kg	$ 43.75

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 30c-50c/head/week for sheep, and $1.50-$2.50/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

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 E + 25%	Fruit grown in New Zealand

(ii) Goods: Classified Rates

Distance Kilometre	B Per tonne	C Per tonne	D Per tonne	E Per tonne	E + 25% Per tonne	E + 50% Undumped per bale	H Per cubic metre	K Per wagon	M Per tonne	R Per tonne
65	63.51	42.34	35.28	15.29	19.11	22.94	5.01	17.54	98.52	12.84
80	68.64	45.76	38.13	16.67	20.84	25.01	5.42	19.23	109.86	14.14
95	73.77	49.18	40.98	18.06	22.58	27.09	5.83	20.91	121.21	15.44
110	78.90	52.60	43.83	19.44	24.30	29.16	6.23	22.60	132.55	16.74
146	91.37	60.91	50.76	22.73	28.41	34.10	7.22	26.82	162.03	20.10
186	113.73	75.82	63.18	28.46	35.58	42.69	8.98	33.95	208.86	25.63
226	133.23	88.82	74.01	33.29	41.61	49.94	10.53	39.25	250.63	30.54
266	148.47	98.98	82.48	36.78	45.98	55.17	11.73	41.80	284.81	33.86
306	161.12	107.41	89.50	40.27	50.34	60.41	12.72	44.36	315.70	36.18
358	172.74	115.16	95.96	45.04	56.30	67.56	13.65	47.96	351.14	39.24
438	191.78	127.85	106.54	52.27	65.34	78.41	15.15	53.48	406.77	44.18
518	210.83	140.55	117.12	59.49	74.36	89.24	16.66	59.00	462.40	49.12
598	229.86	153.24	127.69	66.71	83.89	100.07	18.16	64.52	518.03	54.06
662	245.10	163.40	136.16	72.48	90.60	108.72	19.36	68.94	562.53	58.01

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 1982.

(i) Lime (Bulk) Minimum load 4000 kg

	Per Tonne		Per Tonne
8 km	$ 5.70	16 km	$ 7.53
24 km	$ 8.95	32 km	$10.29
40 km	$11.72	48 km	$12.95
56 km	$14.41	64 km	$15.42
72 km	$16.46	80 km	$17.48

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	$ 6.31	16 km	$ 8.14
24 km	$ 9.98	32 km	$11.72
40 km	$13.16	48 km	$14.41
56 km	$15.63	64 km	$16.86
72 km	$18.10	80 km	$19.33

(iii) Fertiliser and Lime (Bagged) Minimum load 3000 kg.

	Per Tonne		Per Tonne
8 km	$ 8.75	16 km	$11.00
24 km	$12.82	32 km	$14.81
40 km	$16.46	48 km	$18.10
56 km	$19.75	64 km	$20.19
72 km	$22.41	80 km	$23.66

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 4c 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	$0.387	16 km	$0.488
24 km	$0.590	32 km	$0.678
40 km	$0.750	48 km	$0.822
56 km	$0.844	64 km	$0.939
72 km	$1.997	80 km	$1.048

(v) Bagged grain under 16 per tonne.

	Per Bag		Per Bag
8 km	$0.549	16 km	$0.712
24 km	$0.835	32 km	$0.946
40 km	$1.028	48 km	$1.110
56 km	$1.193	64 km	$1.274
72 km	$1.357	80 km	$1.439

Ex paddock - schedule rate plus $0.134 per sack, includes bag loaded and all labour. Where farmer supplies labour over and above driver rate $0.04 per sack. Ex heap in paddock - schedule plus $0.06 per sack. For bagged grain over 16 per tonne see (viii).

(vi) Grain (Bulk) Ex acceptable silo. Minimum load 4000 kg.

	Per Tonne		Per Tonne
8 km	$ 5.90	16 km	$ 7.74
24 km	$ 9.37	32 km	$10.89
40 km	$12.34	48 km	$13.58
56 km	$14.81	64 km	$15.84
72 km	$16.86	80 km	$17.89

Where silos are not completely self emptying, add $0.53 per tonne or where the farmer does not supply the labour to feed the auger inside the silo.
Auger charges $0.82 per tonne.
Ex header $2.06 per tonne by arrangement.
Converting bags to bulk $2.06 per tonne.

(vii) Grass Seed Boxes over 1000 kg. Minimum 8 boxes.

	Per Tonne		Per Tonne
8 km	$ 8.24	16 km	$10.09
24 km	$11.70	32 km	$13.27
40 km	$14.70	48 km	$15.94
56 km	$17.18	64 km	$18.20
72 km	$19.23	80 km	$20.26

Boxes under 1000 kg. Minimum 16 boxes.

	Per Tonne		Per Tonne
8 km	$10.60	16 km	$12.45
24 km	$14.07	32 km	$15.65
40 km	$17.08	48 km	$18.33
56 km	$19.55	64 km	$20.59
72 km	$21.60	80 km	$22.64

If farmer loads boxes efficiently, deduct $3.08 per box. For less than minimum loads add $2.06 per box for first 5 boxes and $1.03 per box thereafter.

Empty boxes.

	Each		Each
8 km	$2.45	16 km	$2.63
24 km	$2.85	32 km	$3.09
40 km	$3.30	48 km	$3.49
56 km	$3.70	64 km	$3.90
72 km	$4.11	80 km	$4.31

(viii) Grass Seed and other small seeds (bagged)

16 bags and over to the tonne. Minimum load 48 bags. Same rate as bagged grain over 16 per tonne.

	Per Bag		Per Bag
8 km	$0.488	16 km	$0.611
24 km	$0.712	32 km	$0.801
40 km	$0.874	48 km	$0.946
56 km	$1.017	64 km	$1.089
72 km	$1.161	80 km	$1.234

Ex paddock add $0.99 per sack. Where farmer supplies labour over and above driver the rate is to be plus $0.04 per sack.
Ex heap in paddock add $0.064 per sack.

(ix) Wool by Road. Minimum load 14 bales.

	Per Bale (150 kg)		Per Bale (150 kg)
8 km	$2.03	16 km	$2.63
24 km	$3.11	32 km	$3.60
40 km	$4.01	48 km	$4.39
56 km	$4.69	64 km	$4.92
72 km	$5.14	80 km	$5.35

Minimum load 14 bales
Add $0.45 per bale off ground.

(x) Potatoes (same rates apply as for bagged grain under 16 sack per tonne). See section (v) above.

These prices are for ex shed or store. Includes use of bag loader and driver only.
Ex paddock add $0.134 per bag unless farmer supplies labour in which case only add 4c per bag.
Ex heap in paddock add $0.06 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	$0.035	$0.315	$0.345
16 km	$0.376	$0.417	$0.453
32 km	$0.524	$0.596	$0.643
48 km	$0.657	$0.740	$0.808
64 km	$0.781	$0.863	$0.956
80 km	$0.884	$0.966	$1.059
97 km	$0.976	$1.079	$1.204
113 km	$1.059	$1.184	$1.298
129 km	$1.143	$1.287	$1.412
145 km	$1.225	$1.392	$1.516
161 km	$1.314	$1.502	$1.628
Minimum load			
Under 40 km	100	100	90
Over 40 km	140	120	100

	Store Sheep	Fat Sheep
8 km	$0.376	$0.387
16 km	$0.488	$0.525
32 km	$0.688	$0.750
48 km	$0.874	$0.976
64 km	$1.048	$1.172

80 km	$1.193	$1.368
97 km	$1.328	$1.568
113 km	$1.412	$1.734
129 km	$1.536	$1.901
145 km	$1.641	$2.035
161 km	$1.735	$2.170
Minimum load		
under 40 km	85	80
over 40 km	100	90

A lamb becomes a hogget on 1 September. A nogget 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 $0.060.
Sheep per head $0.080.
Where facilities for loading are inadequate, an additional charge of $0.021 per head shall be made for sheep and lambs.

(xii) Cattle (all per head)

	Weaners	Yearlings	18 month Cattle
8 km	$1.67	$1.97	$ 2.60
16 km	$2.27	$2.73	$ 3.57
32 km	$3.35	$4.09	$ 5.09
48 km	$4.27	$5.31	$ 6.88
64 km	$5.20	$6.37	$ 8.12
80 km	$6.01	$7.40	$ 9.11
97 km	$6.83	$8.33	$10.12
113 km	$7.48	$9.01	$10.96
129 km	$7.96	$9.64	$11.62
145 km	$8.38	$10.12	$12.19
161 km	$8.83	$10.58	$12.76
Minimum load			
under 40 km	14	12	10
over 40 km	20	16	14

	2 year cattle	Fat Cattle
8 km	$ 3.10	$ 3.34
16 km	$ 4.20	$ 4.57
32 km	$ 6.14	$ 6.88
48 km	$ 7.78	$ 8.92
64 km	$ 9.40	$10.99

80 km	$10.87	$12.49
97 km	$12.35	$14.17
113 km	$13.46	$15.47
129 km	$14.24	$16.38
145 km	$14.96	$17.14
161 km	$15.66	$17.86
Minimum load		
under 40 km	8	8
over 40 km	12	10

Penal rates for cattle: $0.60 per head where the farmer does not give 24 hours notice of job to be done.
Where loading ramp is not provided or is not usable, for loading and unloading, then a charge of $2.69 per head of cattle shall be made.

(xiii) General Good. Minimum load 3000 kg.

16 km	$12.02
32 km	$16.04
48 km	$19.53
64 km	$22.62
80 km	$25.10

4.9.3 Air Rates

External

Freight Rates:

	Fruit (Sydney)	100 kg	250 kg	500 kg	1000 kg
to	Australia	$1.42/kg	$1.12/kg	87c/kg	-
to	Singapore	$1.67/kg	-	$1.49/kg	$1.41/kg
to	London	-	$3.82/kg	$3.60/kg	$3.32/kg

Flowers: 45 kg min. 100 k min.
to Sydney - $1.26/kg, 1.12/kg
to Singapore - 100 kg min. $2.00/kg
to London (commodity rate no. 1420) flowers or 100 kg min. $4.60/kg, 1,000 kg $4.09.

Nursery stock, bulbs, seeds and tubers excluding cut flowers.
No. 1400 100 kg min $3.71
1000 kg min $3.44

Internal

Freightair Christchurch to Auckland 94c per kg.
Christchurch to Wellington 56c per kg.

Jet X 50% surcharge on Freightair.
Christchurch-Wellington .79c
Christchurch-Auckland 1.35 kg
$4.30 minimum charge.

4.9.4 Transport of Cooltainers (New Zealand to Melbourne)

18.5 cubic metres (14.5 tonnes)	$3,999
26.4 cubic metres (17.3 tonnes)	$5,590

4.10 FERTILISERS

4.10.1 Fertiliser Subsidies

For price and freight subsidies see "Assistance and Incentives for Farmers", Section 1.4.

4.10.2 Ravensdown Fertiliser Co-operative Ltd (ex Works Christchurch)

As at November 1982

N	P	K	S		Farmers Bulk Per tonne	Farmers Bags Per tonne
	RATING					
0	8	0	10	Flowmaster Super	122.25	138.25
0	9	0	11	Super	125.60	141.60
0	7	0	8	Serpentine Reverted Super	117.20	133.20
0	8	0	10	Boron Super	141.70	157.70
0	8	0	10	Cobalt Super	144.55	160.55
0	8	0	10	Copper Super	143.75	159.75
0	9	0	11	Molybdate Super 500g	133.80	149.80
0	9	0	11	Molybdate Super 250g	130.25	146.25
0	7	0	8	Molybdate Reverted Super	125.25	141.25
0	8	0	10	Legume Establishment Fertiliser	137.50	153.50
0	7	7	8	15% Potash Super	136.20	152.20
0	6	14	7	30% Potash Super	149.05	165.05
0	6	14	7	30% Potash Boron Super	166.95	182.95
0	6	14	7	Potash Molybdate Super	156.15	172.15

0	4	24	5	50% Potash Super	166.15	182.15
0	4	24	5	50% Potash Boron Super	184.20	200.20
0	8	0	19	Sulphur Super	136.60	152.60
0	7	0	27	Sulphur Super Extra	146.5	162.55
0	6	11	14	22% Potash Sulphur Super	150.15	166.15
0	5	14	15	30% Potash Sulphur Super	159.25	175.25
0	7	0	15	Westland Pakihi Starter	151.80	167.80
6	6	0	14	Nitrogen Super	148.45	165.45
6	6	0	14	Nitrogen Super with Double Boron	178.00	194.00
6	5	5	13	Cropmix	157.05	173.05
2	7	0	11	Cropmix T & R	131.65	147.65
8	4	8	14	Orchard Regular	169.75	185.75
6	5	5	13	Cropmix with Boron	162.60	178.60
6	4	12	12	Orchard High K	169.85	185.85
8	4	8	13	Berryfruit Fertiliser	259.50	275.50
18	20	0	0	Cropmaster DAP	407.05	423.05
20	10	0	12	Cropmaster 20	307.65	323.65
15	10	10	7	Cropmaster 15	308.00	324.00
13	14	14	0	Cropmaster 13	348.45	364.45
46	0	0	0	Urea	-	449.55
20	0	0	0	Liquid Nitrogen	232.25	-
26	0	0	0	CAN	-	356.60
21	0	0	24	Ammonium Sulphate	206.05	222.05
0	0	48	0	Potassium Chloride	208.05	224.05
0	0	40	17	Potassium Sulphate	527.35	543.35
26	0	0	0	Nitrophoska Nitrogreen	-	360.20
12	10	10	1	Nitrophoska	-	462.00
12	5	14	6	Nitrophoska Blue Extra	-	510.75
15	7	5	0	Nitrophoska Yellow	-	429.00
19	9	0	11	Selenium Super	138.80	
0	9	0	11	Molybdate Super 500g with super	145.90	
0	9	0	11	Molybdate Super 250g with Selenium	142.35	
0	7	7	8	15% Potash Super with Selenium	148.30	
0	8	0	19	Sulphur Super with Selenium	148.75	
0	7	0	27	Sulphur Super Extra with Selenium	158.70	

Selenium fertilisers being restricted poisons are available for sale only to commercial users. Available in bulk only.

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
1st January 1982.

A = Auckland
C = Christchurch

Liquid Seaweed Strength 5 Concentrate for Agriculture and Horticulture use	22 litres		92.85
Sporumix A Trace Element Mix	45 kg	A	$ 32.34-
		C	38.28
Sporumix B Trace Element Mix	45 kg	A	$ 26.94-
		C	32.87
Keiserite	50 kg bags	A	$ 24.00-
		C	32.21
Sulphur Flowers	34 kg bags	A	$ 86.87-
		C	92.45
Zinc Sulphate	loose/kg	A	$ .69-
		C	.80
Urea 46% N ex Japan	50 kg bags	A	$ 36.54-
		C	34.80
J.B.D.U. 31%	25kg bags		$ 30.11- 34.35
Rustica 12-5-14 + 2 mgo (R tonn)	50 kg bags	A	$ 31.88-
		C	33.12
Acid Gro Plus Fert. (R tonn)	50 kg bags	A	$ 17.44-
		C	27.08
	Bulk tonne		$268.85
Bulb Gro Plus Fert.	50 kg tonne	A	$279.05-
		C	409.00
	Bulk tonne		$261.89
Crop & Grass Fert.	50 kg bags	A	$ 15.90-
Crop & Grass Fert.	Bulk tonne		$226.81
Grass Gro Plus Fert.	50 kg bags	A	$ 16.55-
Grass Organic Fert.	50 kg bags	A	$ 16.55-
Grass Organic Groplus	Bulk tonne		$237.21
Grass Potassic Fert.	50 kg bags	A	$ 15.51-
Haypaddock Gro Plus	50 kg bags	A	$ 18.34-
	Bulk tonne		$264.61
Lawntone Gro Plus	50 kg bags	A	$ 18.96-
		C	27.42
	Bulk tonne		$273.82
Lucerne Estab. Fert.	50 kg bags	A	$ 18.33-
Lucerne Main Fert.	50 kg bags	A	$ 18.78-
		C	20.52
Lucerne Main Fert.	Bulk tonne		$271.44
Maize Basal Fert.	50 kg bags	A	$ 19.09
	Bulk tonne		$274.62
Rose Gro Plus Fert.	50 kg bags	A	$ 25.58-
		C	34.02

	Bulk Tonne		$375.91
Strawberry Gro Plus	50 kg bags	A	$ 21.11
		C	P.O.A.
Strawberry Gro Plus	Bulk tonne		$307.17
Blood and bone	50 kg bags	A	$ 20.03
		C	P.O.A.
Dried blood	25 kg bags	A	$ 20.73-
		C	24.77
Magnesium Sulphate	50 kg bags	A	$ 27.48-
		C	35.42
Lime Dolomite	40 kg bags	A	$ 12.58-
		C	P.O.A.
Potash Nitrate (Crystal)	50 kg bags	A	$ 55.29-
		C	63.50

4.10.4 Ammo-phos N.Z. Ltd

North Island F.O.R. Napier - net freight additional.
Price subsidy ($15 per tonne) has been deducted.

Grade N	P	K	S	Bulk (per tonne)	Bagged (per tonne)
19	4	0	20	$350.50	$367.50
16	9	0	14	$372.50	$389.50
15	7	5	13	$382.50	$399.50
13	6	11	12	$389.90	$406.90
12	10	10	8	$408.00	$425.00
11	22	0	2	$459.00	$476.00
10	18	7	2	$463.25	$480.25
8	14	13	2	$443.00	$460.00
8	10	20	3	$433.00	$450.00

South Island - Ex Brightwater Store - net freight additional.

N	P	K	S		
12	10	10	8	$408.00	$425.00
11	22	0	2	$459.00	$476.00
16	11	0	13*	$392.63	$409.65
16	5	5	16*	$377.00	$394.00
13	5	12	12*	$378.15	$395.15
8	15	15	2*	$429.00	$446.00
Ammonium Sulphate				$286.95	$303.95

* Blended fertilisers.
Packing: polythene lined 50 kg bags.
Prices for special blends available on request.

4.10.5 Bell-Boothe

Maxicrop	5 litres	$ 15.50
Maxicrop (Agricultural packs)		
Multiple Concentrate	20 litres	$ 89.25
	200 litres	$798.00

4.10.6 New Zealand Farmers' Fertiliser Company Limited

As at 3 September 1982 - ex Auckland Works

N	P	K	S	PRODUCT	Bulk Per tonne $	Bagged Per tonne $
0	10	0	11	Superphosphate	135.80	153.30
0	8	0	8	Serpentine Super.	123.65	141.15
0	10	0	11	Cobalt Superphosphate	154.30	171.80
0	10	0	11	Copper Superphosphate	146.20	163.70
0	10	0	11	Superphosphate with Molybdenum	144.95	162.45
7	6	0	15	Ammoniated Super.	167.60	185.10
6	6	5	13	Crop Fertiliser	169.10	186.60
0	8	8	9	15% Potash Super.	149.35	166.85
0	8	8	9	15% Potash Cobalt Superphosphate	167.85	185.35
0	8	8	9	15% Potash Copper Superphosphate	159.60	177.10
0	6	8	7	15% Potash Serpentine Superphosphate	139.25	156.75
0	6	10	7	20% Potash Serpentine Superphosphate	130.50	146.50
0	7	15	7	30% Potash Super.	160.95	178.45
0	7	15	7	30% Potash Copper Superphosphate	171.10	188.60
0	5	15	6	30% Potash Serpentine Superphosphate	152.75	170.25
0	5	25	5	50% Potash Super.	176.75	194.25
0	0	50	0	Free Flow Muriate of Potash	198.90	216.40
21	0	0	24	Sulphate of Ammonia	223.60	241.10
0	0	40	18	Sulphate of Potash (in bags)		592.60
46	0	0	0	Urea (in bags)		448.50
20	0	0	0	Liquid Nitrogen	202.80	
16	9	0	15	Ammonium Phosphate Sulphate	427.70	445.20
18	20	0	2	Di-Ammonium Phosphate	393.70	411.20
14	14	6	2	Top Crop 14.14.6	412.50	430.00
12	10	10	2	Complesa 12.10.10	-	426.00

Special mixtures available - price on application.

4.10.7 Fertilisers for Horticultural Use

		$
Ammophos 13.6.11	10 kg	11.60
Blood and bone	10 kg	5.40
Dolomite	40 kg	7.80
Dried Blood	40 kg	26.50
Fruitfed Liquid Feed	32 litres	40.96
Magnesium Sulphate	10 kg	10.80
Nitrophoska foliar	25 litres	78.75
Nitrophoska permanent	25 kg	22.95
Nitrophoska nitrogreen	10 kg	8.20
Nitrophoska blue extra	10 kg	11.20
Potassium Nitrate	10 kg	16.20
Potassium Chloride	10 kg	15.60
Berryfruit Fertiliser NPK 8-4-8	bagged tonne	275.50
	bulk tonne	259.50
Agricultural lime	25 kg	2.12
Ammonium Sulphate	bulk tonne	286.95
	bagged tonne	303.95
Borax	1 kg	2.24
	10 kg	5.20
Calcium chloride	25 kg	15.18
Calcium nitrate	10 kg	10.20
Fetrilon (iron chelate)	1 kg	6.45
Fetrilon combi	2 kg	14.60
Fruitfed Liquid Feed	24 lt	32.00
IBDU	25 kg	40.64
Nitram	10 kg	15.60
Sodium Mdibdate	1 kg	35.25
Sporumix	1 kg	1.13
Sulphur	10 kg	6.20
Maxicrop	20 lt	96.33
Orchard Regular NPK 8-4-8	bagged tonne	185.75
	bulk tonne	169.75
Wuxal NPK 9.4.6 (plus trace elements)	5 litres	17.40
Iron sulphate	10 kg	8.20
Sulphated Potash	10 kg	12.00
Superphosphate	10 kg	3.40
	tonne	167.74
Superphosphate Serp. Reverted	tonne	158.52
	10 kg	3.20
Urea	tonne	496.30
	10 kg	10.00
Zinc Sulphate	50 kg	48.25

4.10.8 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
$417/hour $33.50/tonne

Topdressing:

	Job Size Tonnes	Hourly Rate
Fletcher 400 HP	0- 60	$420
	61-100	$410
	101-200	$400
	201-300	$390
	301-400	$380
	401 plus	$370
Cresco	0- 60	$654

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	$94.06	$79.43	$71.29
226-905 kg	$79.43	$61.08	$54.03
Over 905 kg	$71.29	$48.84	$40.75

Minimum charge per job $121.64. Under 8 kg per hectare $144.66 per 100 kg.

4.11 LIME

4.11.1 Cost per tonne ex quarry. (North Canterbury) Whiterock Lime Co. Ltd

Hydrated Lime	per tonne	$7.00
Green Lime	per tonne	$5.00
Calcined Lime (Burnt Lime)	per tonne	$110

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	Ploughed or loose
Under 2.5 t/ha	$5.00	$5.50	Flat rates plus	5.40
2.5 t/ha	$5.50	$6.10	up to 25% per	5.90
Over 2.5 t/ha	$6.10	$6.50	hectare extra	6.50

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 1982. 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	$430.00
Hilgendorf	$480.00
Karamu	$380.00
Arawa	$409.00
Extra for 1st generation	$ 10.00

4.12.2 Barley

Cost of seed per tonne for Certified 2nd Generation.

Manapou, Mata	$400.00
Zephyr	$380.00

4.12.3 Oats

Mapua, Amuri, Taiko	$360.00/tonne $ 70.50 treated

4.12.4 Lupins

Uniwhite, Uniharvest (estimate)	$420-430.00/tonne
Bitter blue, Borre (estimate)	$450.00/tonne

4.12.5 Ryecorn

Rahu	$350.00/tonne U/D

4.12.6 Maize

Various hybrids (treated)	$550/tonne

4.12.7 Peas

(i)	Field	
	Maples	$350.00/tonne
	Blue	$370.00/tonne
	White	$400.00/tonne
(ii)	Garden	
	Various varieties	$430.00/tonne

4.12.8 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	Rangi	$3.00
Swedes		$4.50
Turnips		$4.00
Kale	Medium stemmed	$3.30
	Giant	$5.00
Lucerne (certified)		
	Wairau	$6.50
	Rere	$11.50
Ryegrasses		
	Ruanui	$1.80
	Nui	$3.70
	Ariki	$2.30
	Manawa	$2.40
	Paroa	$2.40
	Tama	$2.50
Apanui Cocksfoot		$3.25
Clovers		
	Hamua	$2.75
	Turoa	$3.20
	Huia	$4.50

4.12.9 Seed Coating

	c/kg
Ryegrass	81
Dogstail, Timothy,	87
Lucerne	90
Red, White and Sub. Clover	90

4.12.10 Vegetable Seeds

Carrot:	
Egmont Gold	$18.96/500g
Manchester Table	$21.00/500g
Onion:	
Californian Red	$56.13/500g
Pukekohe Ultra	$20.90/500g
Pukekohe Long Keeper (M & R)	$32.00/500g
White Lisbon	$34.17/500g
Dwarf Bean:	
Tender green	$ 4.92/kg
Top crop	$ 4.92/kg
Green Beauty	$ 4.92/kg
Runner Bean:	
Mangere pole	$ 4.92/kg
Streamline Scarlet	$ 4.92/kg
Broad Bean:	
Exhibition Long Pod	$ 2.36/kg
Butter Bean:	
Golden Wax	$ 4.92/kg
Broccoli Hybrid:	
Fordhook Early	$230.10/500g
Fordhook Late	$251.04/500g
Fordhook Medium	$249.68/500g
Gem	$202.02/500g
Green Duke Hybrid	$132.38/500g
Premium Crop	$255.88/500g
Cabbage:	
Green Gold	$163.82/500g
Festival	$212.65/500g
Red Dutch	$ 23.72/500g
Wintercross	$163.82/500g
Country Green Hybrid	$217.15/500g
Lettuce:	
Webbs Wonderful	$ 17.00/500g
Triumph	$ 48.30/500g
Great Lakes Regular	$ 34.17/500g
Wintercut	$ 68.36/500g

Cauliflower:		
	All Year Round	$ 74.65/500g
	Armado Duick	$487.13/500g
	Armedo	$463.64/500g
	Maryanta	$463.65/500g
	Avalanche	$ 65.28/500g
	Fiora Blanca	$224.05/500g
Parsnip:		
	Hollow Crown	$ 11.00/500g
	V.I.P.	$ 11.00/500g
	Yatesnip	$ 11.10/500g
Pea:	Green Feast	$ 1.72/1 kg
	Onward	$ 1.73/1 kg
	W.F. Massey	$ 1.78/1 kg
Sweet Corn:		
	Honeycomb	$ 8.70/500g
	NK 51036	$ 8.28/500g
	Miracle	$ 6.90/500g
	Royal Crest	$ 7.72/500g
Silver Beet:		
	Master Green	$ 6.90/500g
	Com. Slobolt R & G	$ 13.34/500g
Tomato:		
	Moneymaker	$ 64.14/500g
	Moneymaker Gvt. app.	$148.00/500g
	Potentate Gvt. App.	$148.00/500g
Potato:		
	Kataher (Chippewa)	$290.00/tonne
	Ilam Hardy	$250.00/tonne
	Rua	$350.00/tonne
Asparagus:		
	Mary Washington	$ 29.50/500g
	Rutgers Beacon F1 (Hybrid)	$690.00/500g
Beet:	Detroit Dark Red	$ 7.42/500g
	Bolthardy	$ 26.00/500g
Brussel Sprouts:		
	Peer Gynt (Hybrid)	$527.46/500g
	Emerald Ball	$ 15.62/500g
	Jade x Reg (Hybrid)	$246.07/500g

Squash:	
Red Warren	$ 13.34/500g
Butternut Waltham	$ 16.10/500g
F1 Hyd Supermarket	$ 80.63/500g
Sweet Mana F1	$115.00/500g
Swede:	
Calder	$ 5.30/kg
Turnip:	
Red Globe	$ 4.50/kg
Marrow:	
Black Zucchini	$ 17.54/500g
Long Green Bush	$ 17.39/500g
Blackjack Hybrid	$ 44.76/500g
Cucumber:	
Perfecto Verde Hybrid	$ 37.98/500g
Green Spear Hybrid	$ 41.15/500g
Dutch Pickling Hybrid	$154.54/500g
Triumph	$180.89/500g
Leek:	
Musselborough	$ 19.30/500g
Titan	$ 36.04/500g
Pumpkin:	
Whangaparoa Crown	$ 20.05/500g
Triamble	$ 13.17/500g
Tri Star	$ 34.73/500g
Radish:	
Red Devil	$ 16.52/500g
French Breakfast	$ 7.41/500g
Long Scarlet Market	$ 7.88/500g
Spinach:	
Medania Ld Orig.	$ 6.32/500g
New Zealand	$ 8.92/500g
Egg Plant:	
Black Beauty	$ 20.06/500g
Black Bell Hybrid	$408.97/500g
Endive:	
Salad King	$ 15.42/500g
Watermelon:	
Candy Red	$ 62.10/500g
Rodeo Hybrid	$222.34/500g

4.12.11 Flower Seeds (1982 prices)

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

4.12.12 Bulbs (per 100)

Daffodils	$ 16.00 to $ 38.26
Hyancinths	$ 70.00 to $105.00
Tulips	$ 29.00 to $ 50.00
Anenomes	$ 8.50 to $ 10.00
Crocuses	$ 14.00 to $ 17.50
Fresias	$ 12.00 to $ 16.00
Nerines	$ 53.00 (pink) to $220.00 (scarlet)

4.13 SHEARING SHED EXPENSES

4.13.1 Plant

(i) Shearing Machines

Sunbeam Heavy Duty S.G.V.	$736.00
Multi-purpose Farm Model	$428.00
Lister Golden Electric	
Single phase	$732.00
Three phase	$732.00

(ii) Electric Grinders

Sunbeam Double-ended 37cm	$875.00
Lister Double-ended	
Single phase	$885.00

(iii) Handpieces

Sunbeam 'Super-grip'	$260.00
Lister 'Gun grip'	$270.00

(iv) Woolpresses

Donalds

	No Tramp Hydraulic	
	Standard Model 2 h.p. single phase motor	$3,785.00
	Maxi model 2 h.p. single phase motor	$4,215.00
	Maxi model 2 h.p. three phase motor	$4,330.00
	Electric	
	Sandow Tip Over model ESW .75 h.p. steel with wooden box	$2,500.00
	Sandow Tip Over model ESW .75 h.p. as above with wheels and custom	$2,600.00
	Sandow Tip over model ESW 2 h.p. (3 phase steel with wooden top box)	$3,200.00
	Manual	
	Sandow Vertical Hoist Model H Wood	$1,240.00
	Sandow Vertical Hoist Model HSW steel with wooden top box	$1,255.00
	Woolpress Conversion Kits available	
	Hayes 'Stevlyon' Auto. Hydraulic Press	$4,950.00
(v)	Wool Tables	
	Hayes 'Stevlyon' Fleece Weigher Table	$ 726.00
	Circular wool table	$ 291.00
	Grigg Right-angled table	$ 480.00
	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 (Cyclone)	$ 203.00
(vii)	Dagging Plant	
	Sunbeam portable petrol	$ 447.50
	Lister portable petrol	$ 355.00
	Tas portable petrol	$ 355.00
	Cam portable 12B electric	$ 285.00
(viii)	Miscellaneous	
	Donald Woolbale barrow	$ 87.00
	Fleece weigher	$ 180.00
	Hand Shears (Sunbeam) - small	$ 11.05
	- large	$ 13.40
	Dagging Shears	$ 15.05
	Wool Bale Trolley	$ 175.56
	Hook	$ 7.62
	Hayes Fleece Weighing Tray	$ 190.00
	Tas Sheep Hand Shears	$ 15.98
	Dagging Hand Shears	$ 13.30

4.13.2 Shed Expenses

Wool packs (1 per 150 kg)	Jute	$ 6.11
	Synthetic	$ 4.26
Twine (per hank)		$ 4.79
Bale Needles (average price)		$ 1.00
'Stendye' Aerosol Markers (Black, red, green, blue) 400 gm		$ 3.65
Wool Bale Stencils - Circular Numerals 75 mm		$ 27.49
- Circular Letters 75 mm		$ 67.96
- Wool store Interlocking 75 mm 0-9		$ 22.99
A-Z		$ 67.24
Grinder Papers (each)		$ 3.30

4.13.3 Wool Charges

Receiving on Sale by Sample	7.758c/kilo
Receiving, Warehousing, Weighing, Lotting etc.	8.580c/kilo
Reclassing and Binning Fleece	7.857c/kilo
Reclassing and Skirting	12.204c/kilo
Reclassing and Binning Oddments	12.204c/kilo
Blending All Wools	5.899c/kilo
Wool Board Levy) Wool Stabilisation Levy)	4% gross proceeds
Grouping	5.93/bale
Lot Building	4.29/bale
Re-Offering	4.43/bale
Straight Repacking	3.86/bale
Repacking Overweight Bales	4.43/bale
Earthquake Insurance	.5c/$100/month
Sheepsback to Store	12.0c/$100
Testing Clients lots	Yield $20.00c/lot
	Yield Micron $24.00c/lot
EC Lots under 4 bales Handling Charge	5.48c/kilo

CHARGES TO BUYERS	
Repacking Skin Pieces	$9.56/bale
Renumbering	16.0c/bale
	(over 24.0c)
If special colour requested	16.0c/bale
Gross Weight	16.0c/bale
Net Weight	16.0c/bale
Late Rebranding (after 8 days from sale)	43.0c/bale
Sheeting on Railed Wools	42.0c/bale
Stripes	16.0c/stripe

Delivery		$3.98/bale (W/B EC 3.34)
Reclassing or Blending		6.131c/kilo
Extra rebranding more than 6 characters other than Port Marks and Renumbers		43.0c/bale
7 to 9 extra		62.0c/bale
10 to 12 extra		75.0c/bale
13 to 15 extra		85.0c/bale
16 to 18 extra		93.0c/bale
19 to 21 extra		$1.05/bale
22 to 24 extra		$1.17/bale
25 to 27 extra		$1.28/bale
More than 1 Port Mark		43.0c/bale
To change a rebrand		43.0c/bale
Storage 29 cents per bale per week with minimum of		61.0c/bale
Samples up to 2 kilos		58.0c/sample
Samples up to 5 kilos		$1.14/sample
Samples up to 10 kilos		$1.82/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		$1.19/bale up to 8 days after sale
		$1.65/bale
If wool not to be weighed		.78c/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.

The Ministry of Works and Development on behalf of the Minister is responsible for the operation and maintenance of community irrigation schemes. However, in the case of Greenstreet, Loburn and Glenmark Irrigation Schemes, this role has been delegated to the respective county councils.

Water charges for 1982/83 season for community irrigation schemes in Canterbury are as follows:

Schemes	Rate/ha	Water Quota	Charge for Extra Water
Ashburton-Lyndhurst	$10.16	300mm	Nil
Mayfield-Hinds	$ 7.80	300mm	Nil
Levels	$10.16	300mm	$1.35/1000 m^3
Redcliffs	$10.16	300mm	$1.35/1000 m^3
Valetta - Farm Settlement Scheme	$ 7.50	300mm	$0.50/1000 m^3
Greenstreet	$ 2.25	100 mm every 21 days	
Morven-Glenavy	*$ 3.00 approx.	600 mm	$0.73/1000 m^3
Waireka Downs	** See below		

* Morven-Glenavy (1960 policy) is still in a development phase. The first farms to receive water have now been irrigating for nine years and the last farms have been irrigating for five years. $2.50 per hectare was the approximte average income last season. The water quota is 24 inches or (600 mm). The irrigation charge for half the water quota is $1.80 per acre ($4.45 per hectare). This charge rises evenly one-tenth per year for the first 10 years. The water charge for water in excess of half the quota is $0.90 per acre foot ($0.73 cents per 1000 m^3).

** Waiareka Downs (1975 policy) is still in a development phase. Of the seven farmers, four have been watering for six years and the other three for four years.

Charges rise as follows:

First and second years	Nil
Third year	$5.60 per roster day (approx. 21c/1000 m^3)
Fourth year	$11.20 per roster day (= 42c/1000 m^3)
Fifth year	$16.80 per roster day (= 63c/1000 m^3)
Sixth year	$22.40 per roster day (= 84c/1000 m^3)
Seventh year	$28.00 per roster day ($1.05/1000 m^3)
Eighth year	Reviewed annually from this year on, to take account of actual costs. ($28.00 per roster day is approximately $9/ha).

Waiau Irrigation Scheme

Part of this scheme received water for most of the 1980/81 season. Their first water charges will become due for

the 1982/83 season and will rise progressively over the next five years to $14/ha approximately. They will then be reviewed to take account of actual construction, operation and maintenance costs and will be subject to annual reviews thereafter. One of the remaining two blocks of the scheme received water for the first time in 1981/82 and the other should receive water in 1983.

Balmoral Irrigation Scheme

Construction commenced on this scheme in November 1981. First water is expected in 1984.

The water availability charge is zero for the first two seasons after first water and then rises in five equal amounts until in the seventh year it reaches $32.50 per hectare (approximately). It will then be reviewed to take account of actual construction, operation and maintenance costs and will be subject to annual reviews thereafter.

Not all the existing schemes are fully developed.

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 1982 to 31 March 1983 was $68.00 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	$ 52.68	$1.09
8- 40 ha	$ 73.63	$2.19

40 -80 ha	$ 220.46	$1.97
80-120 ha	$ 418.83	$1.76
120-160 ha	$ 595.13	$1.53
160-200 ha	$ 749.59	$1.32
200-240 ha	$ 881.89	$1.09
240-280 ha	$ 993.34	$0.88
280-320 ha	$1,080.32	$0.65
320-360 ha	$1,147.19	$0.44
360-400 ha	$1,190.55	$0.21
400 ha and over	$1,212.62	$0.18

Examples of this rating system are as follows:

Farm Area = 4 ha; Charge = $56.28 + (4 x $1.09) = $60.64.
Farm Area = 20 ha; Charge = $73.63 + (20 x $2.19) = $117.43.
Farm Area = 287 ha; Charge = $1,080.32 + (287 x $0.65) = $1,553.87.
Farm Area = 634 ha; Charge = $1,212.62 = (634 x $0.18) = $1,326.74.

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 Atlavar	MCPA (37.5) 2,4-D (sodium salt) (1.0), monuron	$ 4.91	$ 87.80

	(4.0), sodium chlorate (56.5)	P.O.A.	P.O.A.
Avenge 200A	difenzoquat (20.0)	$15.62	$312.50
Ban 750	dicamba (7.5)	$11.69	$229.00
Bexone MCPB	MCPB (40.0)	$ 4.79	$ 95.80
Butoxone D.S.	2,4,5-T		
2,4,5-T Vol.	(butylester) (72.0)	$15.37	$284.80
Dicambone 75D	dicamba (7.5), 2,4-D amine salt (30.0)	$ 9.61	$179.60
Dicambone 5G	dicamba (5.0)	$ 4.66	$ 95.96 (18kg)
Dicamba	dicamba (20.0)	$10.72	$210.60
Dinoseb	dinoseb (36.0)	$ 4.78	$ 95.60
Embark 2s	mefluidide (24.0)	$45.72	$ 91.44 (2 1)
Ethone	2,4-D		
2,4-D Vol.	(butylester)(36.0)	$ 6.58	$131.60
Frenock	sodium 2,2,3,3-tetra fluropropionate(88.0)	$21.03	$177.10(10 1)
Fusilade		$54.54	$267.65 (5 1)
Goal		$44.00	$220.00 (5 1)
Gramoxone	paraquat (20.0)	$11.35	$223.40
ICI 2,4,DB	2,4,DB (10.0)	$ 5.60	$112.00
Nortron	ethofumesate (20.0)	$19.95	$382.20
Nortron SC		$42.88	$ 85.76 (2 1)
Permex SDA	amitrole, 2,2-dichloro-propionic acid (25.7) (sodium salt), simazine (40.0)	$ 7.80 (500g)	$ 64.62(4.5kg) P.O.A. (80kg)
Preglone Extra	diquat (6.0) paraquat (12.0)	$12.40	$244.80
Reglone	diquat (20.0)	$12.65	$253.00
Trident	dicamba (1.87), dichlorprop (60.0) M.C.P.A. (15.0)	$ 9.79	$187.40 $1838.00(2001)
Velpar L		$26.31	$516.60
Simadex WP			$155.80(5x2kg)
Atradex WP			$152.30(5x2kg)
Simaflo		$11.24	$224.80
Atraflow		$10.97	$219.40

(ii) Ivon Watkins-Dow

Actazine 5A	atrazine (40.0)	$11.19	$219.40
Bandamine M	dicamba, (5.0) M.C.P.A.	$ 7.17	$141.80 $1406.00(2091)
Banvine	2,4-D (amine salt) (20.0), dicamba (10.0)	$11.21	$206.00

Betanal	desmedioham (8.0)		
AM II	phenmedipham (8.0)	$21.45	$107.25
Brominal M	bromoxynil (20.0), M.C.P.A. (20.0)	$15.27	$303.80
Dowpon 740-SP	2,2 dichloro-propionic acid (74.0) (sodium salt)	$ 5.35	$105.25
Eliminex 5A	atrazine (20.0) simazine (20.0)	$10.08	$197.40
Fodderkleen	chlornitrofen (20.0) picloram (1.25)	$ 7.13	$141.20
Garlon 520	picloram 5% trichlopyr 19.3%	$21.75	$432.60
High-Ester 2,4-D	2,4-D (butylester) (72.0)	$ 7.24	$131.60 $1266.00(2091)
Lo Vair D	2,4-D (butylester) (40.0)	$ 5.15	$1030.00(2001)
Hi-Foam Concentrate		$ 3.63	$ 71.60
Lo-Drift Spray Additive			$ 11.60 (1kg)
Lontrel Cereal	3,6-dichloro-picozimic Acid 3% bromoxyml (10%), MCPA (30%)	$16.69	$327.60
Lontrel Pasture	3,6-dichloro-picolime acid (1.5%), MCPB (50%)	$14.63	$286.20
MEC 40	mecoprop (40.0)	$ 6.11	$122.20
IWD Paraquat	paraquat (20.0)	$11.35	$223.40
Permazol SDA	amitrole (12.5), 2,2-dichloro-propionic acid (sodium salt) (25.0) simazine (40.0)	$11.90	$178.35(15kg)
Phytazol A	2,2-dichloro-propionic Acid (37%), amitrole (25%), solium thiocyanate (4.5%)	$ 8.28	$124.20(15kg)
Phytazol D	amitrol (13.0), 2,4-D, 2,2-dichloro-propionic acid (47.0), (sodium salt) (18.6)	$ 9.66	$140.40(15kg)
Propazol 50	propazine (50.0)	$15.87	$152.80
Scrub Dessicant TD	2,4-D (40.0), 2,4,5-T (40.0), (butylesters)	$11.68	$233.60 $2264.00(2091)
Selecta 4-CPA	M.C.P.A. (40.0)	$ 7.69	$152.20

Simazol 5A	simazine (40.0)	$11.48	$224.85
Sinox P.E.	dinoseb (36.0)	$ 5.72	$108.28(18.931)
Teedal	2,2-dichloro-propionic acid (sodium salt) (11.0), T.C.A. (63.0)	$ 6.16	$ 47.40
Tordon 2G	picloram	$ 4.98	$124.50
Tordon 50D	2,4-D (amine salt) (20.0) picloram (5.0)	$11.65	$231.60
Tordon Brushkiller DS	2,4,5-T butyl ester (40%), picloram (10%)	$29.32	$551.20 $5464.00(2091)
Tordon 1050	picloram (2.5), 2,4,5-T (butylester) (50.0)	$11.75	$235.00
Turfmaster	M.C.P.A. (10.0), mecoprop (20.0)	$ 6.41	$115.40
Weedar 77	2,4-D (amine salt) (40.0)	$ 5.80	$115.40
Weedar M.C.P.A.	M.C.P.A. (37.5)	$ 4.91	$828.00
Weedar Butyrac	M.C.P.B. (40.0)	$ 5.34	$ 95.80
M.C.P.A. Weedar Butyrac			$908.00(2091)
2,4-DB	2,4-DB (40.0)	$ 6.40	$121.40
Weedazol 4-L	amitrole (40.0),	$12.74	$191.80
Weedone Hi-Ester T	2,4,5-T (butylester) (72.0)	$15.37	$284.80

(iii)May and Baker

Asulox	asulam (40.0)	$14.95	$2716.00(2001)
Axall	bromoxynil (7.5) ioxynil (7.3) mecoprop (37.5)	$16.05	$2790.00(2001)
Buctril M	bromoxynil (20.0) M.C.P.A. (20.0)	$14.02	$280.40
Carbetamex 70	carbetamide (70.0)	$17.09	$ 85.45 (5 kg)
Combine		$31.86	$590.00
Ronstar	oxadiazon (25.0)	$26.73	$502.60
Totril	ioxynil (25.0)	$24.14	$444.00

(iv) N.Z. Farmers Fertiliser Co. Ltd.

Redene - Rural/Ispray Rural Activated Amitrole		$ 5.40	$103.60
Banvel	dicamba (20.0)	$10.76	$211.60

Rural Banweed 75-D	dicamba (7.5), 2,4-D (amine salt) (30.0)	$ 9.35 $ 8.34	$182.20 $1668.00(200l)
Cornox CWK	benazolin (30.0)	$37.40	$159.20 (5 l)
Rural Duston 15	2,4-D (sodium salt) (15.0)	$ 2.10	$ 42.00
Rural Diuron 80	diuron (80.0)	$12.80	$256.00
Rural Elapon	2,2-DPA (sodium salt) (74.0)		P.O.A.
Rural Flowable Atrazine Flowable	atrazine (50.0)	$11.28	$219.40
Rural Simazine	simazine (50.0)	$11.56	$224.80
SDA Longterm	simazine (40.0), 2,2-DPA, amitrole (25.7)	$11.68	$233.60
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)	$ 7.20	$1126.00(209l)
Treflan	trifluralin (40.0)	$ 9.95	$178.00
Rural 2,4-DB 40		$ 6.45	$122.00
Rural 2,4-D Ester 80	2,4-D butyl ester (72.0)	$ 7.25 $ 6.35	$132.00 $1270.00(200l)
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)	$ 4.90 $ 4.15	$ 88.00 $830.00(200l)
Rural MCPB	M.C.P.B. (sodium salt) (40.0)	$ 5.35 $ 4.60	$ 96.00 $920.00(200l)
Rural 2,4,5-T Ester 80	2,4,5-T butyl ester (72.0)	$15.34 $13.93	$289.60 $2786.00(200l)
Hoechst Linuron 50 WP	linuron (49.1)	$16.82	$379.75 (25kg)
Hoechst NATA	TCA (79.3)	$ 4.00	$100.00
Hoegrass 36 EC	methyl 2[4-(2,4-dichlorophenoxy) phenoxy] propionate (37.5)	$30.68	$584.00
Caldon 50 EC	dinoseb 55%	$13.57	$249.00

(v) Shell

Avadex BW	tri-allate (40.0)	$11.32	$226.40
Atrazine 80 W.P.	atrazine (80.0)	$12.40 7.5kg	$ 93.00
Atrazine 50 SC	atrazine (50.0)	$11.28	$219.40

Cearex 4	dicamba (94.0), M.C.P.A. (7.5), mecoprop (30.0)	$ 7.02	$1358.50(2091)
DNBP (Amine)	dinoseb (36.0)	$ 6.23	$112.40
Dicamba 2 Double Strength	dicamba (20.0)	$13.69	$2731.63 (209 l)
2,4,5-T	2,4,5-T (72.0)	$15.44	$2938.54(209 l)
Herbitrol	cyanazine (50.0)	$ 7.12	$ 53.40(7.5kg)
Lasso	alachlor (50.0)	$11.34	$2048.20(209l)
Linuron 50	linuron (50.0)	$17.04	$426.00
Mataven	flamprop-methyl (10.5)	$10.25	$2002.22(209 l)
Mosskiller	pentachlorophenol (12.0)	$ 3.00	$ 60.00 (209 l)
Planavin 75	nitralin (75.0)	$19.75	$197.50(10kg)
Prefix granules	chlorthiamid (7.5)	$ 5.99	$1247.50(250 kg)
Ramrod 65	propachlor (65.0)	$ 9.80	$790.20 (90 kg)
Residex LT	amitrole (12.5), 2,2-dichloropropionic acid (sodium salt) (26.0), simazine (40.0)	$11.75	$ 29.38(4x2.5kg)
Roundup	glyphosate (36.0)	$33.65	$539.00
Simazine 80	simazine (80.0)	$15.57	$ 31.14(2kg)
Simazine 50 SC	simazine (50.0)	$11.56	$224.80
Supercearex	dicamba (1.7), dichlorprop (46.5), M.C.P.A. (10.65)	$ 6.35	$1291.62 (209 l)
Weedkiller W	oils-mineral-herbicidal (23.0 to 25.0)	$107.00	$223.63(209l)
Double Strength 2,4-D	2,4-D butyl ester (72%)	$ 7.28	$1331.33(209l)
2,4-DB	2,4-Db (40%)	$ 6.40	$1251.91(209l)
MCPA	MCPA (37.5%)	$ 4.96	$871.53(209l)
MCPB	MCPB (40%)	$ 5.38	$955.13 (209l)
Paraquat	paraquat (20%)	$11.35	$223.40

(vi) Yates

Dalapon	2,2-dichloro-propionic acid (74.0)	2.5 kg 25 kg	$ 16.18 $106.12
Treflan	trifluralin (40.0)	5 litre 20 litre	$ 49.75 $178.00
Alachlor 50	50% alachlor	20 litre	$198.00
Amdal	dalapon, amitrole	10 kg	$ 91.90
Amitrole TL	20% amitrole, 18.3% ammonium thyocyanote	20 litre	$100.40
Asulox	40% asulam	20 litre	$275.20
Atrazine 50F	50% atrazine	10 litre	$107.75

Chloro-IPC	40% chloro IPC	25 kg	$106.12
Dacthal W7S	75% chlorthal-dumethyl	10 kg	$175.30
Enlde 50W	50% diphenamid	45 kg	$724.20
Faneron	50% bromofenoxim	2.5 kg	$ 80.80
Gesagard 50	50% prometryn	2 kg	$ 37.58
Kerb 50W	50% propyzamide	32 kg	$1133.85
Krenite	48% fosamine	20 litre	$382.40
Linuron 50	50% linuron	25 kg	$423.15
Paraquat (Yates)	20% paraquat dichloride	20 litre	$223.40
Simazine	50% simazine	10 litre	$112.90
Velpar L	25% hexazinone	20 litre	$516.60
Venzar W.P.	80% lenacil	2.5 litre	$136.42
Vindex S.D.A.	25.7% 2,2-dichloropropionic acid 12.5% amitrole 40% simazine	10 kg	$132.70

(vii) Bayer

	Active Ingredient(s) (%)	Pack Size	Per Carton	
Goltix 70 WP	metamitron 70%	3 kg	2 x 3 kg	$39.75/kg
		25 kg		$38.75/kg
Linuron 50 WP	linuron (50.0)	2 kg	2 x 2 kg	$18.20/kg
		25 kg		$16.95/kg
Mecomix M		5 litre	4 x 5 l	$ 6.75/l
		20 litre		$ 6.44/l
		200 litre		$ 6.10/l
Sencor 70 WP	metrabuzin (70.0)	500 g	6 x 500 g	$65.95/kg
		1.5 kg	4 x 1.5 kg	$66.40/kg
Tribunil 70 WP	metabenz-thiazuron (70.0)	1.5 kg	4 x 1.5 kg	$25.00/kg
		25 kg		$23.50/kg
Ustilan 70 WP	ethidimuron (70.0)	1.5 kg	4 x 1.5 kg	$37.75/kg
		18 kg		$36.90/kg

(viii) BP Chemicals

BP Alachlar	alachlar (50.0)	5 litres	$56.00

(ix) Fruit Growers Federation (Horticultural Herbicides)

Actazinesa	1 litre	$10.45
Alicep	1 kg	$30.45
Alloxol	1 kg	$55.60

Ammate XL	1 litre	$ 4.30
	20 litre	$86.00
Pirimor	1 kg	$31.95
Basagran	1 litre	$29.90
Brasoran	1 kg	$28.95
Caldon 50 EC	5 litre	$77.20
Caragard 500 FW	5 litre	$57.00
	20 litre	$244.40
DNBP Amine	1 litre	$ 6.23
Gesagard	2 kg	$37.58
Gesatop 500W	5 litre	$57.80
	20 litre	$224.80
Gesatop 50 WP	2 kg	$31.16
Hoegrass 36 EC	5 litre	$153.40
Hyvar XL	5 litre	$75.60
	20 litre	$257.00
Kerb 50 W	1 kg	$45.60
Krenite	2 litre	$40.62
Lasso	5 litre	$56.70
MH 30	1 litre	$ 7.75
Network	1 litre	$12.50
Nortron	5 litre	$ 95.30
Prefix 7.5	1 kg	$ 8.69
Pyramin	1 kg	$33.25
Sencor 70 WP	1 kg	$61.25
Simadex WP	1 kg	$15.58
Sinbar	1 kg	$59.00
Simazol 5A	1 litre	$11.48
Simaflo	5 litre	$57.75
Surflan	1 kg	$31.25
Tenoran	1 kg	$20.99
Treflan	5 litre	$49.75
Tribunil 70 WP	1 kg	$22.70
Weedazol	1 litre	$12.46
Chloro IPC	1 litre	$ 9.22
Lo Drift	1 kg	$ 7.78

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 Dust			$ 76.50
	Actellic		$27.34	$115.30 (5 l)
	Actellic SG	pirimiphos-		
	No. 20	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)		$129.20 (20 kg)
	Gramothion 60	fenitrothion (60.0)		$181.00
	Malathion 50	maldison (50.0)		$ 98.20
	Pirimor 50	pirimicarb (50.0)	$31.95	
	Preglone		$62.00 (51)	$244.80
	Reglone		$64.65 (51)	$253.00
	Gammexane Insect Powder			P.O.A. (20 kg)
	Sybol		$19.95	$ 99.75 (5 l)
(ii)	N.Z. Farmers Fertiliser Co. Ltd.			
	Ispray			
	Azinphos Methyl	azinphos methyl (50.0)	$15.50	$223.50 (15 kg)
	Carbaryl 80 W	carbaryl (80.0)	$ 8.45	$126.75
	Dibrom 8 E		$20.40	$ 20.40 (1 l)
	Furadan	carbofuran (75.0)	$22.25	$ 22.25 (500g)
	Lindane 50 W	lindane (50.0)	$14.57	$ 29.14 (2 kg)
	Exatin 250 EC		$13.26	$ 66.30 (5 l)
	Orthene 75	acephate (25.0)	$28.15	$281.50 (10 kg)
	Phorate 20 G	phorate (20.0)	P.O.A.	
	Thiodan 35 EC	endosulfan (35.0)	$13.94	$203.80
(iii)	Ivon Watkins-Dow			
	Dyzol 80 EC	diazinon (80.0)	$18.50	$351.00
	Dyzol 20 G	diazinon (20.0)	$ 5.54	$ 83.10
	Fenite 80	fenitrothion (80%)	$13.43	$258.00
	Lorbsan 40 EC	chlorpyrifos (40.0)	$24.40(2)	$106.50 (5 l)
	Lorsban 50 W	chlorpyrifos (50.0)	$25.85	$ 51.70 (2 kg)
	Nexion 40 EC	bromophos (40.0)	$14.88	$287.60
	Plictran 600F	cyhexatin (50%)	$63.40	$126.80 (2 l)
	Thimet 20 G	phorate (20.0)	$ 4.77	$ 71.55 (15 kg)

(iv) N.Z. Farmers Fertiliser Co. Ltd
Rural-Redene

Caterkil		$ 8.88	$177.60
		$ 7.95	$1590.00(200l)
Decis 2.5 EC		$44.96	$ 44.96
Malathion 50	maldison (50.0)	$ 5.59	$103.60
Nuvan 100 EC	dichlorvos (100.0)	500 ml	$ 12.20
		5 litre	$ 92.50
Silogard	maldison	$ 1.55	$ 38.75
Ficamz		$ 3.19	$ 15.95(5 pack)

(v) Shell

Aldrin 50 EC	aldrin (50.0)	$ 5.85	$1149.50(209 l)
Bidrin concentrate	dicrotophos (1030 g/l)	$ 7.60	$ 45.60
DDT concentrate	DDT (20.0)	$ 5.99	$865.26(209 l)
Dieldrex 50 WP	dieldrin (50.0)	$16.00	$160.00 (10 kg)
Dieldrite 25		$ 6.86	$1258.18(209 l)
Gesapon 10 (granular)	diazinon (10.0)	$ 3.54	$ 88.50
Gesapon 80 EC	diazinon (80.0)	$17.96	$348.80
Lindane pellets	lindane (20.0)	$ 5.45	$136.25
Phosdrin 400	mevinphos	$21.06	$210.60(2.5x4)
Ripcord	cypermethrin (20%)	$64.00	$128.00 (1)
Shelldrite Aerosols		$ 4.44 (per aerosol)	
Sumicidin 20 WP	fenvalerate (20.0)	$54.18	$541.80 (10kg)
Sumicidin 10	fenvalerate (10.0)	$24.68	$469.60
Torque 50	fenbutalin oxide (50.0)	$38.88	$ 77.76 (4x500g)
Vapona concentrate	dichlorvos (1080 g/l)	$18.25	$182.50(2.5lx4)
Verthion EC	fenitrothion (60.0)	$10.58	$1960.42
Verthion pellets	fenitrothion (10.0)	$ 2.15	$ 53.75

(vi) Yates

Attack	47.5 pirimiphos-methyl	5 litre	$134.40
	2.5 permethrin	5 litre	$ 62.20
Lannate L	20% methomyl	20 litre	$238.00

Maldison 50 EC	maldison (50.0)	5 litre	$ 36.65
		20 litre	$129.00
Malix	35.5% endosulfan	5 litre	$ 59.85
		20 litre	$217.60
Rogor E	dimethoate (40.0)	5 litre	$ 63.50
		20 litre	$231.40
Rogor W20	dimethoate (20.0)	2.5 kg	$ 25.00
Vydate L	25% oxamyl	3.78 lit	$ 84.30

(vii) Bayer

	Active Ingredient(s) (%)	Pack Size	Per Carton	
Dasanit 5G	fensulfothion	25 kg		$ 2.90/kg
Disyston Ten G	disolfoton (10.0)	20 kg		$ 3.17/kg
Folidol M 50	parathion-methyl (60.0)	1 litre	20 x 1 l	$17.95/l
		25 litres		$12.35/l
Folimat 50 LC	omethoate (58.0)	1 litre	20 x 1 l	$26.00/l
Gusathion M 50 WP	azinphos-methyl (50.0)	2 kg	4 x 2 kg	$17.65/kg
		15 kg	15 x 1 kg	$16.65/kg
		15 kg	10 x 1.5kg	$16.65/kg
		15 kg		$15.90/kg
Mesurol 75 WP	methiocarb (75.0)	2 kg	2 x 2 kg	$54.78/kg
		25 kg		$53.38/kg
Mesurol Snail Baits	methiocarb (2.0)	10 kg		$ 5.50 kg
		25 kg		$ 5.25/kg
Metasystox (I) 25 EC	demeton-s-methyl (25.0)	500 ml	20 x 500ml	$15.95/l
		1 litre	20 x 1 l	$14.75/l
		5 litres	4 x 5 l	$12.55/l
		20 litres		$11.80/l
Nemacur 400 EC	fenamiphos (40.0)	1 litre	20 x 1 l	$25.00/l
		10 litres		$24.00/l
		25 litres		$22.80/l
Peropal 25 WP	azocyclotin (25.0)	2 kg	6 x 2 kg	$26.60/kg
Tamaron 600 LC	methamidophos (60.0)	1 litre	20 x 1 l	$19.80/l
		25 litres		$19.58/l
		200 litres		$17.93/l
Thiofor 350 EC	endosulfan (35.0)	5 litres	3 x 5 l	$13.28/l
		20 litres		$11.88/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	$19.90/l
		20 litres		$19.50/l
Diazinon 109	diazinon 10%	25 kg		$ 2.94/kg
Fenitrothion	fenitrothion	20 litres		$ 8.73/l

600 EC	(60.0)	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

(viii) Hoechst

Hostathion 40 EC	triazophos 40%		$191.00

(ix) May and Baker

Kilval	40% vamidothion	1 litre	$ 19.64
		5 litres	$ 96.00

(x) Oil Sprays

Shell Sunspray	1 litre	$ 2.36
Premium late winter	1 litre	$ 1.26
Shell Red Spray	1 litre	$ 0.96
Mobil Superior	5 litres	$ 9.90
Simicidin 10 EC	1 litre	$ 23.30
Garden Pack	500 g	$ 4.75

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)	$41.25	$ 41.25
	Chinosol W	8-hydroxyquinoline sulphate (67.0)	$79.80	$199.50
	Copper Oxychloride	copper oxychloride (50.0)	$ 5.00	P.O.A.
	Brassicol 75	quintozine (75.0)	$11.53	$237.50
	Morocide 50 WP	binapacryl (16.67) captan (53.34)	$15.00	$365.00
(ii)	Ispray			
	Brassicol 75(A)		$11.53	$237.50
	Difolatan 5 F	captafol (50.0)	$13.03	$221.20
	Difolatan 80W		$17.94	$425.50
	Chinosol W		$79.80	$199.50(2.5kg)
	Copper Oxychloride		$ 5.00	$ 10.00(2kg)
			P.O.A.	P.O.A.
	Ispray Dinocap 25W		$ 9.75	$190.50
	Fungaflor 75 WSP		$47.69	$ 47.69(100g)
	Morocide 50 WP		$15.00	$365.00
	Mancozeb 80 W	mancozeb (80.0)	$ 5.31	P.O.A.
	Orthocide 10 Dust	captan (10.0)	P.O.A.	P.O.A.
	Orthocide 80 W	captan (80.0)	$ 9.69	$232.50
	Phaltan 50 W	folpet (50.0)	$11.89	$280.75
	Plantvax 75 W	oxycarboxin (75.0)	$34.38	$34.38
	Saprol 20 EC	triforine (19.0)	$17.88	$325.00
(iii)	ICI Tasman			
	Milcurb	dimethirimol (12.5)		$28.74/2 l
	Nimrod	bupirimate (25.0)		$112.50/5x1 kg
	Ridomil MZ WP	metalaxyl (72.0)		$51.65/2.5 kg
	Sumisclex	procymidone (50.0)		$50.40/kg
				$438.30/9 kg
	Sumisclex 25			$135.00/5 l
				$530.00/20 l

(iv) Bayer

	Active Ingredient(s)	Pack Size	Per Carton	
Antracol 70 WP	propineb (70.0)	1 kg	16 x 1 kg	$ 8.00/kg
		25 kg		$ 7.00/kg
Bayleton 5 WP	triademefon (5.0)	1.5 kg	4 x 1.5 kg	$22.25/kg
		2 kg	6 x 2 kg	$22.25/kg
		25 kg		$21.35/kg
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 oxychloride (50.0)	25 kg		P.O.A.
Euparen 50 WP	dichloro-fluanid (50.0)	1.5 kg	4 x 1.5 kg	$31.36/kg
		25 kg		$29.83/kg
Bayleton 25 WP	triadmefon	25%		$50.90/kg
Bayleton 100EC			20 x 1 l	$45.00/l
			5 litre	$42.00/l

(v) Yates

Allison 50 WP	50% dicloran	25 kg		$ 60.25
		5 kg		$208.00
Benlate Dupont	benomyl (50.0)	1 kg		$44.06
Bravo 75	chlorothalonil (75.0)	2.5 kg		$72.10
		25 kg		$625.00
Bravo 500 f	chlorothalonil (50.0)	5 litre		$97.50
		20 litre		$384.20
Captan 80	captan (80.0)	2.5 kg		$31.20
		25 kg		$233.00
Copper oxychloride 50	copper oxychloride (50.0)	4 kg		$21.60
		25 kg		$ 86.50

(vi) Shell Fungicides

Kocide 101	cupric hydroxide 50%	$ 9.85	$69.60 (10kg)
Syllit 408	dodine (40.0)	$10.20	$200.00

(vii) Ivon Watkins-Dow

Saprol	tiniforine (19%)	$17.03	$ 85.15 (5 l)
Topsin M-4A	thiophanate-methyl	$17.18	$ 85.90 (5 l)

(viii) May and Baker

Rovral WP	50% idiodione		$ 48.88 (1 kg)
Rovral Flo 250		$27.32	$136.58
Ridomil MZ 72 WP	(Ciba-Geigy NZ Ltd)	$51.65 per 2.5 kg	

(ix) Fruit Growers Federation

Agrimycin	225 g	$ 8.03
Basudin 50	2 kg	$ 29.96
Bluestone	50 kg	$ 46.08
	5 kg	$ 5.50
Dichlone	2 kg	$ 30.08
Dithane M22 Maneb	2.5 kg	$ 12.38
Dithane M45 Mancozab	2.5 kg	$ 16.50
Dithane Z78	2 kg	$ 14.90
Karathane	2.5 kg	$ 23.75
Hydrated Lime	25 kg	$ 5.82
Lime Sulphur	5 litre	$ 6.25
Melprex 40	300 ml	$ 3.80
Microsul 80	2 kg	$ 6.68
Polygram 2000	25 kg	$173.75
Thirospray	2 kg	$ 14.52
Pallinal	25 kg	$212.50
Ronilan Flow	5 litre	$247.50
Ronilan	1 kg	$ 51.35

4.15.4 Miticides

Omite 30 W (Ispray)	$23.60 per 2 kg
Peropal 25	$53.20 per 2 kg

4.15.5 Larvacides

Larvacide Larvamps	$ 4.14 per tin
Chloropicrin	$73.70 per 25 kg

4.15.6 Soil Fumigants

Shell DD (1,2-dichloropropane 1,3 dichloropropene) 100%	$61.20 per 20 l
Methyl Bromide	$ 2.80 per 454 g
Terrazole	$68.93 per kg

Basamid Granules	$ 7.55 per kg
	$137.80 per 20 kg
Chinsol W	$199.50 per 2.5 kg
Formalin	$16.70 per 5 l
	$41.40 per 20 l
Di Trapex (C)	$441.50 per 50 l

4.15.7 Growth Regulants

Alar 85 (Ispray)	$53.00 per 500 g
	$195.00 per 2 kg
Caldon 50 EC (Ispray)	
Bramble de-suckering agent	$77.20 per 5 l
	$286.40 per 20 l
Fatol Super (Ispray)	
Tobacco super control agent	$120.00 per 20 l
ANA	$11.25 per litre
Berrysize	$17.08 per 2 l
Fulset	$ 3.94 per 25 ml
Seradix	$17.15 per 600 g
Stop Drop	$ 2.90 per 50 ml
Ethrel	$52.28 per litre

4.15.8 Wetting, Spreading and Marking Agents

Ortho Spray Slicker (Ispray)	
sticking agent	$133.60 per 20 l
Rural Spreader Slicker 15	
wetting agent	$ 33.20 per 20 l
Rural Liquid Spray Marker Dye	$730.89 per 27 l
Yates Sprayfix	$ 5.70 per 2 l
	$ 11.40 per 5 l
	$ 41.60 per 20 l
Spraymarka	$ 13.65 per 250 g
Citowet	$ 6.45 per litre
	$127.50 per 20 l
Triton B 1956	$ 18.00 per 2 l

4.15.9 Miscellaneous Chemicals

Agral LN	$ 34.60 per 20 l
Royal - MH	$ 30.97 per 3.8 l
Rebwachs WF	$ 72.50 per 2.5 kg
Casoron 7.59	$135.75 per 25 kg
Ispray Saprene	$ 26.54 per litre
Temik 10 g	$ 12.99 per kg
Wuxal (foliar fertiliser)	$ 17.50 per 5 l
Wuxal 9.4.6 (N,P.K)	$ 3.86 per litre
Syvel Disinfectant	$ 3.01 per litre

Pinol Antiseptic deodorant	$ 3.02 per litre
Talon WB	$23.55 per 2.5 kg
Rubigan	$23.00 per 500g

4.15.10 Aerial Spraying

(i) Airwork Agricultural Aviation Ltd

Brush Weeds	450 l/ha	$65.00/ha
Insecticides	112 l/ha	$17.00/ha
Cereals	112 l/ha	$17.00/ha
Defoliation	225 l/ha	$24.00/ha
Potatoes	135 l/ha	$18.00/ha
Potato 1.5 acres (minimum)	135 l/ha	$23.00/ha
(Over 100 acres 5% group discount may apply)		
Pasture	112 l/ha	$15.50/ha
Nitrogen	225 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						90.63	111.47
0- 10					55.38	78.54	92.34
0- 20	12.83	18.52	27.89	47.52	50.35	78.54	92.34
21- 40	10.62	15.70	26.58	45.31	50.35		92.34
41- 80	9.76	14.85	25.17	43.30			
81-120	9.21	14.40	24.36				
Over 120	8.17	13.69	23.26				

Minimum charge for flying = $200.00

Helicopter Spraying:

Hourly rates:	Placement and Charter Per Hour	Productive Using Ancilliary Equipment
Hiller 12E	408.00	448.00
Hughes 300	342.38	382.66
Hiller Soloy	499.00	540.00
Hughes 500	484.00	524.00
Bell Jet Ranger	524.00	564.00
Hughes 500D	524.00	564.00

Positioning fee $262.00

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	$13.37
56	$15.25
84	$19.07
112	$22.88
140	$26.71
168	$36.23
224	$45.79
280	$61.03
392	$74.39
448	$96.50
560	$122.06

(iv) Whirl-Wide Helicopters Ltd

	Hourly rates
AS 130 Squirrel	$600
Bell Jet Ranger	$540
Hiller Soloy (Turbine)	$480
Hiller 12E	$460
Hughes 300C	$350

Spraying prices 1982/83 Season

	Per Ha
*Bush Weeds up to 9	$125.00
9 - 18	$115.00
over 18	$105.00
*Pre burn and release - single pass	$ 50.00
- double pass	$ 62.50
*Defoliation and blight	$ 36.00
*Crop and thistles	$ 21.00
*Thistles - low volume	$ 16.20
*Insecticides	$ 27.60

* The above are maximum rates.
Large areas subject to negotiation.

4.15.11 **Ground Application**
(materials extra)

(i) Gun Spraying

One man plus fully equipped truck $25.50 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 $12-$15.50 per hectare.

4.16 SELLING CHARGES

4.16.1 Yard Fees

Addington:

Sheep and lambs	.37	Calves	$2.14
Fat cattle	$2.57	Bulls	$4.59
Store cattle	$2.14	Porkers	.92
Vealers	$2.14	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 12c

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	) 0.70	
Store cattle	)	plus loading/unloading fee of 10c per head
Dairy cattle	) 0.80	
Bulls	1.00	

4.16.2 Commissions on Stock sold through a Stock and Station Agent

Sale Yards		Clearing Sales	
Sheep	4.75%	Sheep	10%
Fat Cattle	4.75%	Store Cattle	4.75%
Store Cattle	4.75%	Pigs	4.75%
Vealers	4.75%	Dairy Cows	7.5%
Bulls Stud	7.5%	Implements & Sundry	10.0%
Dairy Cattle	7.5%	Furniture	15.0%
Pigs	4.75%		
Horses	8.0%	Special Sales	
Horses	8.0%		
Deer	4.75%	Stud Cattle	7.5%
Grazing	10.0%	Stud Sheep	5.75%

4.17 PLANTS

4.17.1 Farm Shelter Trees and Shrubs

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)
Thuya	$40 (3 year trees)
Pinus Muricata	$25 (2 year trees)
Arizonica	$33 (2 year trees
Macrocarpa	$33 (2 year trees)
Lombardy Poplar	$40 (small)
Douglas Fir/Oregon	$30 (3 year trees)
Cedrus deodara	$50 (3 year trees)
Eucalyptus	$60 (small in tubes)
Willows - S.matsudana	$40 (1 year trees) $15 (cuttings)

- S.1002	$40 (1 year trees) $18 (cuttings)
- S.1040	$40 (1 year trees) $18 (cuttings)
- S.1184	$25 (cuttings)
Acer Negundo (Box Elder)	$20 per 10
Alnus Glutinosa (Black Elder)	$22 per 10
Betula Pendula (Silver Birch)	$20-$30 per 10
Cortaderia Selloana (Pampas Grass)	$50 per 100
Phorium Tonax (N.Z. Native Flax)	$ 7 per 10
Poplars Flevo	$40 per 100
Robusta (Black Poplar)	$40 per 100
Sequoia Sempervirons (Californian Redwood)	$45 per 100
Pussy Willow	$47 per 100
Cytisus Proliferus (Tree Lucerne)	$30 per 100
Dononea Viscosa	$55 per 100
Ligustrum (Golden Privet)	$48 per 100

4.17.2 **Shelter Belts**
(establishment costs)

$3.00 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	$ 9.60 each
Apple	$ 6.80 each
Pear	$ 8.15 each
Plum	$ 7.60 each
Peach	$23.00 each
Apricot	$ 9.00 each
Cherry	$11.95 each
Feijoa (grafted)	$5.95 to $ 9.70 each

(ii) Nut Trees

Sweet Chestnut	$ 6.00 each
Japanese Walnut	$ 5.30 each
Hazelnut	$ 6.40 each

(iii) Citrus Fruits

Lemons (from N.I.)	$ 7.50 each

Tangelos	$12.50 each
Mandarins	$12.50 each
Grapefruit	$12.50 each
Oranges	$12.50 each

4.17.4 Vegetable Plants

Beetroot	.95 per 12
Cauliflower	$1.70 per 12
Sweetcorn	.95 per 12
Green pepper	.95 per 12
Celery	$1.70 per 12
Cabbage	$1.70 per 12
Grafted Tomato	$1.45 each
Butternut squash	.95 per 12
Zucchini	.95 per 12
Parsley	.95 per 12
Tomato	$1.00 per 12
Brussel Sprouts	$1.70 per 12
Broccolli	$1.70 per 12
Silverbeet	$1.70 per 12
Leeks	.95 per 12
Onions	.95 per 12

4.17.5 Fruit Plants

Berryfruit:

Strawberry	$1.60 per 6
Raspberry (plants)	
Avon)	
Marcy)	$20.00 per 100
Fairview)	
Heritage)	
Haida)	$25.00 per 100
Raspberry bushes	$ 8.50 each
Blueberry unrooted cuttings	$4.95 each
tissue cultured (soft tubes)	$4.95 each
tissue cultured (hard tubes)	$4.95 each
plants	$3.00 each
bushes	$5.40 each
Brambles	
Black satin (thornless)	$ 2.00 each
Blackberry (thorn free)	$600 per 1000
Boysenberry	$4 per 10
Blackcurrant - plants	$3.50 each
- cuttings - Halton Black	$8.00 per 100
Millist	$8.00 per 100
Daniels late September	$8.00 per 100

Redcurrants (cuttings)	
Jonkheer van Tefs	$8.00 per 100
Cranberries (bushes)	$6.40 each
Gooseberries (bushes)	$4.40 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 and 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 6.4 cents per litre is paid into the National Roads Fund. This is refundable where vehicles are used off public roads.

* A motor spirits duty of 9.8 cents per litre on premium

motor spirits (and 9.3 cents on regular motor spirits) into the Consolidated Revenue Account. 2.5 cents per litre of this portion is refundable for vehicles used commercially.

* A local authority tax of .66 cents per litre (and .33 cents per litre 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 8.9 cents per litre can be claimed for petrol used in an Exempted Vehicle. This is broken down; 0.4 is Road User Charges; 2.5 Consolidated Fund.

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 8.9 cents per litre can be claimed either on the actual quantity of fuel used in a Licensed Vehicle. 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 8.9 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 8.9 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 Commissioner of Works.

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) 59.1 cents per litre (after Agricultural Use Rebate of 8.9 cents per litre taken off retail price of 68 cents per litre.

- Super (96 octane) 62.1 cents per litre (after Rebate 8.9 cents per litre taken off 71 cents per litre.

Diesel - 58.5 cents per litre.

Multi-purpose lubricating oil = $1.728 per litre in 209 litre drum. In a 60 litre drum it costs $1.824 per litre.

Multi-purpose grease - $2.51 per litre in 18 kg drum = $45.18.

Transmission oil - $1.68 per litre in 209 litre drum. In a 20 litre container it costs $2.04 per litre.

Deposit on 209 litre drum is $28.50). Deposit on a 60 litre drum is $14.65.

Antifreeze - $2.05 per litre in a 20 litre drum. A 2 litre container costs $4.36.

In general the cost of fuel, oil and grease is considered in terms of cents per kilometre travelled.

Light trucks and cars	allow 29-38 cents per km
Heavy trucks	allow 55.00 cents per km approx
Tractors 37.3 kW (50 hp)	allow $3.56 per hour
60.0 kW (80 hp)	allow $6.06 per hour

67.1 kW (90 hp)	allow $10.90 per hour
111.9 kW (150 hp)	allow $18.74 per hour
Crawler tractors	allow $7.15 per hour
Balers (conventional)	allow $1.60 per hour
Header - tractor drawn	allow $1.60 per hour
- self propelled	allow $8.00 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 20-28 cents per km
Wheel tractors	allow $2.40 per hour
Crawler tractors	allow $4.50 per hour
Mobile plant	allow 10% of initial value

4.20.3 Tractor Running Costs

Supplied by J.M. Snook, Hutchinson Motors, Christchurch. Updated March 1983 and based on running costs over 5 years.

(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 @ 58.5c per litre	$11,846.25
Fuel Filters change every 600 hours = 5 @ $4.50	$ 22.50
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 @ $13.60	$ 136.00
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	$ 290.00
Top Overhaul including parts, one @	$ 550.00
Air Cleaner oil bath or dry elements	$ 220.00
Tyre Maintenance wear and tear 3000 hours	$ 160.00

Grease (lubricating)	$ 50.00
Anti-Freeze radiator	$ 90.00
General Renewal Repairs fan belts, radiator hoses, general servicing etc.	$ 800.00
Battery	$ 198.00
TOTAL DIRECT COSTS	$15,155.00
TOTAL DIRECT PER YEAR	$ 3,031.00
TOTAL DIRECT PER HOUR (assuming 600 hours per year)	$ 5.05
TOTAL DIRECT PER HA (assuming .607 ha per hour)	$ 8.32

FIXED COSTS

Registration agricultural use, $36.20 per year	$ 181.00
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
Depreciation D.V. over 5 years	$11,000.00
Interest on $14,060 for 5 years @ 10%	$ 7,030.00
TOTAL FIXED COSTS	$18,527.80

TOTAL COSTS

TOTAL COSTS FOR 5 YEARS	$33,683.80
TOTAL COSTS FOR 1 YEAR	$ 6,736.56
TOTAL COSTS FOR 1 HOUR (assuming 600 hours per year)	$ 11.22
TOTAL COSTS FOR 1 ha worked (assuming .607 ha/hour)	$ 18.50
TOTAL COSTS INCLUDING LABOUR AT SAY $5.00 PER HOUR	
TOTAL COSTS PER HOUR	$ 16.22
TOTAL COST PER HA WORKED (assuming .607 ha per hour)	$ 26.72

(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 @ 58.5 cents/litre	$30,420.00
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 @ $19.40 each	$ 271.60
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 @ $25.20	$ 176.40
Fuel Filters change ever 600 hours 7 @ $4.50	$ 31.50
Air Cleaner oil bath or dry element	$ 220.00
Injector Servicing every 1500 hours	$ 350.00
Top Overhaul including parts	$ 550.00
Battery one replacement heavy duty	$ 265.00
Tyres 14 x 30 or 15 x 30, say one	$ 690.00
Anti-Freeze radiator, 6 litre @ $3.68 per litre plus top up, (2 changes of 3 litres) say	$ 22.08
Grease small drum for 4000 hours	$ 45.18
Power Assisted Steering oil and filters over 4000 hours	$ 60.00
General Renewals and Running Repairs fan belts, radiator hoses, brake adjustments, etc.	$ 700.00
TOTAL DIRECT COSTS	$34,634.84
TOTAL DIRECT COSTS PER YEAR	$ 6,926.97
TOTAL DIRECT COSTS PER HOUR (800 hours per year)	$ 8.66
TOTAL DIRECT COSTS PER HA WORKED say .81 ha per hour	$ 10.69

FIXED COSTS

Registration $36.20 per year. This is for Class B	$ 181.00
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%	$12,900.00
TOTAL FIXED COSTS	$29,537.65

TOTAL COSTS

TOTAL COSTS FOR 5 YEARS	$67,172.49
TOTAL COSTS FOR 1 YEAR	$12,834.50
TOTAL COSTS FOR 1 HOUR (800 hours per year)	$ 16.04
TOTAL COSTS FOR each ha worked say .81 ha per hour	$ 19.80
TOTAL COSTS INCLUDING LABOUR AT $5.00 per hour direct costs per hour	
DIRECT COSTS PER HOUR	$ 13.66
DIRECT COSTS PER HA WORKED	$ 16.86
TOTAL COST PER HOUR	$ 21.04
TOTAL COST PER HA WORKED	$ 25.97

(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, @ 58.5 cents per litre	$33,345.00	$56,160.00
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 @ $20.00	$ 200.00	$ 200.00
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 @ $22.40	$ 179.20	$ 179.20
Fuel Filters, duals, change every 600 hrs 10 filters @ $4.50	$ 45.00	$ 45.00
Air Cleaner dry type Cyclopac cartridge, $140.00 each, say three replacements over 3000 hrs	$ 420.00	$ 420.00
Injector Servicing every 1200/1500 hrs 4 and 6 cylinder, 2 services	$ 350.00	$ 495.00

Top Overhaul including parts	$ 550.00	$ 700.00
Battery one replacement in 5 years, heavy duty	$ 265.00	$ 265.00
Tyres 15 x 30 to 18.4 x 38, say one replacement or relug	$ 690.00	$ 780.00
Anti-Freeze radiator 4-6 litre, plus top up	$ 29.00	$ 35.00
Grease small drum	$ 45.00	$ 45.00
Power Assisted Steering oil and filters	$ 38.00	$ 49.00
General Renewals and Running Repairs, fan belts, radiator hoses, brake adjustment, etc.	$ 600.00	$ 700.00
TOTAL DIRECT COSTS	$37,777.95	$61,210.50
TOTAL DIRECT COSTS PER YEAR	$ 7,555.59	$12,242.10
TOTAL DIRECT COSTS PER HOUR	$ 12.59	$ 20.40
TOTAL DIRECT COSTS PER ha worked (say 1.2 ha per hour)	$ 10.49	$ 17.00
FIXED COSTS		
Registration $36.20 per year (Class B)	$ 181.00	$ 181.00
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%	$15,500.00	$26,000.00
TOTAL FIXED COSTS	$46,244.58	$63,176.38
TOTAL COSTS		
TOTAL COSTS FOR 5 YEARS	$84,022.53	$124,386.88
TOTAL COSTS FOR 1 YEAR	$16,804.50	$24,877.37
TOTAL COSTS PER HOUR	$ 28.00	$ 41.46
TOTAL COSTS PER ha worked (say 1.2 ha per hour)	$ 23.33	$ 34.55

TOTAL COSTS INCLUDING LABOUR AT $5.00 PER HOUR				
DIRECT COST PER HOUR	$	17.59	$	25.40
DIRECT COST PER HA WORKED	$	14.65	$	21.16
TOTAL COST PER HOUR	$	33.00	$	46.46
TOTAL COST PER HA WORKED	$	27.50	$	38.71

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.

Cultivation 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 $8.00 per hour. Repairs and maintenance add a further $2.00. If 12% is added for machinery costs, this gives a total variable cost of up to $20 per hour if labour is employed. Given that cultiv-

ation 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 $16.00 per hectare fromm one extreme to $200 at the other. By contrast the variable cost of machinery per hectare for a single spray application will vary according to tax rate from $1.50 to $6.00 for a smaller tractor covering 2 ha per 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 to 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	8.00		20.00	
without labour		6.00		15.00
	18.55	16.55	25.54	20.54
Costs per hectare				
(a) Lowest cost x 2 hrs/ha		33.10		23.08
(b) Highest cost x 10 hrs/ha			255.40	

The range of costs for cultivation therefore will lie between $33.10 and $255.40/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 $8.27 to $17.00, and at a spraying rate of 2 ha/hr will amount to $4.14 to $8.50 per hectare. 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 $27.00 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 1982/83 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 58.5c per litre	$12,870.00
Fuel filters: duals, change every 600 hours, say 4 @ $12.00 each	$ 48.00
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 @ $16.40 each	$ 49.20
Air cleaner: dry type, one every 1000 hours	$ 140.00
Injector Servicing: once every 5 years	$ 240.00
Battery: one heavy duty	$ 265.00
Grease: small drum for 1000 hours	$ 45.00
Power steering oil and filters	$ 45.00
General renewals and running repairs: fanbelts, radiator hoses, cutter blades, reel tines, conveyor chains, concave fittings etc.	$ 5,300.00
TOTAL DIRECT COSTS	$19,329.20
TOTAL DIRECT COSTS PER YEAR	$ 3,865.84
TOTAL DIRECT COSTS PER HOUR	$ 19.33
TOTAL DIRECT COSTS PER HECTARE HARVESTED, say 1.25 ha/hour	$ 15.46

FIXED COSTS

Registration: $36.20	$ 181.00
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	$97,840.50
TOTAL COST FOR 5 YEARS	$117,169.70
TOTAL COST FOR 1 YEAR	$23,433.94
TOTAL COST FOR 1 HOUR	$ 117.17
TOTAL COSTS FOR EACH HECTARE HARVESTED 1.25 ha per hour	$ 93.73
TOTAL COST INCLUDING LABOUR @ $6.50 per hour	
DIRECT COSTS PER HOUR	$ 25.33
DIRECT COSTS PER HECTARE HARVESTED	$ 20.26
TOTAL COST PER HOUR	$ 123.67
TOTAL COST PER HECTARE HARVESTED	$ 98.94

4.20.6 Registration Costs

As at December 1982.

Cars	$53.40 per year
Trucks	
- light under 2000 kg	$53.40 per year
- heavy, 2 axles	$92.40 per year
Heavy with 3 axles	$101.40
Heavy with 4 or more axles	$110.40
Wheel Tractor	$36.20 per year
Trailers	
- light	$23.20 per year
- heavy	$39.20 per year
Heavy semi trailer	$78.20
Heavy full trailer	$87.20
Motor Cycles	
- under 60 cc	$20.20 per year
- 61cc and over	$37.40 per year

Farm Vehicles
(Only those which qualify for exemptions, the fees shown apply only to farm vehicles which are used on a road under restrictions prescribed by the Motor Spirits Duty Refund Regulations 1978).

Class B farm tractors	$36.20
Class B farm trucks	$44.20
Class B farm motor cycles (over 60 cc)	$37.40
Class B farm motor cycles (60 cc or less)	$20.20
Class B farm power cycles	$20.20
Class B self-propelled (i.e. trailers drawn by Class B farm vehicles	$36.20

4.20.7 **Road User Charges**
(Taken from the Ministry of Works and Development booklet "Road User Charges")

(i) Time Licences

- apply to off-road motor vehicles.
- 3 licence categories.

Category 70.81
- among others includes tractors other than those exempted, sawing/shearing apparatus for tree cutting, bulldozers and angle dozers.

Category 82.87
- among others includes front-end loaders, mobile pile drivers, self-propelled trench diggers and excavators.

Category 88.91
- among others, includes mobile cranes.

Maximum Gross Weight (tonnes)	Vehicle Type Numbers 70.81	82.87	88.91
1	$19.00	$19.00	$19.00
2	$19.00	$19.00	$24.19
3	$19.00	$19.00	$29.37
4	$19.00	$25.92	$38.01
5	$19.00	$29.37	$44.92
6	$19.00	$36.28	$53.56
7	$22.46	$43.20	$65.66
8	$25.92	$53.56	$77.76
9	$29.37	$63.93	$95.04
10	$36.28	$76.03	$112.32

(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 23
- unpowered vehicle, 1 single tyred axle.

Category 24
- unpowered vehicle, 1 twin tyred axle.

Category 26
- unpowered vehicle, 1 group of 2 close axles both single tyred.

Category 27
- unpowered vehicle, 1 group of 2 close axle, 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	23	24	24	27
1	8.65	8.65	0.94	0.90	0.90	0.90
2	9.64	9.61	2.30	2.02	1.87	1.89
3	10.81	10.70	15.20	3.84	3.02	3.04
4	12.39	12.04	11.42	7.12	4.46	4.63
5	14.70	13.90	23.50	13.00	6.52	6.96
6	18.16	16.50	44.76	23.01	9.54	10.41
7	23.28	20.13	79.15	38.83	13.86	15.51
8	30.62	25.24	131.41	62.65	20.04	22.86
9	40.87	32.28	206.97	96.85	28.59	33.12
10	54.80	41.72	312.02	144.16	40.17	47.08

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 Works and Development.

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 B1	B2	B3	Residential Rate
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

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" - $8.60 per year (monthly).
"New Zealand Farmer" - $23.00 per year (fortnightly).
"New Zealand Journal of Agriculture" - $16.00 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 $1.50 per quarter, March, June, September, December.
- Ledger Activity Fee - 8c per chargeable transaction (after first 30 transactions per quarter).
- Cheque Duty 5c per form.
- Clearance Fee, first 5 each day are free, 9c per entry if over 6 entries, e.g. 6 entries x 9c = 54c.

(ii) Stock Companies.
Client drawing on a stock company or dev, 10c including stamp duty. Stock company paying accounts for client per payment $1.00 no base fee is charged.

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 January 1983.

(i) Buildings: per $100 value.
Fire Cover:
Dwellings - Brick $0.26.
- Wood $0.34.
Outbuildings - Brick - concrete or earth floor $0.175-0.110.
- 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 (same as buildings).
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 $100 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 $0.085 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 $30.00 per tractor.

(iv) Specialised Farm Equipment - Chainsaws, tools, scanaprobe, nitrogen contrainers, radio telephones etc.

All Risks: per $100 value - about 5% 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, 0.50% (time limit up to 12 months).
As per above but excluding whilst in any building or silo, 0.75% (3 month limit of cover).

Fire plus Hail, Flood, Stock, Snow and Frost Risk - 1.75%.

Hay - $0.28.

(vi) Wool:

0.85
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	$10.00

Forest and Rural Fires Act plus $15.00
The premiums are based on the ownership of one property.

(xi) Stock Insurance

These charges are from Pyne Gould Guinness for "loss of use by accident".

Pedigree bulls: 5.75% for 12 months.
Run bulls: 6.9% for up to 8 months.
Limit of $25,000 per animal.
Stud rams: 14% for 12 months.
Stud rams death only: 12% for 12 months.
Limit $5,000 per animal.
Stud Boar: 12% for 12 months.
Limit $5,000 per animal.
Goats and Deer are not insurable.

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 or the local body concerned.

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	$10,000-12,500
Factory Supply Dairy	$ 9,000-11,500
Sheep and Mixed Cropping	$ 9,000-11,000
Horticultural Units	$12,000-14,000

Generally within the range $13,000-$17,000 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	$31.64
	3.55mm		$33.27
	3.15mm	408m	$33.27
	2.5mm H.T.	648m	$35.81
	2.5mm 12.5 gauge		$33.94

(ii)	Barbed Wire		
	2.5mm (barbs 75mm)	240m	$45.43
	2.5mm (barbs 150mm)	261m	$45.43
(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	$3.51
		1.5m	$3.66
		1.65m	$3.85
		1.8m	$4.07

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	$1.70
		1.5m x 75mm x 50mm	$1.85
(ii)	Concrete Wigram Posts Ltd:		
	Strainers	2.4m x 200mm x 200 mm	$24.10
		2.1m x 175mm x 175mm	$19.80
		2.1m x 150mm x 150mm	$16.10
		2m x 150mm x 150mm	$14.95
		2m x 125mm x 125mm	$12.10
	Half Round	2m x 150mm x 150mm	$14.95
	Stays	2.4m	$ 8.85
		2.7m	$ 9.50
	Stay blocks	Extra large	$ 4.35
		Large	$ 2.80
		Small	$ 2.45
	Cattle Posts	1.95m	$ 7.50
	Intermediates	1.54m	$ 5.00
		1.70m	$ 5.75
	Pointed Driving Posts		$ 5.90
	Sheepyard Posts		$ 6.30

	Sheepyard Gate Posts		$ 9.70
	Special Wire spacings extra		$ 0.40
	McKendrys:		
	Farm Posts	1.83m	$ 6.60
	Cattle Posts	1.98m	P.O.A.
	Sheep Yard Posts	1.67m	P.O.A.
	Post Butts	1.37m	$ 6.60
	Paling Posts	1.83m	$ 7.50
		2.77m	$ 8.50
	Gate Posts	1.83m x 15cm x 15cm	$14.00
	Fletchers:		
		1.35m	$ 7.43
		1.85m	$ 8.10
		2.77m	$11.48
(iii)	Tanalised Round Intermediates		
		1.8m x 75mm SED	$ 3.28
		1.8m x 100mm SED	$ 4.00
		1.8m x 125mm SED	$ 4.75
(iv)	Tanalised Half Rounds		
		1.8m x 150mm	$ 3.60
		2.4m x 150mm	$ 6.00
		2.7m x 150mm	$ 5.50
		3.0m x 175mm	$ 7.25
(v)	Tanalised Strainers		
		2.1m x 175mm SED	$10.25
		2.1m x 200mm SED	$11.65
		2.4m x 175mm SED	$12.90
		2.4m x 200mm SED	$14.25
		2.4m x 225mm	$15.55
		2.7m x 200mm	$17.50
(vi)	Tanalised Stock Yard Posts		
		2.7m x 150mm SED	$13.00
		2.7m x 175mm SED	$15.00
		2.7m x 200mm SED	$17.50
(vii)	Tanalised Stays		
		2.7m x 75mm SED	$ 5.65
		2.7m x 90mm SED	$ 5.75
(viii)	Deer Post	2.7m	$ 6.90- $ 9.70

SED = Small End Diameters.

4.25.4 Stays

Concrete (incl. small footing block)		$ 8.00
Tanalised	2.4m x 7.5-10cm	$ 5.35
	2.7m x 7.5-10cm	$ 5.35
	2.7m x 90	$ 5.75

4.25.5 Stay Blocks

Concrete		$ 3.00
Tanalised	200mm x 75mm x .5m	$ 2.75
	200mm x 50mm x .5m	$ 1.80
	150mm x 50mm x .5m	$ 1.30

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 (Hurricane) per 25 kg case

	Galvanised	
	50mm x 4.00mm	$48.68
	40mm x 4.00mm	$48.68
	30mm x 4.00mm	$48.68
	30mm x 3.15mm	$51.39
	7mm x 2.8mm	$52.67
Hot Dipped	4 mm	$64.13
	3.15mm	$66.64

(iii) Concrete Post Staples
(for single or double hole posts)

25 kg bags	$45.50

4.25.7 Battens (Tanalised)

1.05m x 50mm	.63
1.2m x 50mm	.75

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	$21.50
	2.1 m	$23.75
Gates	3.6 m	$52.00
	4.2 m	$55.00

(ii) McAlpines (Wooden)

Hurdles	1.8 m	$15.50
	2.1 m	$16.00
	2.4 m	$16.50
Gates Cattle	3.0 m	$47.00
	3.6 m	$49.00
	4.2 m	$53.00
Sheep Yard	1.8 m	$46.00
	2.1 m	$48.00
	2.4 m	$52.00

(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)	$97.11	$101.20	$104.63	$109.46	$112.73
Pairs (heavy)	$121.72	$127.83	$133.36	$140.16	$145.85

Long pairs (heavy)	4.50 metres long	$152.76
	4.75 metres long	$158.43

Economy	3.75m long	4.25m long
Special	$67.39 ($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	-

(vi) Aabaas Bros.

Angle Iron Gates	Standard	Heavy
2.44	74	
2.05	78	
3.66	85	102
4.27	95	110
4.88	110	120
Stressed Gates		
3.05	85	
3.66	92	116
4.27	95	110

4.88	110	120

Angle Iron Sheep Yard Gates
860mm High - 4 bars

.91	35
3.66	81

4.25.9 Gate Fittings

(i) Gudgeons
Canadian Screw 12mm-20mm - $1.77-$2.64 each
Drive Gudgeon 20mm - $3.47 each.
Std. Through Post 200mm-400mm
$3.98-$5.78 each.
"Lock" Through Post 200mm-400mm
$5.25-$7.68 each.
Square Shank Through Post 250mm-500mm
$6.30-$7.61 each.
3 post gudgeons 35cm $4.70 each.

(ii) Hinge Straps
Standard Canadian 150mm-300mm
$2.52-$6.38 per pair.
Heavy duty Canadian 300mm-600mm
$8.09-$13.41 per pair.

(iii) Clamp hinges

Single way - concrete post	
125mm-200mm	$18.01 per set
Two way - concrete post	
125mm-200mm	$19.41 per set

(iv) Gate Fastenings

Hayes Fork Chain fastener for	
for double gates	$ 7.50
for single gates	$ 7.00
Light Ring	$ 0.31
Hayes adjustable fastener for square concrete posts (3 sizes)	$ 5.09-$10.90
Cattle gate chain	$14.90
Hook and eye Gate Fastener	$ 4.18
Hayes Taper lock Hitch Pin	$ 5.56-$10.15
Standard Type Hitch Pin	$ 5.56-$ 8.26

(v) Gate lugs
Galvanised 16 and 20 mm - 53c and 69c.

Hinges - Wooden Gates	
450mm (per pair)	$ 6.70
450mm (per pair)	$12.50
Hayes Lift and Swing Gate Hinge Sets	$85.50

4.25.10 Wire Netting

(i) Cyclone

Twinlock Hinge - Joint Boundary

Type High Tensile	Height	Stay Spacing	Price/100m
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	$121.93
8 line	750 mm	300 mm	$122.32
7 line	600 mm	300 mm	$107.75

Medium Tensile

7 line	900 mm	300 mm	$134.52
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	$139.40
8 line	800 mm	300 mm	$116.39

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

Hurricane 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	$3.43	$4.24

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 High Tensile	Height	Stay Spacing	Price/100m
8 line	900 mm	150 mm	$153.28
8 line	900 mm	700 mm	$117.36
8 line	800 mm	150 mm	$147.98
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

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 grab	$45.00
Tension Handle (for permanent wire strainers)	$49.50
Straining Tension Indicator	$34.40
'Triplex' Permanent Strainers	
- not insulated	$ 1.58
- insulated	$ 2.25
'Rotatense' tensioning system (steelpost, baseplate, 4 anchors)	$50.54
Boundary Fence Clamps	$41.90
Wooden Netting Clamps	$40.85
General Purpose Strainer	$69.78
General Purpose Strainer heavy duty	$96.48
Boundary Fence Strainer	$74.39
Cyclone Hardwood Strainer Boards	
Field Fence	$80.61
Ranchman Circular Wire Strainer	$ 0.75
Handles (pair)	$16.93
Donalds Wirestrainers	
Chains in Cartons of 10	$42.50
Multigrip in Cartons of 10	$38.00
Permanent - plain in carton of 100	$ 1.77
- insulated in carton of 100	$ 2.00

(ii) Post and Standard Drivers

Hayes Tubular Standard Drivers	$30.60
Stake Driver	$52.30
Donalds Post Driver and Accessories	
Tractor operated Post Driver - Standard Model - Overall height 4.3m 180 kg weight	$1,470.00

Tractor operated Post Driver - overall height 4.9m, 230 kg	$1,765.00
Top Link - Heavy Duty Screw	$ 93.00
Wire Rope Std Length 8.38 m	$ 33.00
Wire Rope - Length 9.6 m	$ 42.00
Pilot Hole Driver 40 mm round x 1.6 m long	$ 52.00

Manual Post Driver 80mm	$46.50
125mm 15 kg	$73.50
150mm 20 kg	$87.00
150mm 25 kg	$98.00
Manual Standard Driver	$35.50

(iii) Post and Standard Removers

Donalds Standard Lifter	$35.50
Post and Standard Puller	$71.00
Hayes Standard Lifter	$48.44

(iv) Wire Reels

Hayes Combination Wire Coiler and Reel	$150.40
Multiwire Reel 2 Reels	$111.20
3 Reels	$148.60
Junior Wire Reel Standard	$43.50
Deluxe	$88.16
Bell Booth Spinning Jenny	$43.00

(v) Post Hole Diggers

Gallagher Post Hole Digger gear box, drive shaft and frame only, E370	$994.00

Gallagher Auger complete with Plain or Stony Tip

100 mm	D 140	$162.00
150 mm	D 139	$168.00
200 mm	D 141	$174.00
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

Mate Post Hole Diggers (Aitchison)

Model 85 fully motorised, 85cc two stroke powerhead	$599.00
Model 100 fully motorised, 100cc two stroke powerhead	$673.00

Aitchison Augers (R/Hand)

Size	Single Blade 1500 Series 76 cm long Replaceable Cutter and Breaker Tip	Double Blade 1700 Series 76 cm long Standard Cutterhead	
50.8mm,		1720	$55.44
76.2mm,		1730	$65.44
101.6mm,	1540	1740	$73.05
127.0mm,	1550	1750	$76.45
152.4mm,	1560	1760	$78.88
177.8mm,	1570	1770	$84.02
203.2mm,	1580	1780	$86.76
228.6mm,	1590	1790	$90.96
254.0mm,	1590-1	1790-1	$95.54

Accessories		
2701	38cm Extension	$25.74
1301-3	2-man handle assembly	$48.58

Mate Auger
Cutterheads 1700 Series R/H and L/H

Description	Application	76.2mm	101.6mm	127mm	152.4mm	177.8mm	203.2mm	228.6mm	254mm
Std Double Blade Cutterhead	Good Digging Conditions	21.76	23.05	24.22	28.53	30.09	36.66	39.96	39.96
Double Blade Tungsten Cutterhead	Fair Digging Conditions	45.72	46.84	49.99	53.43	54.47	63.09	64.07	70.75
Double Blade Cutterhead Tungsten Ripperhead	Hard Conditions	54.69	55.84	58.97	62.42	64.90	72.10	73.08	79.75
	Sandstone Hard Dry Conditions Not for Wet Conditions		36.88	37.39	40.44	44.13	48.87	49.69	50.88
Ripperhead Tungsten Brecker	As above but more durable		63.18	63.77	66.71	71.08	76.15	80.80	82.72
Double Blade Cutterhead	Two plain Cutters				53.51	56.49	62.05	63.62	65.05
Replaceable Cutters	Two Plain TC Cutters				72.69	73.36	81.24	83.79	86.86
Double Blade Cutterhead Replacement Cutter	Two Full Face TC Cutters				109.87	118.18	135.73	152.86	155.85
Double Blade Cutterheads	Two Serrated Cutters				55.30	58.31	63.91	68.27	72.77
Replaceable Serrated Cutters	Two Serrated TC Cutters				74.56	77.47	83.02	86.86	93.89

(vi) Tools

Hayes Standard Hammer and Setter	$30.60
Tubular Stake Driver	$52.30
Staple Pick	$10.00
Post Rammer - wooden handle	$14.80
- steel handle	$20.28
Channellock Fencing Pliers	$16.25
Fencing Pliers	$18.90
UTICA American Double Hammer Fencing Pliers	$19.20
Plier Pouch	$ 4.62
Staple Bag	$20.80
Fencing Apron	$25.20
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

Shade Cloth

73%	$4.28	)
50%	$4.52	) per metre
70%	$5.15	)

Windbreak Cloth

91cm x 50 m	$1.74 per metre
183cm x 50 m	$2.80 per metre

4.25.13 Electrical Fencing Components

(i) Electric Fence Energisers

Mains: 230-240 V A.C.

G301 Gallagher BEV II	$175.00
G310 Mains/Battery	$149.50
G315 Gallagher Super 60	$270.50
Power 260 Mains	$395.00
G325 Gallagher M.P.E.	$106.00
G341 Gallagher E12 Battery (12V)	$102.30
G361 Gallagher KM 2	$ 81.00
G365 Gallagher SP5 c/w batteries	$491.64
G345 Gallagher SP50 battery case	$1186.80
G331 Gallagher super battery (12,24,36 V)	$220.00
G355 Gallagher E8 Strip Grazer	$98.00
Waikato Watchdog Mains 50	$155.48
Waikato Watchdog Mains 100	$272.03
Pel P200 Mains Super High Power Energiser	$361.50
P100 Mains Super Power Energiser	$235.00
P9 Battery	$ 89.65
Stafix 240V	$276.00-$389.50

(ii) Energiser Replacement Modules and Parts
Module prices are less 50% if old modules returned.

G401 Gallagher Module BEV II	$ 43.87
G410 Module Mains Battery	$ 43.87
G415 Gallagher Module Super 60	$ 99.40
G420 Module Power 260	$155.55
G425 Gallagher Module MPE	$ 33.87
G441 Gallagher Module E12 MK III	$46.12
G460 Gallagher Module KM2R	$59.00
G461 Gallagher Module KM2	$41.92
G473 Gallagher Battery Plate KM2	$ 5.94
G431 Gallagher Module Super battery	$100.48
G436 Gallagher Module WP50	$98.23
G445 Gallagher Module SP50	$100.81
G455 Gallagher Module E8 Strip Grazer	$42.00
G465 Gallagher Module SP5	$75.53
G475 allagher SP50 Solar Panel 32 Watt	$906.67
G476 Gallagher SP5 Solar Panel 5 Watt	$352.18
G498 Gallagher Coil only for E8 (output)	$ 12.50
Speedrite Replacement Modules	$ 32.65-$ 85.55
SP100 Solar Panel 33 watt panel	$1,250.00

(iii) Electric Fence Accessories

There is a wide range of products and parts available, not all of them are included here.

Testers Batteries and Tools

Waikato Fence Tester Watchdog	$ 56.98
G503 Gallagher Digital Voltmeter	$ 89.00
G518 Battery SP50 Low Lose 12 Volt	$168.57
G534 Driver for Insultimber Deer Post	$ 64.69
Gallagher Automatic Remote Monitor	
G550 Systems (ARMS) 4 channel	$640.00
G556 1 channel	$399.00
Extra Channel 8 Responders (Nummate Colour)	$ 98.75
604 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
G613 Wire joint Sealing Compound (per tube)	$ 3.16
30 Amp Cutout fuses	$ 8.32
G605 Flexible connector (with leads and bolt)	$ 0.99
Knife-switch Cut-out (with leads)	$ 5.76
G525 Gallagher Tool Kit	$ 43.84
G501 Neon Fence Tester	$ 10.94
G523 Wire twisting tool	$ 3.57
G552 "Maun" 8 side cut insulated pliers	$ 20.75

(iv) Insulators

G651 Rod Type R 10 mm	$0.22-$0.24
G652-4 Bobbin Type B	$0.16-$0.19
G670 Steel Post Type Y	$0.23-$0.27
G672 Wooden Post WP	$0.37-$0.45
G673 Wooden Post	$0.16-$0.20
G677 Strain Type S	$0.29-$0.34
Waikato Watchdog Corner	$5.88
Waikato Waratah (per bag)	$10.28
Waikato Fence Breaker (spring loaded)	$2.78
Wang-on Permanent PK300	$0.50
Pel Strain Insulators	$0.53-$0.64
Insultube Insulators	$0.04-$0.08
Stand Off Insulators	$0.76-$0.81
Steel X Post Insulators	$0.23
Wooden Post Insulator	$0.15-$0.25

(v) Electric Fence Wire, Cable and Netting

'Livestrand' 200 m	$ 8.64
Stafix 'Livestrand' 350 m reel	$15.13
500 m	$21.27
Stafix Super 6 Hotstrand 200 m	$10.35
Super 6 Hotstrand 500 m	$25.54
Hottape 200 m reel	$19.24
'Spark' 200 m	$ 6.75
500 m	$16.85
Waikato Poliwire 200 m	$ 8.54
Watchdog 500 m	$21.25
Watchdog 6 strand 500 m	$25.62
Stafix Heavy Duty Underground cable 100 m	$37.00
G609 Gallagher Galvanised Undergate Cable double Insulated 100 m	$31.50
'Flexinet' 50 yard (45.7 m)	$85.90
'Bell Booth' undergate cable 100 m	$32.00
G612 Gallagher Aluminium lead-out wire 3.15 mm (1100 mm)	$238.50
G625 Fence Tensioner	$ 9.40
G620 Polywire (6 strand) 500 m	$ 25.32
G621 200 m	$ 11.46
G628 Gallagher Flood Gate Chain 12 g (150 m)	$117.00
G629 Flood gate chain 9 g (150 m)	$150.00
G640 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	$ 1.78
12 mm Rod	$ 2.25
Yates Type Pigtail	P.O.A.
Standard H Hi-Tensile	$ 1.70
Pel Pigtail (Hurricane)	$ 1.96

(vii) Electric Fence Reels

'Stafix' Self Insulated Reel	$ 14.65
'Stafix' Fence-Mounted Mini Reel	$ 12.25
Reel Assembly including Bracket and Insulator	$ 11.70
Yates reel only Watchdog	$ 21.79
Wheelbrand reel and std.	$ 28.94

'Insultimber' - Gallagher

Semi-permanent post	$ 2.52
Droppers	$ 1.49
Permanent posts	$ 2.98
Deer posts (large)	$ 5.98
(small)	$ 4.73
Tie downs	$ 0.96
Rabbit Fence Post	$ 0.96

4.25.14 **Contract Fencing Rate**

(i) On Canterbury Plains

- 200 wooden posts @ 400 wooden droppers per km, 10 2.5mm hi-tensile wires, horizontal strainers gates etc. $16-$22 per 20 m.

- Hourly rate = $15 (approx.) 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. $22-$28 per 20 m.

- 100 wooden posts per km, 150 waratahs, 7 2.5mm hi-tensile wires, 1 barb, strainers, gates etc. $16-$22 per 20 m.

(iii) Contract Post Driving

$28-$35 per hour includes tractor, driver and operator.

4.25.15 **Guide to Fencing Cost (1982)**
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

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	$1398.50	$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
	$26.50

(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
	$20.50

(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
	$32.50

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
	$2,182.99

(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
	$2,621.00

(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
		$3,154.00

4.26 WATER SUPPLY

4.26.1 Polythene Piping

New World Products

Size	Standard/100m Low Density		High Density/ 100 m	
15mm	Trickle	$24.00		
15mm	PSI 125	$34.00	PSI 173	$37.00
20mm	115	$66.00	173	$76.50
25mm	90	$82.20	130	$92.50
32mm	75	$104.25	130	$131.50
40mm	70	$123.40	130	$185.00
50mm	55	$168.25	130	$338.50

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

Nominal Diameter	Class B 60m head 87 psi 600 kPa Red	Class C 90m head 130 psi 900 kPa Blue	Class D 120m head 174 psi 1200 kPa Green		Class E 150m head 217 psi .500 kPa	
80 mm	$344	$196	32 mm	$120	15 mm	$ 47
100 mm	$517	$407	40 mm	$155	20 mm	$ 66
125 mm	$706	$673	50 mm	$240	25 mm	$ 94
150 mm	$1,005	$1,008	65 mm	$379	32 mm	$143

200 mm	$1,535	$1,451	80 mm	$529	40 mm	$181
		$2,238	100 mm	$880	50 mm	$298
			150 mm	$1,904		

Garnite S'Lon PVC Pipe Fitting

Cat. No.	Description	Size mm	Trade Price
	Faucet Adaptor (Spigot to Female BSP thread)	15 x 15	0.83
		20 x 15	0.88
		20 x 20	0.92
		25 x 20	0.97
		25 x 25	1.01
		through to	
		100 x 80	9.83
	P.G. 905 Tee	15	$ 0.72
		20	$ 1.07
		25	$ 2.04
		32	$ 2.85
		40	$ 3.70
		50	$ 6.43
	Elbow 1.14m	15	$ 0.62
		20	$ 0.72
		25	$ 0.97
		32	$ 1.83
		40	$ 2.14
		50	$ 3.36
		80	$ 3.36
		100	$15.65
	90^{o} Elbow	15	$ 0.55
		20	$ 0.90
		25	$ 1.30
		32	$ 2.11
		40	$ 2.81
		50	$ 3.91
	Reducing Socket	20 x 15	$ 0.69
		25 x 20	$ 0.85
		32 x 20	$ 1.42
		40 x 32	$ 1.83
		50 x 40	$ 2.70
	Reducing Bush	20 x 15	$ 0.38
		25 x 20	$ 0.61
		32 x 25	$ 0.77
		40 x 25	$ 1.13
		40 x 32	$ 1.23
		50 x 25	$ 1.75
		50 x 40	$ 1.84
	Quick Repair Joint	15 - 40	$ 4.91
			-$13.43

4.26.3 Concrete Water Troughs (McKendry's)

Capacity		
1137 litres	round	$90.00
910 litres	round	$84.00
546 litres	long	$80.00
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	Diameter	Height	Weight	Price
25025 litres	3.50 m	3.20 m	8.13 tonnes	$1,200.00
13650 litres	2.82 m	2.89 m	4.06 tonnes	$ 985.00
9100 litres	2.54 m	2.58 m	3.05 tonnes	$ 825.00
4450 litres	1.8 m	2.1 m	1.27 tonnes	$ 550.00
2960 litres	1.8 m	1.4 m	1.12 tonnes	$ 450.00
1820 litres	1.42 m	1.3 m	0.81 tonne	$ 330.00

4.26.5 Valves and Floats

Fullflow 69	19 mm Standard Valve	$ 15.85
Jobe	19 mm trough Valve	$ 15.85
	19 mm Tank level control valve	$ 56.40
	25 mm Tank level control valve	$ 59.21
	32 mm Tank level control valve	$ 98.69
	38 mm Tank level control valve	$104.34
	51 mm Tank level control valve	$109.99
	76 mm Tank level control valve	$211.50
	20 mm trough valve	
	- bottom intake	$ 15.85
	- top intake	$ 15.85
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 (Davies B Series and RO 75)

B1 standard 23 litres per minute	$397.00
B1LP Low 30 litres per minute	$404.00

	B1HP High 15 litres per minute	$413.00
	B1 HPBF Boiler feed 15 litres per minute	$465.00
	Pressure systems for the above vary in cost from $744 to $1249.00 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	$832.00
	C1 HP High Pressure 23 litres per minute	$842.00
	C1HPBF Boiler feed 23 litres per minute	$897.00
	C12 Low pressure 57 litres per minute	$833.00
	C2 C1 less Vee Drive and Motor Bracket	$751.00
	C3 C1 less Vee Drive	$775.00
	Pressure systems for the above vary in cost from $1208.00 to $1789.00 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 $1264 to $1691 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	$241.00
	L1 .50 Double acting 3.81 cm bore	$228.00
	L1 .75 Double acting 4.445 cm bore	$232.00
	L2 .50 Double acting 6.35 cm bore	$295.00
(vi)	Hydraulic Water Rams (Davies)	
	Ram 3	$390.00
	Ram 5	$508.00
(vii)	Centrifugal Pumps (Davies K Series) Motorised	
	K .17 BSP .12 kW 2 pole single phase 230 volt	$256.00
	K .33 B .25 kW 2 pole three phase 400 volt	$291.00
	K .75 BSPGM .68 Kw 2 pole single phase 230 volt	$402.00

K .75 BGM .55 kW 2 pole three phase 400 volt	$404.00
K1 .25 BSP GM .93 kW 2 pole single phase 230 volt	$435.00
K2 B DV 1.50 kW 2 pole single phase 230/460 DV	$588.00
K3B GM 2.20 kW 2 pole three phase 400 volt	$615.00
K3B DV 2.20 kW 2 pole single phase 230/460 DV	$952.00
K5B 3.70 kW 4 pole three phase 400 volt	$1298.00
K75B 5.50 kW 4 pole three phase 400 volt	$1395.00
KH5B 3.70 kW 2 pole three phase 400 volt	$850.00
K10B 11.00 kW 4 pole three phase 400 volt	$2364.00
KH75B 5.50 kW 2 pole three phase 400 volt	$1412.00
K15B 5.50 kW 2 pole three phase 400 volt	$2780.00
KH15B 11kW 2 pole 400 volt three phase	$2205.00
KH20B 15.00 kW 2 pole three phase 400 volt	$2350.00

D. McL. Wallace

1.27 cm Gnome	0.13 kW one phase	$348.00
1.9 cm	0.56 kW one phase	$451.00
2.54 cm	1.5 kW three phase	$586.00
3.175 cm	2.25 kW three phase	$619.00
3.81 cm	4.1 kW three phase	$1,112.00

(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)	$598.00
SPE2/50 (AL) BS Aluminium (3.37 kW 4 stroke Briggs and Stratton petrol engine)	$671.00
SPE2/50 (CI) BS Cast Iron (3.73 kW 4 stroke Briggs and Stratton petrol engine)	$521.00
SPEPT Portable Trolley with cushion tyres for above models	$168.00

Motorised

SKP .75 BSP .68 kW 2 pole 230 volt single phase	$436.00

SPK .75 B .55 kW 2 pole 400 volt three phase	$438.00
SPK 1.25 BSP .93 kW 2 pole 230 volt single phase	$532.00
SPK 1.25 B .93 kW pole 400 volt three phase	$527.00
SPK .75 BSPGM .68 kW 2 pole single phase gunmetal	$632.00
SPK .75 BGM .55 kW 2 pole 400 volt three phase gunmetal	$542.00
SPK 1.25 BGM .93 kW 2 pole 400 volt three phase gunmetal	$627.00

4.27 FARM MACHINERY

4.27.1 Tractors

(i) Ford 2 wheel drive models - 1982 Prices
(1983 prices unavailable at time of print)

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)
Prices on application as 1983 prices unavailable at time of print.

3600	35.0 kW (47 h.p.)	
4100	38.7 kW (52 h.p.)	
4600	46.2 kW (62 h.p.)	
774	58.2 kW (78 h.p.)	
974	72.4 kW (97 h.p.)	
1174	89.5 kW (116 h.p.)	with dual wheels

1474 108.2 kW (148 h.p.) with dual wheels

(iii) Case: All with cab (blower/heater) and radio, power shift, quick hitch and 4 x 8 ram and hoses

2090 2 WD & Cab	85 kW (120 h.p.)	$56,960
2290 & Cab	104 kW (139 h.p.)	$61,802
2290 4 WD & Cab	104 kW (139 h.p.)	$69,818
2390	114 kW (163 h.p.)	$69,125

(iv) David Brown: Price does not include safety frame

1190 NC	36.0 kW (48 h.p.)	$15,936
1290 NC	43.5 kW (58 h.p.)	$18,365
1290 NC 4 W.D.	43.5 kW (58 h.p.)	$22,356
1390 NC	49.9 kW (67 h.p.)	$20,416
1390 Q Cab	49.9 kW (67 h.p.)	$25,675
1390 C 4 W.D.	49.9 kW (67 h.p.)	$29,729
1490 Q Cab	61.8 kW (83 h.p.)	$29,972
1490 Q 4 W.D.	61.8 kW (83 h.p.)	$35,926
1690 Q Cab	76.7 kW (103 h.p.)	$36,937
1690 Q 4 W.D.	76.7 kW (103 h.p.)	$41,827

(v) International Harvester

Model		2 WD	4 WD
284*	22.4 kW (30 h.p.)		$8,855
383*	30 kW (40 h.p.)	$11,745	$13,447
483*	34.5 kW (46 h.p.)	$13,945	$15,645
V533	36 kW (48 h.p.)	$15,621	-
V633	41.25 kW (55 h.p.)	$16,715	-
485 Std*	40.5 kW (54 h.p.)	$16,890	$21,270
485 TA*	40.5 kW (54 h.p.)	$17,490	$21,870
585 Std*	46.5 kW (53.7 h.p.)	$18,950	$24,320
585 TA*	46.5 kW (53.7 h.p.)	$19,550	$24,920
685 TA*	54 kW (72 h.p.)	$21,900	$27,270
685 TAXL*	54 kW (72 h.p.)	$27,700 (cab)	$33,280
785 TA*	60 kW (80 h.p.)	$24,150	$29,575
T85TA EST	61.9 kW (83 h.p.)	$23,754	$29,174
T85XL EST	61.9 kW (83 h.p.)	$29,554 (cab)	$34,974
786TA	75.0 kW (100 h.p.)	$39,250 A/C cab	$46,690
885XL	63.4 kW (85 h.p.)	$33,890 (cab)	$38,950
886 TA	90.75 kW (121 h.p.)	$45,800 A/C cab	$53,824
986 TA	105 kW (140 h.p.)	$50,900 A/C cab	
1086 TA	119 kW (148 h.p.)	$55,330 A/C cab	$62,900

(vi) Massey Ferguson

MF 210	18.7 kW (25 h.p.)	$6,602.00

MF 210 4 WD	18.7 kW (25 h.p.)	$7,329.00
MF 220	22 kW (30 h.p.)	$7,595.00
MF 220 4 WD	22 kW (30 h.p.)	$8,827.00
MF 240 8 sp P/S	36 kW (48 h.p.)	$14,976.00
MF 240 MPT P/S 1 PTO + Aux. Pump	36 kW (48 h.p.)	$15,969.00
MF 254/4 Hyd. P/S		$22,486.00
MF 265 8 speed	46.5 kW (62 h.p.)	$18,804.00
MF 265 MPT P/S	46.5 kW (62 h.p.)	$19,390.00
MF 290 8 speed	58.7 kW (79 h.p.)	$20,890.00
MF 290 MPT	58.7 kW (79 h.p.)	$21,875.00
MF 275/4		$24,237.00
MF 290/4		$26,798.00
MF 675/2 MPT		$26,824.00
MF 690/2 MPT		$29,995.00
MF 698/2		$34,088.00
MF 698/2 Turbo		TBA
MF 2640/2		$47,182.00
MF 2640/2		$52,860.00
MF 2680 2 WD cab	93.5 kW (126 h.p.)	$49,805.00
MF 2680 4 WD cab	93.5 kW (126 h.p.)	$56,517.00

Safety frames on non cab tractors = $305.00

(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
New specifications and new dark green colours				$22,452.00
8045Q	58.8	80	4	$26,545.00
New specifications and new dark green colours				$27,590.00
10011Q	73.5	100	2	$23,077.00
New specifications and new dark green colours				$24,122.00
10045Q	73.5	100	4	$28,672.00
New specifications and new dark green colours				$29,717.00
12011Q	88.2	120	2	$27,736.00
New specifications and new dark green colours				$28,781.00
12045Q	88.2	120	4	$33,919.00
New specifications and new dark green colours				$34,964.00

(viii) Kubota
Prices do not include weight

B7100 HST	$ 6,699.00
B7100 Std (wheel weights included)	$ 5,840.00
L305-FP	$ 8,540.00
L305-DT	$ 9,985.00
L405-FP	$11,645.00
L405-DT	$12,395.00
M4050-FP	$13,969.00
M4050-DT	$15,918.00
M4950-FP	$15,500.00
M4950-DT	$18,750.00
M5950-FP	$17,450.00
M5950-DT	$21,450.00
M6950-FP	$20,550.00
M6950-DT	$24,995.00
M7950-FP	$25,750.00
M7950-DT	$29,795.00
'B' Series Front Weights	$ 150.00
'L' Series Front Weights	$ 250.00
'M' Series Front Weights	$ 400.00
'M' Series Agric. Radio	$ 185.00
Kubota Rollmasta Safety Q Cab (new 'M' series)	$ 3,878.00
(ex fitting) Safety Frame (M4050) 2x post	$ 336.00
Rollamasta Safety Frame (L405) 2x post	$ 296.00
Rollamasta Safety Frame (new 'M' series)	$ 442.00
Canopy for safety frame - M4050 (steel roof)	$ 298.00
New 'M' series PVC (incl. steel frame)	$ 162.00

(ix) Belarus (1982 prices)

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 (1982 prices)

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

JD 1050	40 h.p. Power steering 2 WD	$10,450.00
JD 1050	40 h.p. Power steering 4 WD	$12,450.00
JD 1040 CS	16.9 x 28 & 750 x 16 Tyres	$16,750.00

JD 1040 Synchro	16.9 x 28 & 750 x 16 Tyres	$18,193.00
JD 1040 Synchro	9.5 x 24 tyres 4 WD	$21,390.00
JD 1140 CS	16.9 x 30 & 750 x 16 Tyres	$18,520.00
JD 1140 Synchro	16.9 x 30 & 750 x 16 Tyres	$19,964.00
JD 1140 Synchro	16.9 x 30 & 11.2 x 24 tyres 4WD	$23,450.00
JD 1140 CS Orchard	13.4 x 16.1 & 27/9.50 x 15	$18,696.00
JD 1140 CS Narrow	14.9 x 24 & 650 x 16 tyres	$18,745.00
JD 1140 Synchro Narrow	12.4 x 28 & 650 x 16 tyres	$19,437.00
JD 1640 CS	16.9 x 30 & 750 x 16 tyres	$20,515.00
JD 1640 Synchro	16.9 x 30 & 750 x 16 tyres	$21,958.00
JD 1640 Synchro	16.9 x 30 & 11.2 x 24 tyres 4 WD	$25,950.00
JD 1640 SG2	16.9 x 30 & 11.2 x 24 tyres 4 WD	$34,635.00
JD 1640 SG2	16.9 x 30 & 11.2 x 24 tyres	$28,765.00
JD 20405 Synchro	18.4 x 30 & 1000 x 16 tyres	$23,370.00
JD 20405 Synchro	18.4 x 30 & 12.4 x 24 tyres 4 WD	$28,235.00
JD 20405	18.4 x 30 & 1000 x 16 tyres	$31,870.00
JD 20405 SG2	18.4 x 30 & 12.4 x 24 tyres 4 WD	$36,735.00
JD 2140 Synchro	18.4 x 34 radial & 1000 x 16 tyres	$25,870.00
JD 2140 Synchro	18.4 x 30 & 1000 x 16 tyres	$24,718.00
JD 2140 Synchro	18.4 x 34 radial & 12.4 x 28 radial tyres 4 WD	$30,870.00
JD 2140 Synchro	18.4 x 30 & 12.4 x 24 tyres	$29,519.00
JD 2140 SG2	18.4 x 34 radial & 1000 x 16 tyres	$34,620.00
JD 2140 SG2	18.4 x 24 & 12.4 x 28 tyres 4 WD	$39,620.00
JD 3140 Synchro	18.4 x 38 & 13.6 x 28 tyres 4 WD	$36,950.00
JD 3140 SG2	18.4 x 38 & 1000 x 16 tyres	$42,040.00
JD 3140 SG2	18.4 x 28 & 13.6 x 28 tyres 4 WD	$47,540.00
JD 4040 SG	18.4 x 38 duals	$51,950.00
JD 4240 SG		$55,360.00
JD 4440 SG		$59,090.00
JD 4640		$68,940.00
JD 4840		$74,620.00
JD 8450	Dual 18.4 x 38 front & rear 4 WD	$97,190.00
JD 8650	Dual 20.8 x 28 front & rear 4 WD	$113,600.00
JD 8850	Dual 24.5 x 32 front & rear 4 WD	$145,823.00

CS = Collarshift
Synchro = Synchromesh

(xii) Fiat

470	35.8 kW (48 h.p.) Ind PTO Power Steering	$19,500.00
466	40.3 kW (54 h.p.) Safety Frame	$17,250.00
466 DT	40.3 Kw (54 h.p.) Safety Frame	$21,730.00
470 DT	35.8 kW (48 h.p.) Ind P.T.O.	$21,800.00
566	43.3 kW (58 h.p.) Safety Frame	$18,550.00
566 DT	43.3 kW (58 h.p.) Safety Frame	$23,510.00
640	47.8 kW (64 h.p.) Safety Frame	$21,660.00
640 DT	47.8 kW (64 h.p.) c/w safety frame	$22,800.00
666	50.7 kW (68 h.p.) Safety Frame	$21,180.00
666 DT	50.7 kW (68 h.p.) Safety Frame	$26,400.00
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	$30,960.00
680 HDT	50.7 kW (68 h.p.) Pininfarina 'Q' cab	$35,960.00
680 HDT	(68 h.p.) Cab c/w Air cond.	$38,210.00
766	58.2 kW (78 h.p.) c/w Safety Frame	$23,400.00
766 Dt	58.2 kW (78 h.p.) c/w Safety Frame	$28,980.00
780	58.2 kW (78 h.p.) Pininfarina 'Q' cab	$31,510.00
780	52.2 kW (78 h.p.) 'Q' cab air conditioned	$33,210.00
780 DT	52.2 kW (78 h.p.) safety frame	$32,980.00
780 DT	58.2 kW (78 h.p.) Pininfarina 'Q' cab	$38,290.00
780 DT	58.2 kW (78 h.p.) cab c/w air conditioned	$40,670.00
880	65.7 kW (88 h.p.) c/w Safety Frame	$32,240.00
880 DT	65.7 kW (88 h.p.) Pininfarina 'Q' cab	$42,150.00
880 DT	65.7 kW (88 h.p.) cab c/w air conditioned	$43,950.00
980	73.1 kW (98 h.p.) Pininfarina 'Q' cab c/w air conditioned	$42,880.00
980 DT	73.1 kW (98 h.p.) cab	$42,430.00
980 DT	73.1 kW (98 h.p.) Pininfarina Factory a/conditioned	$48,250.00
1180	86.8 kW (115 h.p.) cab c/w air conditioned	$46,700.00
1180 Dt	36.8 kW (115 h.p.) cab c/w air conditioned	$58,900.00

(xiii) Marshall (Leyland)

302	(28 h.p.) 20.88 kW	$13,727.00
502	(47 h.p.) 35.05 kW	$18,884.00
602	(62 h.p.) 46.23 kW	$21,256.00
702	(72 h.p.) 53.69 kW	$21,256.00
802	(82 h.p.) 61.15 kW	$24,870.00
604	(62 h.p.) 46.23 kW	$28,037.00
704	(72 h.p.) 53.69 kW	$29,347.00
804	(82 h.p.) 61.15 kW	$32,065.00

(xiv) Mitsubishi

New Series

MT 180 D	18 h.p. 4 WD	$ 6,500.00
MT 180 HD	18 h.p. 4 WD Hydro static drive	$ 7,350.00
MT 250 D	25 h.p. 4 WD not live drive	$ 8,500.00
MT 250 D	25 h.p. 4 WD live drive PTO	$ 8,750.00
MT 300	30 h.p. 2 WD live PTO power steering	$ 9,450.00
MT 300 D	30 h.p. 4 WD live PTO power steering	$10,450.00

(xv) Holder

A50 H Tractor Standard	$21,250.00
A50 5/N Tractor c/w single acting hydraulics	$21,740.00
Custom cab fitted	$ 2,848.00
A60 Tractor Turb charged	$29,225.00
Custom cab	$ 1,500.00
C500 Municipal Tractor	$28,898.00

(xvi) Moller

Power pony		
PP 16T	11.9 kW c/w Lift Lever Turf Tyres	$ 3,498.00

N.B. Specialist attachments include mid-mounted mowers, front end loader, rotary hoes, etc.

(xvii) Universal

Model	Tyre Sizes		Price
	Front	Rear	
U530	600 x 16	13 x 28	$12,000.00
U530 DTC	750 x 20	13 x 28	$14,432.00
U550 M	600 x 16	13 x 28	$12,500.00
U550 V	500 x 15	10 x 28	$13,440.00
U550 LC		400-15.5 L15 x 12.5	$13,900.00

U640	600 x 16	13 x 28	$13,000.00
U640 DTC	750 x 20	13 x 28	$16,030.00
	14 x 28	9.5 x 20	$17,530.00
Type U Safety Frame			$ 250.00

(xviii) Shibaura

SE 1340 4 WD	10.7 kW	(15 h.p.)	$ 5,285
SE 2200 2 WD	18.0 kW	(24 h.p.)	$ 7,196
SE 2240 4 WD	18.0 kW	(24 h.p.)	$ 8,116
SE 3000 2 WD	23.5 kW	(32 h.p.)	$ 9,500
SE 3040 4 WD	23.5 kW	(32 h.p.)	$10,570
SE 4040 4 WD	32.2 kW	(43 h.p.)	$12,395
SE 4300 2 WD	32.0 kW	(43 h.p.)	$12,388
SD 4300 2 WD LC Orchard	32.0 kW	(43 h.p.)	$13,588
SD 5000 T 2 WD	37.0 kW	(50 h.p.)	$14,300
SD 5040 T 4 WD	37.0 kW	(50 h.p.)	$15,498
SD 5000 T 2 WD LC Orchard	37.0 kW	(50 h.p.)	$14,975
SE 6000 2 WD	39 0 kW	(53 h.p.)	$18,022
SE 6040 4 WD	39.0 kW	(53 h.p.)	$19,500
SE 6300 2 WD	47.2 kW	(63 h.p.)	$17,304
SE 6340 4 WD	47.2 kW	(63 h.p.)	$20,954
SE 7300T 2 WD	54.2 kW	(73 h.p.)	$19,984
SE 7340T 4 WD	54.2 kW	(73 h.p.)	$23,634
SE 8300 2 WD	62.2 kW	(83 h.p.)	$22.586
SE 8340 4 WD	62.2 kW	(83 h.p.)	$27,070
SE 1000T 2 WD	77.0 kW	(105 h.p.)	$26,970
SE 1040T 4 WD	77.0 kW	(105 h.p.)	$32,304

(xix) Yanmar

YM 186D 4 WD	7.6 kW	AG Tyres	$ 7,240
YM 186D 4 WD	7.6 kW	Turf Tyres	$ 7,440
YM 226 2 WD	16.5 kW	AG Tyres	$ 7,960
YM 226D 4 WD	16.5 kW	AG Tyres	$ 8,620
YM 336 2 WD	24.2 kW	AG Tyres	$11,030
YM 336 2 WD	24.2 kW	Turf Tyres	$11,320
YM 336 2 WD	24.2 kW	Lowered Orchard Model	$12,200
YM 336D 4 WD	24.2 kW	AG Tyres	$12,250
YM 336D 4 WD	24.2 kW	Turf Tyres	$12,640

226	Folding Safety Frame	$ 410
336	Safety Frame	$ 350
	Palmer Weather Cab (does not include Safety Frame which is an extra $280)	$ 1,980

4.27.2 Crawlers

Fiat

505CS	45.0 kW (58h.p.) hydraulic linkage	$22,000
605 CMS	49.2 kW (66 h.p.) hydraulic linkage	$29,850

4.27.3 Trucks

(i) Nissan/Datsun

Datsun Utility		
	1 tonne, cab and chassis - petrol	$10,765
	- diesel	$12,025
	Half tonne well side deck	$ 9,810
	dropside deck (extra)	$ 900
	wellside deck (extra)	$ 1,400
Nissan Petrol		
	4 WD, cab and chassis	$14,565
	Nissan Patrol Petrol, Cab & chassis	$18,980
	Diesel, Cab & chassis	$20,480

(ii) Mazda

B1600 SWB	1 tonne, cab and chassis	$ 9,845
	pickup	$11,160
B2000 Limited	Petrol, LWB, cab and chassis	$11,740
	pickup	$12,940
B2200 Diesel	1 tonne, cab and chassis (5 speed)	$11,795
	pickup	$13,185

(iii) Land Rover

SWB	Pick-up Petrol	$17,049
SWB	Hard Top (petrol)	$20,101
SWB	Pick-up Diesel	$16,750
SWB	Hard top Diesel	$17,995
LWB	Cab & chassis, petrol	$17,231
LWB	Cab & chassis, diesel	$18,710
	Chassis & cab, V8, Petrol	$20,325
	Hard top	$24,821

(iv) Toyota

Land cruiser	Hard top - petrol	$18,477
	- diesel	$20,227
Land cruiser	L.W.B., cab & chassis - petrol	$18,251
	- diesel	$20,001
Dyna	2 tonne - petrol	$12,065
	3 tonne - diesel	$14,565

Hi-Lux	2.2 litre diesel cab & chassis	$12,172
	2.2 litre diesel cab & chassis Ute	$13,472
	Light ace van 1.3	$12,702
	1 tonne, cab & chassis, 1.6 litre	$10,172
	2.0 litre cab & chassis	$10,772
	2.0 litre 4 WD - petrol, cab & chassis	$14,572
	4 WD diesel cab & chassis	$16,172
	4 WD diesel Ute	$17,572
	4 WD petrol Ute	$15,972
	Utility 1.6 litre	$11,472
	2.0 litre	$12,072
Hi-Ace	1 tonne, cab & chassis	$10,683
	1 tonne van, 2.0 litre, Petrol	$15,144
	Diesel	$16,244

(v) Bedford

CF	2 tonne, cab & chassis SWB	$14,235
CF	2 tonne, LWB chassis	$17,560

(vi) Mitsubishi

LO21PS	1600 cc wellside	$10,970
	1600 cc cab & chassis	$ 9,770
LO22PNU	2000 cc sport	$12,536
LO22GFSR	2000 cc 4 WD wellside	$15,464
LO22GFSR	2000 cc 4 WD cab & chassis	$14,264
LO32PYR	1600 cc cab & chassis	$10,395
LO32NVR	1600 cc van	$13,376
LO32WHNR	1600 cc starwagon	$16,320
LO32UHNR	1600 cc High top van	$13,576
FK102HR-406mm		$26,310
FM215JR		$36,278
FP318JR		$60,952
FP313JR		$66,995
FP315JR		$69,595
FV313HRR		$85,742
FV315HRR		$89,775
FV315NR		$90,975

(vii) Canter

FB100BRY	1.5 diesel	$12,488
FC212EZRY	3 tonne petrol	$14,695
FE211EZRY	3 tonne diesel	$15,495

(viii) Dodge

G15AV5460VBY3		$42,918
G15AV5520VBY3		$43,290

(ix) Daihatsu Diesel

1.5 tonne cab & chassis	$11,950
1 tonne double cab & chassis, 6 seater	$16,000
3-4 tonne, cab & chassis	$15,300
Double cab & chassis, 6 seater	$18,495
S55P 4 WD cab & chassis	$15,374

(x) Suzuki

SJ 4 x 4 chassis	$10,740
SJ 4 x 4 Rag Top	$11,505
SJ 4 x 4 Van	$11,570

(xi) Holden

WB chassis	$15,600
WB Utility	$16,395
Rodeo chassis	$ 9,835
Rodeo utility petrol	$10,935
Rodeo Utility Diesel, 4 x 2	$12,560
Rodeo Utility Diesel, 4 x 4	$16,390

(xii) Isuzu

KA 1.5 tonne, Petrol	$10,655
TL 2 tonne, diesel	$12,400
TLD56 3 tonne	$14,100
KT26 3.5-4 tonne	$15,885

4.27.4 **Farm Bikes**

60 percent deposit on all new bikes.

(i) Yamaha

	Retail
AG100J	$1,698
AG175J	$1,998
XT250 4 stroke	$2,399
TT250 4 stroke	$2,399
3 wheeler	
YT125K 2 stoke	$1,875
YTM200K 4 stroke	$2,598
TYM200EK electric start shaft drive	P.O.A.

(ii) Kawasaki

KV 100 Stockman	$1,675
KL 250 Stockman	$2,544
KV 175 Stockman	$2,180
KLT 200 (3 wheeler)	$2,999

(iii) Suzuki

LT125 4 wheeler 4 stroke 5FWD gears, 1 reverse	$3,155
TF100 2 stroke	$1,548
DR125Z 4 stroke	$1,895
TS185 ER 2 stroke	$1,595
DR250Z 4 stroke	$2,995

(iv) Honda

CT10A	$1,391
CT110B	$1,580
CT235C	$1,799
CT185	$2,189
ATC110 C	$1,950
ATC185 SC	$2,439
ATC200C	$2,599
ATC200ED	$3,184

4.27.5 **Ploughs**

(i) Duncan

530 mounted	3 furrow c/w landwheel	$2,451
	4 furrow c/w landwheel	$2,848
560 semi-trailed	5 furrow c/w hydraulic ram	$6,165
	6 furrow c/w D/A ram & hoses	$6,802
	7 furrow c/w D/A ram & hoses & front furrow wheel	$7,932

(Deduct $175 if landwheel is not required)
Land wheel extra $280.

Optional extras:

Extra furrow assembly for 530	$601
Extra furrow assembly for 560	$696

(ii) Clough

	Number of furrows					
	1	2	3	4	5	6
Series 820 Golden plough with coulters	$617	$944	$1371			
Less coulters	$527	$764	$1101			
Landwheel - add $84 if required						
Mounted						

	Number of furrows				
	2	3	4	5	6
840 standard 30 or 35cm Furrows Landwheel - deduct $115 if not required	$1551	$2086	$2605		
841 Series Heavy Duty 30, 35 or 40 cm Furrows landwheel - deduct $115 if not required	$1686	$2293	$2828		
842 Series Shear Leg 33 or 38 cm Furrows Landwheel - deduct $115 if not required	$1710	$2388	$2924		
850 Semi-mounted 30, 32 or 35 cm Furrows		$3076	$3623	$4455	$4708
30, 32.5, 35, 40 cm Furrows (Heavy Duty Framed)		$3308	$3914	$4853	$5909

4.27.6 Mole Drain Ploughs

Belgrave Trailing	$407.00
Three point linkage	$462.00
Combination	$527.00
Alkathene sowing attachment 25 mm diameter	$ 37.50
Alkathene sowing blade, 3 pt linkage model	$895.00
with adjustable spool holder	$1,025.00
Alkathene sowing plough, trailing model	$1,345.00
with adjustable spool holder	$1,475.00
Roller, slicer for mole plough	$109.00

4.27.7 Chisel Ploughs and Subsoilers

(i) Clough

960 Goliath	
5 tine chisel plough	$1,696
7 tine	$2,204
9 tine	$2,808
11 tine	$3,282
13 tine	$3,778
15 tine	$4,381
Pair of rubber wheels	$ 435

Trailing 955 Goliath Chisel Plough/Cultivator

4.1 m	13 tine	$7,250
4.7 m	15 tine	$7,800

(ii) Aitchison

Multiflow Chisel Ploughs

		No. of Tines	N.I.	S.I.
Tine fitted with Cushion tine				
Frame Size	1.83 m	5	$1,414	$1,712
	2.44 m	7	$1,839	$1,866
	3.05 m	9	$2,350	$2,378
Tine fitted with Rigid tine				
Frame Size	1.83 m	5	$ 994	$1,021
	2.44 m	7	$1,250	$1,278
	3.05 m	10	$1,594	$1,621
Tine fitted with Flexitine				
Frame Size	1.83 m	6	$ 804	$ 828
	2.44 m	7	$ 936	$ 964
	3.05 m	10	$1,291	$1,326

Chisel Ploughs and Subsoilers

		No. of Tines	No. Tool Bars		
Frame Size	1.17 m 'Single Subsoiler'	1	2	$ 970	$ 986
	1.89 m Low Draft	3	2	$1,457	$1,487
	1.98 m Low Draft	4	2	$1,730	$1,760
	1.98 m Cushion	3	2	$1,504	$1,534
	1.98 m Cushion	4	2	$1,795	$1,825
	1.98 m 'Double Subsoiler	2	-	$1,675	$1,705
	2.44 m Low Draft	4	2		$1,830
	2.44 m Low Draft	5			$2,120
	2.44 m Cushion	4			$1,892
	2.44 m Cushion	5			$2,197

Superflow Chisel Plough

Frame size	1.17 m 2 tool bars 'Single Subsoiler' 1		$ 970	$ 986
	1.98 m, 2 tool bars			

	3 Low Draft Tines	$1,457	$1,487
	4 Low Draft Tines	$1,730	$1,760
	3 Cushion Tines	$1,504	$1,534
	4 Cushion Tines	$1,795	$1,825
	'Double Subsoiler' 2	$1,675	$1,705
Frame size	2.44 m, 2 tool bars		
	4 Low Draft Tines	$1,795	$1,830
	5 Low Draft Tines	$2,085	$2,120
	4 Cushion Tines	$1,857	$1,892
	5 Cushion Tines	$2,162	$2,197
Frame size	1.98 m, 3 tool bars		
	5 Low Draft Tines	$2,545	$2,585
	7 Low Draft Tines	$2,977	$3,017
	5 Cushion Tines	$2,621	$2,661
	7 Cushion Tines	$3,085	$3,125
Frame size	2.44 m, 3 tool bars		
	7 Low Draft Tines	$3,187	$3,232
	9 Low Draft Tines	$3,645	$3,690
	7 Cushion Tines	$3,325	$3,370
	9 Cushion Tines	$3,777	$3,822
Frame size	3.05 m, 3 tool bars		
	9 Low Draft Tines	$3,871	$3,912
	1 Low Draft Tines	$4,297	$4,347
	9 Cushion Tines	$4,007	$4,057
	1 Cushion Tines	$4,463	$4,513

Price on Three Beam Model includes depth wheels as standard depth wheels can also be fitted to all Two Beam Models.

(iii) Howard Paraplow 1000 Series

3 leg Paraplow c/w disc assemblies	$7,506
4 leg Paraplow c/w disc assemblies	$9,189

4.27.8 Discs

(i) Reid and Grey

2.7m Tandem	$3,120
3.0m Tandem	$3,290

(ii) Duncan

Standard Century Disc

2.1m 24 blades plain	$2,213
24 blades front scalloped	$2,255
all scalloped 24 blades	$2,298

2.4m 28 blades plain	$2,343
28 blades front scalloped	$2,393
all scalloped 28 blades	$2,446
2.7m 32 blades plain	$2,519
32 blades front scalloped	$2,575
all scalloped 32 blades	$2,638
3.0m 36 blades plain	$2,800
36 blades front scalloped	$2,867
all scalloped 36 blades	$2,944

800 Mounted Disc Series

2.1m 24 blades plain	$2,579
24 blades front scalloped	$2,616
all scalloped 24 blades	$2,651
2.4m 28 blades plain	$2,662
28 blades front scalloped	$2,706
all scalloped 28 blades	$2,750
2.7m 32 blades plain	$2,770
32 blades front scalloped	$2,819
all scalloped 32 blades	$2,870

(iii) Clough

	Number of Furrows			
	2	3	4	5
Series 830				
Standard 65 cm discs with stand	$1,883	$2,346	$2,916	$3,431
Landwheel - add $120 if required.				

4.27.9 Cultivators

(i) Duncan

630 Single Bar Cultivator

Factory Number A	Factory Number B		$
206	240	11 Tine, 3.0m (10') frame	$1,371
221	258	13 Tine, 3.0m (10') frame	$1,473
228	265	15 Tine, 3.6m (12') frame	$1,517
257	300	17 Tine, 4.1m (13'6") frame	$1,715

(All models fitted with steel depth wheels as standard)

630 2 Bar Cultivator

349	408	17 Tine, 3.5m (11.6') frame	$2,330
461	538	25 Tine, 5.0m (16') frame	$3,075

(All models fitted with pneumatic depth wheels as standard)

Angle Crumbler

108	128	3.0m (10') Angle Crumbler	$ 638
117	137	3.6m (12') Angle Crumbler	$ 686

633 Cultivator

382	449	3.0m (10') 21 tines c/w crumbler	$2,245
437	514	3.6m (12') 25 Tines c/w Crumbler	$2,571
325	382	3.0m (10') 21 tines less Crumbler	$1,912
372	438	3.6m (12') 25 Tines less Crumbler	$2,188

634 Rotacrumbler

232	273	2.4m (8') 23 Tines c/w crumbler	$1,366
255	302	3.0m (10') 29 Tines c/w crumbler	$1,510
281	331	3.6m (12') 35 Tines c/w crumbler	$1,655
270	360	4.2m (13.9') 41 Tines c/w crumbler	$1,800
444	592	4.3m (14') 41 Tines c/w folding wings and crumblers	$2,960
479	639	4.9m (16') 47 Tines c/w folding wings and crumblers	$3,194
173	204	2.4m (8') 23 Tines less crumbler	$1,019
198	233	3.0m (10') 29 Tines less crumbler	$1,163
218	257	3.6m (12') 35 Tines less crumbler	$1,283
211	282	4.2m (13.9') 39 Tines less crumbler	$1,410
371	495	4.3m (14') 41 Tines less crumbler	$2,476
402	536	4.9m (16') 47 Tines less crumbler	$2,680

644 Triple K Cultivator

126	148	1.75m (5'9") 11 Tines c/w depth wheels	$ 740
97	114	1.75m (4'9") 11 Tines less depth wheels	$ 572
67	79	Crumbler attachment	$ 396

660 Vibroflex Cultivator

367	431	9 Tine - 2.25m	$2,157
521	612	13 Tine - 3.25m heavy duty	$3,062
630	741	17 Tine - 4.25m heavy duty	$3,704
109	128	Wing Assemblies (4 tines) per pair	$ 642

(All models fitted with pneumatic wheels)

(ii) Clough

Series 900 tool bar cultivators

2.6m 9 rigid tines	$811
2.6m 3 tines, 3 moulders	$723
2.6m 9 tines, 3 moulders	$914
Pair of wheels	$205

Standard Frame 925 Mini-Till Models.

		With Crumbler	Less Crumbler
1.6m	13 tine	$ 822	$489
2.1m	17 tine	$ 960	$583
2.6m	19 tine	$1,087	$680

NOTE: The above models are 3 bar with standard 280 mm diameter crumbler and fitted with 100 mm points.

Folding Wing 920 Maxi-Till			
4.2m	41 tine	$2,979	$1,853
4.8m	45 tine	$3,193	$1,958
5.4m	49 tine	$3,438	$2,063
Standard Frame 922 Maxi-Cult			
2.4m	13 tine	$1,631	$1,137
3.0m	17 tine	$1,869	$1,332
3.6m	21 tine	$2,102	$1,518
4.2m	23 tine	$2,338	$1,705

Add $260 for a pair of steel wheels.

Fully Trailing Folding Wing 923 Maxi-Till			
6.4m	57 tine	$7,300	$6,100
7.6m	69 tine	$7,700	$6,400
8.8m	81 tine	$8,500	$7,100
Fully Trailing Standard Frame 923 Maxi-Till			
3.6m	35 tine	$3,310	$2,745
4.2m	39 tine	$3,630	$2,982

Series 942 Single Bar Coil Tine Cultivator		
	13 tine	$1,372
	15 tine	$1,540
	17 tine	$1,706
	19 tine	$1,839

Add $260 for pair of steel wheels.
Add $410 for pair of rubber wheels.
Crumbler units to suit
3m - $581, 3.6m - $614, 4.05m - $646.

Maxitill Cultivators
Standard Frame 920

		With Crumbler	Less Crumbler
2.4m	23 tine	$1,450	$ 939
3.0m	29 tine	$1,590	$1,062
3.6m	35 tine	$1,749	$1,184
4.2m	39 tine	$1,989	$1,347

Agritiller Double Bar Cultivators
Series 940

9 tine	$1,060
11 tine	$1,244
13 tine	$1,449
15 tine	$1,628
17 tine	$1,785
19 tine	$2,050

Add $200 for pair of steel wheels.

Uni-Tiller. Series 930

9 tine	$1,075
11 tine	$1,226
13 tine	$1,438

(iii) 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 Cultivators		
1.37m, 3 tool bars, 10 tines	$ 495	$ 509
with crumbler roller, 169 kg	$ 745	$ 760
Roller kitset	$ 287	$ 287
1.83m, 4 tool bars, 17 tines	$ 795	$ 812
with crumbler roller, 171 kg	$1,138	$1,155
and Helper springs	$1,281	$1,298
Roller kitset	$ 394	$ 394
2.13m, 4 tool bars, 21 tines	$ 907	$ 928
with crumbler roller	$1,299	$1,322
and Helper springs	$1,442	$1,465
Roller kitset	$ 451	$ 451
2.44m, 4 tool bars, 23 tines	$1,020	$1,047
with crumbler roller	$1,453	$1,487
and Helper springs	$1,605	$1,638
Roller kitset	$ 498	$ 498

3.05m, 4 tool bars, 29 tines	$1,132	$1,158
with crumbler roller	$1,605	$1,638
and Helper springs	$1,795	$1,831
Roller kitset	$ 545	$ 545
3.66m, 4 tool bars, 35 tines	$1,279	$1,313
with crumbler roller	$1,852	$1,885
and Helper springs	$2,096	$2,129
Roller kitset	$ 658	$ 658
4.26m, 4 tool bars, 43 tines	$2,470	$2,610
three crumbler rollers (fitted)		
Helper springs fitted on 2 tool bars as standard.		

Trailed Easyflow with Gooseneck Rau Tines		
5.6m, 4 tool bars, 56 tines		
with Raker Tines	$6,745	$6,895
with crumbler roller	$6,845	$6,995
Raker tine kitset	$1,192	$1,192
Roller kitset	$1,263	$1,263
7.0m, 4 tool bars, 69 tines		
with Raker Tines	$7,245	$7,395
with crumbler roller	$7,345	$7,495
Raker Tine Kitset	$1,381	$1,381
Roller kitset	$1,400	$1,400

(iv) Kubota Tillers

FL 850	$1,795
FL 1000	$1,995

4.27.10 **Rotary Cultivators**

(i) Gallagher Rototiller

30 complete with skids, E10, .76m	$1,886
40 complete with skids, E11, 1.05m	$2,027

(ii) Howard

HN Rotavator

	HN32 (0.81m)	HN40 (1.02m)
540 p.t.o. - cadet rotor Transmission rating 15 kW		
Basic machine	$2,319	$2,418
Complete with: depth control skids	$2,419	$2,518
front D.C.W.	$2,565	$2,664

HL Rotavatora

	HL40 (1.02m)	HL50 (1.26m)	HL60 (1.52m)
540 pto Transmission rating 34 kW			
Standard Rotavator	$3,270	$3,430	$3,640
Rotacadet	$3,505	$3,708	$3,946

AR Rotavator

	AR50 (1.26m)	AR60 (1.52m)	AR70 (1.78m)	AR80 (2.03m)	AR90 (2.28m)
540 or 1000 p.t.o. Transmission rating 60 kW					
Standard Rotavator c/w steel D.C.W.	$4,436	$4,546	$4,735	$5,275	$5,469
Standard Rotavator c/w crumble roller	$5,316	$5,458	$5,691	$5,837	$6,063

AH Rotavator

	AH90 (2.28m)	AH100 (2.54m)	AH120 (3.05m)
540 or 1000 p.t.o. Transmission rating 76 kW			
Standard Rotavator c/w pneumatic D.C.W.	$8,842	$9,511	$10,697
Standard Rotavator c/w crumble roller	$9,442	$10,130	$11,396

HD Rotavator

	HD3.05 (3.05m)	HD4.05 (4.05m)
1000 p.t.o. Transmission rating 122 kW		
Standard Rotavator	$17,138	$22,561

(iii) Gallagher Rotohoes

Lightweight	E20 1050	1.05 m	$3,093
	E21 1300	1.30 m	$3,194
	E22 1550	1.55 m	$3,294

(Wheels and roller crumbler extra)

Heavy Duty

E30 50 offset mounted, skid & wheel	1.3 m	$4,934
E31 60 offset mounted, skid & wheel	1.55 m	$5,141
E32 60 central mounted, two wheels	1.55 m	$5,192
E33 70 offset mounted, two wheels	1.88 m	$5,392
E34 80 central mounted, two wheels	2.05 m	$5,695

E35 90 central mounted, two wheels	2.3 m	$5,838

Dreadnought

E40 80 central mounted	2.05 m	$6,897
E41 90 central mounted	2.3 m	$7,248
E42 100 central mounted	2.55 m	$7,658
E43 120 central mounted	3.05 m	$8,500

Roller Crumbler Complete

Model	Width	L/W	H/D & D/N
40	1.05 m	$238	-
50	1.3 m	$256	$478
60	1.55 m	$274	$494
70	1.88 m		$515
80	2.05 m		$536
90	2.3 m		$557
100	2.55 m		$578
120	3.05 m		$620

4.27.11 **Harrows** (conventional):

(i) Duncan

Zig-Zag Harrows	1 leaf (less drawbar)	$133
	3 leaf bar	$132
	4 leaf bar	$145
	5 leaf bar	$173
Self-clearing Harrows	1 leaf (less drawbar)	$134
	3 leaf bar only	$181
	4 leaf bar only	$213
	5 leaf bar only	$254
Drill covering Harrows	Single leaf (less bar)	$ 71
	3 leaf bar and sliders	$292
	4 leaf bar and sliders	$372
	5 leaf bar and sliders	$486
	3 leaves with bar and sliders	$ 79
	4 leaves with bar and sliders	$ 88
	5 leaves with bar and sliders	$131

Finger Harrow Kits

Factory Number A	Factory Number B		Recommended Retail Price
52	69	16 Run 701 Seedliner	$345.00
54	72	18 Run 701 Seedliner	$360.00
56	75	20 Run 701 Seedliner	$375.00
60	80	24 Run 702 Seedliner	$400.00
74	88	2.4m (8') for 634 Rotacrumbler	$441.00
81	95	3.0m (10') for 634 Rotacrumbler	$477.00
89	104	3.6m (12') for 634 Rotacrumbler	$521.00
75	88	1.7m (5'9") for 644 Triple K	$441.00
74	87	2.25m for 9 tine vibroflex	$436.00
82	96	3.25m for 13 tine vibroflex	$482.00
110	129	3.25m for 9 tine and wings vibroflex	$645.00
117	138	4.25m for 13 tine and wings vibroflex	$689.00

(ii) Howard

AR Rotaharrow

Trash Rotor c/w steel D.C.W.	$5,187	$5,690	$5,905
Trash Rotor c/w crumble roller	$6,143	$6,252	$6,499
Bar Rotor c/w steel D.C.W.	$5,362	$5,872	$6,106
Bar Rotor c/w crumble roller	$6,318	$6,434	$6,700

AH Rotaharrow

Trash Rotor c/w pneumatic D.C.W.	$9,942	$11,143
Trash Rotor c/w crumble roller	$10,561	$11,842
Bar Rotor c/w pneumatic D.C.W.	$10,124	$11,432
Bar Rotor c/w crumble roller	$10,743	$12,131

4.27.12 Power Harrows

(i) Gallagher

E 50	1.05 m	$3,263
E 51	1.30 m	$3,387
E 52	1.55 m	$3,538

(Wheels or roller crumbler extra)

Heavy Duty

E60 50 offset mounted, skid & wheel	1.3 m	$5,735
E60 60 offset mounted, skid & wheel	1.55m	$5,886
E62 60 central mounted, 2 wheels	1.55m	$5,904
E63 70 offset mounted, 2 wheels	1.88m	$6,127
E64 80 central mounted, 2 wheels	2.05m	$6,453
E65 90 central mounted, 2 wheels	2.3 m	$6,656
E66 100 central mounted, 2 wheels	2.55m	$6,904
E67 120 central mounted, 2 wheels	3.05m	$7,394

Dreadnought

E80 80 central mounted	2.05m	$7,555
E81 90 central mounted	2.3 m	$8,106
E82 100 central mounted	2.55m	$8,657
E83 120 central mounted	3.05m	$9,759

(ii) Kuhn

HR250	$ 6,899
HR300	$ 8,450
HR400	$11,110

4.27.13 Rollers

(i) Cambridge Rollers

Duncan

300 Field Roller	2.4m, 660mm rings	$1,885
	2.7m, 660mm rings	$2,209
	3.0m, 660mm rings	$2,150
	2.4m, Deep Vee Rings	$1,957
	2.7m, Deep Vee Rings	$2,111
	3.0m, Deep Vee Rings	$2,442
Roller Seed box	2.4 m	$1,342
c/w Gears & Fitting	2.4 m	$1,398
	3.0 m	$1,450

Belgrave

2.4 m	$1,315
2.4 m with Willetts seedbox and clutch	$2,245
2.7 m	$1,425
2.7 m with Willetts seedbox and clutch	$2,450
3.0 m	$1,535
3.0 m with Willetts seedbox and clutch	$2,593
2.4 m with Willetts seedbox	$ 685
2.7 m with Willetts seedbox	$ 760
3.0 m	$ 793

(ii) Heavy (Water Ballast) Rollers

Springston Agricultural Engineering

8 tonne 2.4 m long, 13 mm plate steel	$2,950
15 mm plate steel	$3,600
10 tonne 3.0 m long, 13 mm plate steel	$3,500
15 mm plate steel	$4,900

4.27.14 Drills and Seed Boxes

(1) Duncan

701 Seedliner

Factory Number A	Factory Number B		Recommended Retail Price
1018	1198	16 Run Hoe drill	$5,990
1076	1266	18 Run Hoe drill	$6,330
1125	1324	20 Run Hoe drill	$6,618
1171	1378	16 Run Disc drill	$6,889
1237	1455	18 Run Disc drill	$7,277
1294	1522	20 Run Disc drill	$7,611
1038	1221	16 Run Disc drill - Telescopic d/b	$6,106
1140	1341	18 Run Hoe drill - Telescopic d/b	$6,707
1192	1403	20 Run Hoe drill - Telescopic d/b	$7,015

702 Seedliner

1300	1530	24 Run Hoe drill	$7,650
1496	1760	24 Run Disc drill	$8,798
1376	1619	24 Run Hoe drill - Telescopic d/b	$8,094
57	67	200mm D/A Depth Stop Ram & Hoses	$ 336

734 Multi-seeder

	1748	15 Run Triple Disc	$11,655
	2112	19 Run Triple Disc	$14,082
	2352	23 Run Triple Disc	$15,680
57	67	200mm D/A Depth Stop Ram & Hoses	$ 336

750 Till-Seeder

644	859	11 Run	$ 4,295
704	939	15 Run	$ 4,695

Turnip and Rape Seeds Box

186	219	15 Run	$1,094
188	221	16 Run	$1,106

194	228	18 Run	$1,140
196	230	19 Run	$1,152
198	233	20 Run	$1,164
207	243	23 Run	$1,216
209	246	24 Run	$1,228

Eclipse Sowing Box

168	198	15 Run	$ 991
171	201	16 Run	$1,005
177	208	18 Run	$1,041
182	214	19 Run	$1,071
185	218	20 Run	$1,088
194	228	23 Run	$1,142
198	233	24 Run	$1,167

(ii) Aitchison
Seedmatic Seed Drills

	N.I.	S.I.
Seedmatic Light Drill and Undersower 1000 Series		
SS1000 16 row 2.44 Model, Mounted Fitted with skids or wheels	$3,723	$3,954
SS800 12 row 1.8m Model, Mounted Fitted with skids or wheels	$3,262	$3,462
Deluxe Models-Seedmatic Light Drill and Undersower fitted with strip spray rig-fibreglass tank, spray pump and hectarmeter		
SS1000X 16 row 2.44m	$4,965	$5,196
SS800X 12 row 1.8m	$4,244	$4,464
Seedmatic Combine Linkage Drill 1100 Series		
SC1100 16 row 2.44m sowing width seed and fertiliser hopper endwheel drive	$4,500	$4,753
SC880-12 row 1.8m sowing width seed and fertiliser hopper endwheel drive	$4,100	$4,330
Seedmatic Contractors Drill-Trailed 1700 Series		
SD1700-17 row 150mm Centres	All prices f.o.b. Wanganui	
Basic Drill Rig-No Skeith Discs or Press Wheels	$9,527	$9,527
With-Skeith discs but no press wheels	$10,515	$10,515
With-Skeith discs and press wheels	$11,500	$11,500

With-Skeith discs, press wheels and additional Granule Box		$12,737	$12,737

4.27.15 Precision Drills

(i) Stanhay

Handpush	Single Row	$ 604
S870 MLW	3 row	$4,352
	4 row	$4,991
	5 row	$5,771
	6 row	$6,447

4.27.16 Transplanters

Howard

Type C	Automatic Gripper	1 row	$1,264
Type C		2 row	$1,985

4.27.17 Fertiliser Spreaders, Topdressers and Manure Spreaders

(i) Hylton Engineering

2 tonne trailed	p.t.o. driven	$5,542
	motor driven	$5,435
2 tonne trailed	blower unit	P.O.A.
3 tonne trailed	p.t.o. driven	$6,174
	motor driven	$6,080
	blower unit	P.O.A.
4 tonne trailed	p.t.o. driven	$6,549
	motor driven	$6,445

Drawbar jack, dual wheels, extra height adjustment and blowers are all optional extras on the above models.

3.7 m truck mounted	$6,250
4.0 m truck mounted	$6,458
4.3 m truck mounted	$6,664
4.6 m truck mounted	$6,870
4.9 m truck mounted	$7,324
5.2 m truck mounted	$7,531
5.53m	$7,755
5.85m	$7,813
6.15m	$8,019

The above prices for truck mounted spreaders exclude the cost of the motor.

Optional extras include extra height adjustment, lifting stand ($590).

(ii) Nodet Gougis (1982 prices)

Precision pneumatic tractor mounted.

12.2 m width, 1 tonne hopper	$6,250

(iii) Aitchison Industries

Agri-Spred, Fertiliser Spreaders	N.I.	S.I.
Type Oscillating Pipe-Mounted		
SP400 Capacity 350 kg	$1,195	$1,235
SP500 Capacity 500 kg	$1,287	$1,327
SP600 Capacity 600 kg	$1,330	$1,370
Type Trailed		
SP1200 Oscillator Capacity 1.2 cu meter	$2,975	$2,995
SPT2000 Capacity 2000 kg	$2,813	$2,865
Precision Spinner, Mounted		
SN400 Capacity 350 kg	$1,004	$1,039
SN500 Capacity 500 kg	$1,096	$1,131
SN600 Capacity 600 kg	$1,139	$1,174
Precision Spinner, Trailed		
LP1200 Spinner 1.2 cu.m.	$2,975	$2,995
SNT2000 2000 kg	$2,627	$2,677
Economy spinner ("Zero") Mounted		
SNE400 Capacity 350 kg	$ 765	$ 783
Garden (Trailed)		
SN25 Capacity 50 kg	$ 474	$ 486
Garden Maxi, mounted		
SN30 Capacity 32 kg	$ 522	$ 534

Agri-Spred Attachment Accessories Available.

(iv) Vicon

Vari Spreaders PS302 300 litre	$1,236
Vari Spreaders PS602 600 litre	$1,986

Vari Spreaders PS1002

(602 with hopper extension) 1000 litre	$2,256
PS602 Hopper extension only to make 1000 litre	$ 270

4.27.18 Combine Harvesters

(i) Claas

DOM.48 3.7m Gutterbar, mechanical Drive	$68,693
DOM.76 Std 4.6m Futterbar, Mechanical Drive	$99,920
DOM.76 4.6m Cutterbar, Hydrostatic Drive	$112,285
DOM.86 4.6m Cutterbar, Mechanical Drive	$115,385
DOM.96 4.6m Cutterbar, Hydrostatic Drive	$134,836
DOM.106 5.8m Cutterbar, Hydrostatic Drive	$155,950
DOM.116CS 6.7m Cutterbar, Hydrostatic Drive	$194,950

(ii) Massey Ferguson

MF 530 Combine complete with 3.7m new profile table, air conditioned cab, automatic table height control, 15x30 ply front wheels tyres tubes 12 x 18 6-ply rear wheels tyres tubes.	$91,713
MF 530 Combine complete with 4.3m new profile table, air conditioned cab, automatic table height control, 15x30 ply front wheels tyres tubes 12 x 18 6-ply rear wheels tyres tubes	$92,636
MF 535 Combine complete with 3.7m new profile table, air conditioned cab, automatic table height control, 15x30 ply front wheels tyres tubes 12 x 18 6-ply rear wheels tyres tubes, plus cascade separator	$94,810
MF 535 Combine complete with 4.3m new profile table, air conditioned cab, automatic table height control, 15x30 ply front wheels tyres tubes 12 x 18 6-ply rear wheels tyres tubes, plus cascade separator	$95,706
MF 565 Combine complete with 4.9m new profile table, air conditioned cab, automatic table height control, 15x30 ply front wheels tyres tubes 12 x 18 6-ply rear wheels tyres tubes, plus cascade separator and grain tank covers.	$100,713
MF 850 Combine complete with 4.9m grain table Hydrostatic transmission, Automatic table height control, air conditioned cab, floating cutterbar	

23.1x18x26 10-ply front WTT 12.5x16 6-ply rear WTT		$140,980
MF 860 Combine complete with 5.5m grain table, Hydrostatic transmission, automatic table height control, air conditioned cab, floating cutterbar 23.1x18.30 16-ply front WTT 14Lx16.1 6-ply rear WTT		$153,820

(iii) International Harvester

1420	4.6 m platform	$ 99,871
1460	5.2 m platform	$124,987
1480	6.7 m platform	$153,706
STB with air conditioning monitors, trailer, spare knife, seives		

(iv) John Deere

JD 1075	4.9 Front air cond. 5.9 cab	$107
JD 1065	4.3 Front air cond. 5.9 cab	P.O.A.
JD 6620	Basic machine	P.O.A.
JD 7720	Basic machine	P.O.A.
JD 8820		P.O.A.

(v) New Holland/Clayson (1982 prices)

8030		Ford 2712E Mech. drive 55.7 kW (no cab, no perf. monitor)	$ 69,000
8040		Fiat 806, 77.2 kW (no cab, no perf. monitor)	$ 79,000
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

4.27.19 Windrowers

(i) Hesston

Hydro-swing trailed auger header 4.2 m	$ 20,550
Conditioner Add extra	$ 2,750
Hydro-swing Windrower - Indent only	$ 22,344
Pull type mower conditioner as standard	$ 9,620

Self propelled windrower 3.7m front less conditioner and cab (indent only)		$ 47,094

(ii) International harvester (1982 price)

5000	Self propelled	3.8 m	$ 32,000

4.27.20 Mulchers (Straw Choppers)

Taarup

SKT 1500		$3,614
SKT 2100	2.1 m	$4,977
SKT 2100		$5,630

4.27.21 Forage Harvesters

(i) Gallagher

Multicut	1.37 m Offset	1.37 m Central	1.83 m Central
Without Chute	$4,270	$4,472	$5,031
With wide mouth chute	$4,651	$4,840	$5,473
With main chute and short top swivel	$4,905	$5,107	-
With side loading chute and long top swivel	$5,050	$5,262	$5,975
Fine cut offset			
Without chute	$3,892	$4,094	$4,500
With wide mouth chute	$4,273	$4,462	$4,942
With main chute and top swivel	$4,527	$4,279	-
With side loading, chute and long top swivel	$4,682	$4,884	$5,402
Precise cut			
Without chute	$4,625	$4,827	$5,734
With wide mouth chute	$5,006	$5,195	$6,181
With main chute and short top swivel	$5,260	$5,462	-
With side loading, chute and long top swivel	$5,415	$5,617	$6,683
Back loading Chutes			
Wide mouth chute only	$ 381	$ 368	$ 455

Main chute without swivel		$ 360	-
Top swivel chute (short)		$ 275	-
Top swivel chute (long)	-	$ 285	$ 285
Side loading chute only	-	$ 505	$ 659
Hydraulic control for top swivel chutes		$ 375	$ 375
Pre-wilt and Hay Chutes		$ 298	$ 315
Scrub and Safety Chutes		$ 349	$ 414

(ii) Giltrap

Double Acting ram for turning chute on Gallagher Forager Harvester	$ 370
Electric remote control for turning chute on Gallagher Forage Harvester	$ 280

(iii) Taarup

404		$8,193
405		$8,869
406	Fine chop	$10,965
502	Double chop (600 rpm gearbox)	$ 9,245
502	(100 rpm)	$ 8,592
602		$ 9,551
605	Precision chop	$11,842
DMH 1100	Single chop 1.1 m	$ 3,681
DMH 1350	Single chop 1.3 m	$ 4,382
DC 1500	Single Chop	$ 7,120

(iv) John Deere (1981-82 prices)

JD 15A	Double chop 1.6 m	$ 9,300
JD 16A	Double chop 1.8 m	$ 9,900

(v) Hesston

7150	Forage Harvester 1000 rpm Complete with hydraulic knife grinder, electric remote control kit, 2 metre windrow pick up	$23,375
2000/100	Complete with hydraulic knife sharpener, 2 metre windrow pick up	$13,921

(vi) Gehls

CB 750 'cut and blow'
(available for 540 or 1000 RPM tractors)

designed for tractors up to 90 PTO kW	$15,345

Attachments:

HA 400 1.5 m pickup front	$ 3,740
HA 1000, 2 m pickup front	$ 5,120
HA 1100, 2 m pickup front	$ 5,135
CA 660, single row corn front	$ 4,895
TR 600, two row corn front	$ 7,905
Hydraulic Lift	
Ram and hose kit	$ 535

(vii) JF Precision Cut Forage Harvester - trailed

FCT 80	$14,530
Single row maize attachment	$ 3,095
Two drum mower attachment	$ 3,830
FCT 110 complete with electric controls for chute and spout	$17,650
Two row maize attachment	$ 5,800
Two drum mower attachment	$ 3,830
JF Precision Cut Forage Harvester (side mounted)	
FC 80	
Complete with electric controls	$10,350
Single row maize attachment	$ 3,095

(viii) 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

(ix) Pottinger

Erntewagon II Pick-up and Forage Wagon	$26,045

(x) Class

Jaquer 40	$16,375
Jaquer 62	$18,475

(x) Bucktons Engineering

Combination Wagon	
CF 300	$ 8,850
CF 425	$ 9,475
CT 600	$10,765
Forage Harvester	
Fine Cut	$ 4,094
Multi Cut	$ 4,472
Precise Cut	$ 4,827

4.27.22 Silage Feed Equipment

Self feed units Giltrap, Gallagher Combinations.
Model 50 H.C. 5 tonne capacity as feed wagon and 11.94 cubic metres as forage wagon, filled with Gallagher Forager in draw bar.

With Gallagher Multi Cut Head	$13,220
With Gallagher Precise cut head 1370 mm	$13,570
With Gallagher Fine cut head 1370 mm	$12,820
Less cutting head, high sides - back and ram	$ 7,250

Model 40 H.C. 4 tonne capacity as feed wagon and 8.75 cubic metres as forage wagon.

With Gallagher Multi Cut Head	$12,720
With Gallagher Precise cut head 1370 mm	$13,070
With Gallagher Fine cut head 1370 mm	$12,320
Less cutting head, high sides - back and ram.	
Fast floor for rear unloading, standard	$ 6,750

Model 25 HC 2.5 tonne capacity as feed wagon and 6.93 cubic metres as forage wagon.

With Gallagher Multi Cut Head	$12,120
With Gallagher Precise cut head 1370 mm	$12,500
With Gallagher Fine cut head 1370 mm	$11,750
Less cutting head etc.	$ 6,190

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	$15,500
With hitch elevator section for centre feeding at rear	$ 1,100
With brakes - plus	$ 645
With cross conveyor - plus	$ 1,200

Model 25 P.T.O. front centre feed, approx. 2.5 tonne capacity, 3.93 cubic metres. Standard 10.0/75 x 15 new tyres	$ 5,250
Model 25 H as for M25 plus hydraulic kitset fitted to P.T.O. shaft on gearbox.	$ 5,540
Model 40 P.T.O. Front centre feed model, approx. 4 tonne capacity, 6.08 cubic metres	$ 6,100
Model 40 H with complete hydraulic drive	$ 6,100
Model 50 P.T.O. Front Centre Feed Model, approx. 5 tonne capacity, 8 cubic metres. Standard 11.5/80 x 15 tyres. 1 metre longer than M40	$ 6,600
Model 50H with complete hydraulic drive	$ 6,600
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.	$ 8,400
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	$ 6,600
Model 45 P.T.O. Cross conveyor, side feed model, approximately 5 tonne capacity, 8 cubic metres. Standard 11.5/80 x 15 new tyres.	$ 8,000
Model 60 P.T.O. cross conveyor side feed model, approx. 6 tonne capacity, 10 cubic metres.	$ 9,750
Giltrap - Extras available for all self feed wagons.	
Hydraulic Drive Kitsets (for all P.T.O. models)	$ 440
Extension high side for green maize, silage models 45, 50, 60, 65	$ 105
Extension high side modle 25, 30, 40	$ 80
Single Bale Cradle, Centre Feed Models	$ 175
Double Bale Cradle, Centre Feed Models	$ 220
Raising Blocks for towing wagon over stack, pair	$ 30
Swivel hitch (bolt on attachment) for towing behind silerator	$ 115
Brakes M40 - work off tractor external hydraulic	$ 645
10.0/75 x 15 tyres	$ 880
11.5/80 x 15 tyres	$ 1,100
Gordon Bros. Silage Spreader	$ 540
Blade to fit	$ 145
Trailer Drawback jack	$ 60
Hydraulic drawback jack (new trailers only)	$ 55
Spare part	$ 115
Giltrap Rear End Loader - 3 pt linkage with bucket	$ 1,515
With 5 tine silage fork-extra	$ 300
Granway - Feed systems. Feed handlers.	

Single axle - 4 tonne 6 cubic metres	$ 6,250
Tandem - 5 tonne, 8 cubic metres	$ 7,445
Single axle with cross feed conveyor, P.V.C. belt, drive unit fitted and underscoop	$ 7,765
Tandem and underscoop conveyor, P.V.C. belt	$ 8,960
Tandem low liner - for 2 Howard bales, deck 4.5 m long, sides 5 m high	$ 7,590
Single axle model low liner - sides 5 m high	$ 6,250

Feed wagon accessories:	
Articulated hitch supplied with initial wagon order	$ 360
Articulated hitch supplied separately	$ 580
Hydraulics power kit for farm vehicles	$ 875
Pair wide wheels - 12.5 x 16 tyres (extra)	$ 300
Round bale self-loading attachment - including winch unit and forks	Contact Factory
Canopy covers for harvesting behind flail	
Single axle wagon	$ 256
Tandem wagon	$ 284
Side loading extension	
Single axle wagon	$ 50
Tandem wagon	$ 65
Underscoop for precision Chop material	$ 42
Extension hoses to connect past flail - pair hoses 1 m each ready to connect	$ 48
Cross feed conveyor unit - including flap and underscoop	$ 1,515
Accumulator harvest - 5 tonne capacity	$ 8,500
Conestoga Farm Trailer Running gear	
Single Axle adjustable length	$ 1,905
Tandem axle adjustable length	$ 2,430
Tandem Trailer axle assembly 4 of 11 x 15 tyres	$ 1,760
Single axle assembly 11 x 15 tyres	$ 1,037
Screw Jacks - heavy acne thread	$ 64
Bale basket - 20 bales capacity (3 pt. linkage)	$ 2,365
Box Blade - heavyweight	$ 1,260
Power pack aux. vacuum pump drive	$ 425
Calf Feeder Unit - 3 pt. linkage	$ 780
D.H. Instant Hitch - A frame	$ 245
D.H. Instant Hitch - Saddle	$ 59

4.27.23 Mowers

(i) Turner

LR 16 Hydramower	(45 h.p. plus)	$13,031
Hydramower 15 rear mount	(55 h.p. plus)	$17,449

Hydramower 15 mid mount	(55 h.p. plus)	$18,277
Hydramower 18 rear mount	(55 h.p. plus)	$18,687
Hydramower 18 mid mount	(55 h.p. plus)	$19,242
Hydramower 23 rear mount	(60 h.p. plus)	$20,027
Hydramower 23 mid mount	(60 h.p. plus)	$20,602
Hydramower 255 rear mount	(60 h.p. plus)	$27,666

Brush Buster Head	$ 6,072
Circular Saw Attachment	$ 6,420

(ii) Kuhn

GMD 44 Hydraulic		$3,555
GMD 44 Plain	4 discs 1.6 m	$3,315
GMD 55	5 discs 2.0 m	$4,200
GMD 66	6 discs 2.4 m	$4,572

(iii) Busatis

1102 kW	1.9 m	$2,530
	Electric grinder	$ 480
Inner Swath Board		$ 65

(iv) Vicon

CM 165	4 disc 1.6 m	$3,518
CM 240	6 disc 2.4 m	$4,564

(v) Claas Rotary

WM20	1.65 m	$3,250
WM24	1.85 m	$4,182
WM30	2.45 m	$7,590

(vi) New Holland

442	4 disc 1.6 m	$3,315
462	6 disc 2.4 m	$4,572

(vii) Gallagher

Multimows

Parks and verges twin rollers, with hinged chute

	1370 mm	1830 mm
E330 Offset to right	$4,691	$5,077
E332 Offset to left	$5,062	$5,452
E335 Central mounted	$4,889	$5,279

Rotomov Orchard and Topping Mower

Model	Width of Cut	Price
72	1.8 m	$3,517
84	2.15 m	$3,598

(viii) Taarup

204	4 disc	$3,466
205	5 disc	$4,551
206	6 disc	$4,953
TOPS	Rotary Offset Hyamowr	$2,195

(ix) Massey Ferguson

60	1.5 m	$1,281
	1.8 m	$1,324

(x) Andrews and Bevan (1982)

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
	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

(xi) Kubota

Mid mount mower - BKM60B	$2,256
Plus Sales Tax	$ 165

(xii) Flaid King (Bucktons Engineering)

146	1.52 m	$2,900
189	1.83 m	$3,020
213	2.13 m	$3,075
244	2.74 m	$3,290
Lightweight	1.22 m	$1,700
Lightweight	1.45 m	$1,800
Lightweight	1.7 m	$2,040
Rotary	2.13 m	$3,075
Rotary	2.87 m	$4,190

(xiii) Howard

Rotaslasher

Rotaslasher RA Single Speed Gearbox model
540 pto - 23 kW maximum

RA36 (0.91 m) 2 blade cutting head	$1,498

Rotaslasher RP Single Speed Gearbox model
540 pto - 42 kW maximum

RP48 (1.22 m) 4 blade cutting head	$2,019
RP60 (1.52 m) 4 blade cutting head	$2,335

Rollascythe RPR

RPR60 (1.52 m) 4 blade cutting head	$2,826

Rotaslasher RS Single Speed Gearbox
540 pto - no maximum kW limit

RS60 (1.52 m)	$2,841
RS72 (1.83 m)	$2,971

Selectacut Gearbox Models
540 or 1000 pto - no maximum kW limit

RS60 (1.52 m)	$3,483
RS72 (1.83 m)	$3,571

4.27.24 Ride on Mowers

Monro

Cub 3.72 kW (5 h.p.) Manual, 609.6 mm (24")	$1,718
Cub 3.72 kW (5 h.p.) Electric, 609.6 mm (24")	$1,960
Scout 5.96 kW (8 h.p.) Manual, 685.8 mm (27")	$2,202
Scout 5.96 kW (8 h.p.) Electric, 685.8 mm (27")	$2,398
Minitractor 8.19 kW (11 h.p.)	$2,950
Trailing Cutter 5.96 kW (8 h.p.) Manual, 1524 mm	$ 995

4.27.25 Mower Conditioners

(i) Vicon

KM 240	6 disc rubber roller	(approx.) $15,000

(ii) New Holland

Haybine 477 with hydraulic ram 2.1 m	$ 6,500

(iii) Hesston (1982/83 prices)

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)	$14,133

(v) Kuhn

FC44	$ 5,756

(vi) Hood and Belcher (1982)

350 kg haybine c/w hydraulic ram	$ 6,500

(vii) JF

CM 166	Drum Mower 1.85m cut	$ 3,200
CM 166c	Drum Mower with fail crimper	$ 4,900
CMT 245c	2.4m cut with fail conditioner	$10,990
	less conditioner but with swath plates	$ 9,650
9CS 210	2.1m cut, disc type	$11,715
GCS 240	2.4m cut, disc type	$13,395

(viii) Claas

WM 24C	1.85 m	$ 6,845

(ix) John Deere

JD 1326	P.O.A.

4.27.26 **Hay Conditioners**

(i) Kuhn

GA 300	Gyrotedder	$2,136
GF 452	Hyrotedder	$3,150

GRS 21	Gyrotedder	$2,300
GRS 25	Gyrotedder	$3,650

(ii) Gallagami

1.5 m trailed		$ 1,500

(iii) Claas

Swather WSDS 30		$2,400
	WSDT 310	$2,145

4.27.27 **Hay Rakes**

(i) Bamford (1982)

R2	7 Reel Rake	$2,780

(ii) Kuhn

GA 402	Gyro rake	$2,805
"Reed 7"	7-reel rake	$3,650

(iii) Vicon

HKX 620	4 finger wheels, 2 pt linkage	$1,657
H 1020	6 finger wheels, trailing	$2,810
CH 300	Universal haymaker tedder	$2,580
H1240/H1340	Trapeze 8 finger wheel V rake	$3,640

(iv) Claas Tedders

W450	Working width 4.5 m	$3,365
WAS450	Working width 4.5 m	$3,715

(v) Pottinger

Haystar Kombi 350		$2,498
401 Haysystem		$3,259
411 Haysystem		$3,350

4.27.28 Balers (Conventional)

(i) Massey Ferguson

124		$11,210

(ii) International

425D		$ 9,500

445D		$12,700
(iii) New Holland		
370	Hayliner	$14,200
377	High Capacity Hayliner	$16,900
386	Hayliner - 400 mm x 450 mm	$20,600
(iv) Welger (1982)		
AP 52		$ 9,299
AP 61		$10,998
AP 71		$12,199
(v) Claas		
Square Balers		
Markant 55	Bale chamber 460 x 360	$13,366
Markant 65	Bale chamber 460 x 360	$15,600
(vi) Hesston		
Beeline Baler, complete with bale tensioner and bale chute		$19,311
Less hydraulic bale tensioner		$18,328
(vii) John Deere		P.O.A.

4.27.29 Big Balers

(i) Hesston		
Big Baler		
Complete with floation tyres and bale shute		$89,641
5400	Small Round	$ 5,950
5540	Round	$18,660
5580	Round	$19,800
(ii) International		
2400	Big Roll	$17,500
(iii) Howard		
Big Baler		$17,300
	- gripper kit	$ 1,378
(iv) New Holland		
841	Round Baler with electricwrap	$23,300
861	Round Baler with electricwrap	$25,900

(v) Welger (1982)

RP 150	Round 1.2 m wide	$13,600
RP 180	Round 1.5 m wide	$15,574
RP 180	Auto tying	$15,964

(vi) Vermeer

504F	Round Baler	$19,665
604F	Round Baler	$22,400

(vii) Gehl

1450	Round bale (makes 1.1m x 1.5m bale up to 454 kg)	$18,850
1850	Round bale (makes 1.5m x 2m bale up to 907 kg)	$26,985

(viii) Claas

Round Balers

Rollant 44,	Bale chamber 1.2 m x 1.2 m	$16,752
Rollant 62,	Bale chamber 1.6 m x 1.2 m	$17,980
Rollant 85,	Bale chamber 1.8 m x 1.5 m	$20,650

4.27.30 Grain Handling Equipment

(i) Portable Grain Augers
Slade Engineering (N.B. Prices do not include motors)

Double Augers	P.T.O.	Electric	Petrol
200 mm diameter			
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)

(ii) Aitchison

		N.I.	S.I.
9.75 m	P.T.O. drive	$2,919	$3,019
10.97 m	P.T.O. drive	$3,109	$3,209
12.1 m	P.T.O. drive	$3,319	$3,419
13.7 m	P.T.O. drive	$3,529	$3,629

Hayes 180 mm Grain Augers P.O.A.

Springston Agricultural Engineering Grain Auger
1 m $2,350

(iii) Grain Dryers

Moridge

Model 400 400 bu. capacity LPG fuel	$16,600
Model 8770 700 bu. capacity LPG fuel	$43,000

Waterwide Systems sold fuel burners (1981/82 price)

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 c/w induction fan and flue no ducting for hot air supplied	$16,880

Bisley Fans for grain dryer

Type 1 Fixed Temperature Burner	$1,517
2A Fixed Temperature Burner	$2,321
2B Hi Low Burner Flowmatic Type	$2,736
3 kW Electric Unit	P.O.A.

(iv) Miscellaneous

Bisley Vertical Mixer 1 tonne (1982)	$5,175

Bisley Hammermills (1982)

BM2	5.6 kW	up to 50 sow or 1,000 bird unit	$2,117
BM2	7.0 kW		$2,180
BM3	15.0 kW	40-150 sow or 10-25,000 bird unit	$2,995
BM3	18.7 kW		$3,354

Oxford Industries (1982)

Feed Out Trolley 5 Bag	$ 550
Feed Out Trolley 10 Bag	$ 850

4.27.31 Hay Handling Equipment

(i) Hesston

SH 10	STAK hand complete	$9,800
SM 10W	STAK mover complete	$1,500
SM 30	STAK mover complete	$3,750
5000	Round Bale Mover	$ 260
4820	Big bale accumulator	P.O.A.
4830	Big bale stacker	P.O.A.

(ii) Springston Agricultural Engineering

Bale elevator 6 metres long (mobile; petrol or P.T.O. optional)	$1,300

(iii) Garth D. Stewart

G.D.S. Hi lift forklift	$ 895
Accumulator	$1,699
Impaler	$ 925

(iv) Drum Machinery

Hay Elevator, 5.5 m lift	$ 930
Hay Sweep	$ 288
Round baler Feedout Machine	$1,870
Hay Feeding Rack 2.4 m	$ 158
3.0 m	$ 178

4.27.32 Feed Mixers

(i) Farmhand

F898 Grinder Blower	$10,378
817 Feedmaster, (2.270t Tank)	$16,777
835 Feedmaster, (2.725t Tank)	$20,739

(ii) Gehl

MX100 Mix-all Feedmaker (2.270 t tank)	$18,875
MX100 equipped with swinging auger feeder	$20,320
MX135 (3.06 t tank)	$23,000
MX135 equipped with swinging auger feeder	$24,505
MX135 equipped with power bale feeder	$25,445

(iii) Bisleys Milling and Mixing System

BM2	5.5 kW	$1,917
	17.0 kW	$1,980
BM3	11.7 kW	$2,867
	15.0 kW	$3,075
	18.7 kW	$3,461
BM5	30.0 kW	$6,758
	37.0 kW	$6,948
A3	Vertical Mixed	$4,600
Also available - Horizontal Batch Mixer		P.O.A.

4.27.33 Trailers

General Purpose
(i) Drum Machinery

Hydraulic Tip Trailer 3 tonne capacity with 3 m x 2.2 m deck		$ 1,830
Tailgate and High Sides		$ 197
Hay Extension 1.1 m		$ 197
Hay poles		$ 59
Dual wheels		$ 137
Silage cages	from	$ 960
Drum Motor Bike trailer 1.2 m x 1 m		$ 446
Car trailer with Stock Crate		$ 778 $ 1,028

(ii) Giltrap Trailers - Hydraulic Tip

3 tonne C tip trailer combination hydraulic trailer with silage cage and Gallagher forager, 11 cm	
Less Head Ram, Hoses, Linkage	$ 4,707
Gallagher Multi Cut	$10,140
Forage Head Fine Cut	$ 9,750
Forage Head Precise Cut	$10,500
5 tonne tip trailer combination, as above but with 14 cm capacity	
Less Head Ram, Hoses, Linkage	$ 5,700
Gallagher Multi Cut	$11,130
Forage Head Fine Cut	$10,750
Forage head precise Cut	$11,500

1.5 tonne horticulture trailer 2 cubic yards	
75mm single stage ram	$2,100
2 tonne hydraulic trailer 2 cubic yards	
75mm single stage ram	$ 2,250
3 tonne tip trailer 2.75 x 2.3 deck	
Standard 11.5/80 x 15 new tyres	$ 2,550
5 tonne tip trailer 3.65 x 2.3 deck	
2 stage telescopic ram Standard	
11.5/80 x 15 new tyres	$ 3,350

Giltrap Scissors lift trailer - bulk unloader	
Model 110 with hydraulic stabilisers	$ 9,800
Model 110C combination, no stabilisers	
Multi cut	$15,580
Fine cut	$15,285
Precise cut	$15,945

Giltrap Silage Cages - with mechanical power gates	
Standard side loading complete with high	
mesh front, 3 tonne	$ 1,080
5 tonne	$ 1,240
Front loading complete with low front pipe	
frame roof and heavy cover, 3 tonne	$ 1,307
5 tonne	$ 1,500
Roof and cover only to fit existing cage	
3 tonne	$ 268
5 tonne	$ 300

Giltrap extras for both models of tip trailer,	3 tonne	5 tonne
All steel deck	$220	$300
Steel tail door with chains	$130	$130
0.914 m hay extension	$120	$120
Swivel hitch for towing behind silerator	$115	$115
Brakes - work off tractor, external hydraulics	$645	N/A

(iii) Bucktons Engineering

CF300 3 tonne centre discharge loading capacity 5.3 cubic metres 11L x 15 flotation tyres	PTO	$5,275
	Hydraulic	$5,585
CF425 4.5 tonne centre discharge loading capacity 6.7 cubic metres 11L x 15 flotation tyres	PTO	$5,933
	Hydraulic	$6,210

CF600 6 tonne centre discharge loading capacity 8.1 cubic metres Tandem axle 11L x 15 flotation tyres	PTO	$7,325
	Hydraulic	$7,500
Single axle 15.5 x 15 12 ply tyres	PTO	$6,320
	Hydraulic	$6,495
Single axle 15.5/55-17 tyres	PTO	$6,510
	Hydraulic	$6,680
SD350 3.5 tonne side delivery loading capacity 5.8 cubic metres 11L x 15 tractor tyres		$7,070
SD450 4.5 tonne side delivery loading capacity 7.3 cubic metres 15.5 x 15 tractor tyres		$7,400
SD600 6 tonne side delivery loading capacity 8.8 cubic metres Tandem axle 11L x 15 tyres		$8,820
2 tonne hydraulic tip trailer 2.7 x 1.98 deck with .300 sides 75mm single stage piston ram 11L x 15 flotation tyres		$2,275
3 tonne hydraulic tip trailer 3.0 x 2.29 deck with .300 sides 75mm single piston ram 1L x 15 flotation tyres		$2,350
6 tonne hydraulic tip trailer 3.6 x 2.29 deck with .480 sides 90mm 2 stage telescopic ram 11.5 x 15 tyres		$3,395
15.0/55-17 tyres		$3,575
Side tipping trailer loading capacity 13 cubic metres Tandem axle 11L x 15 flotation tyres		$6,485

4.27.34 Chainsaws

Where chainsaws have variable bar lengths available, price quoted is for smallest bar.

(i) Dolmar

112	51 cc	38 cm bar	$518
123	70 cc	42 cm bar	$691
114	51 cc	38 cm bar	$579
117	51 cc	38 cm bar	$611

120	61 cc	38 cm bar	$649
153	110 cc	52 cm bar	$829

(ii) Stihl

032AV	51 cc	41 cm bar	$560
038AVEQ	61 cc	41 cm bar	$665
048AVEQ	76 cc	51 cm bar	$715
056AV	81 cc	51 cm bar	$728
051AV	90 cc	53 cm bar	$747
076AVE	111cc	53 cm bar	$804
90AV	137cc	63 cm bar	$982

(iii) McCulloch

Mac 110	25 cm bar	$209
Mac 120	31 cm bar	$229
Power Mac 310	36 cm bar	$339
Power Mac 320	41 cm bar	$359
Pro Mac 510	41 cm bar	$399
PM10	40 cm bar	$519
Pro Mac 610	51 cm bars	$531
Pro Mac 650	41 cm to 70 cm bars	$578 -$602
Pro Mac 700	41 cm to 70 cm bars	$618 -$642
Pro Mac 850	50 cm to 83 cm bars	$737 -$776
PM 1000	83 cm	$839

(iv) Homelite

XL	25 cm bar	26 cc	$225
XL2	31 cm bar	26 cc	$310
SXL2	36 cm bar	31 cc	$345
150A0	31 cm to 41 cm bars	43 cc	$450
240	35 cm to 40 cm bars	39 cc	$470
XL12	31 cm to 50 cm bars	54 cc	$499
330	40 cm to 50 cm bars	54 cc	$550
360A0	31 cm to 76 cm bars	57 cc	$650
410	40 cm to 60 cm bars	57 cc	$690

550A0	40 cm to 90 cm bars 84 cc	$790
750A0	48 cm to 109 cm bars 112 cc	$968

4.27.35 Portable Generators and Welders

(i) McCulloch 'Mite-E-Lite' Generators (Briggs and Stratton Engines)

RC 103	220V, 900W, 4.5 Amp	$750
RC 153	220V, 1350W, 6.8 Amp	$925
RC 253	220V, 2250W, 11.4 Amp	$1,175
BC 153	220V, 1350W, 6.8 Amp	$610
BC 253	220V, 2250W, 11.4 Amp	$775

(ii) Robin Electric Generators (1982 prices)

LG 101	$ 697
LG 151	$ 843
LG 201	$1,062

(iii) Lincoln Electric

Tractapac basic (Mobile DC Welder and 240 V Aux. Power Source)	$1,303
20 cm wheels and tyres trailer	$ 794
35 cm wheels and tyres trailer	$ 825
Weldanpower 150 including roll cage, rope start	$1,494
Weldanpower 175 (diesel) roll cage, rope start	$1,867

4.27.36 Spray Equipment

(i) Tanks

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.	$ 500
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.	$1,000
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.	$3,475
'Sprayrite' (Moller)	polythene	
Polytank 500	500 litres freestanding tank	$ 370
	with 3 pt linkage frame	$ 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	$ 435
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 stroke) 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 stroke) W.P. = 3000 kPa; output = 52 litres/minute	$1,150
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 $ 545/ $ 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*

(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	$480
10 m Articulated boom, 25 Delavan nozzles, 13 mm connecting hose	$625

All booms fitted with LF 1.54 tips as standard

'Sprayrite'

3.5 m straight boom, 9 nozzles, electro-galvanised tubing	$ 71.30
6 m boom	$ 548
10 m boom	$ 785

(iv) Hose Reels

F.M. Winstone. Holds 80 m of 13 mm hose or 100 m of 10 mm hose	$163
'Sprayrite'. Holds 100 m of 10 mm hose or 100 m of 10 mm hose	$178

(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	$1.93
- 25 mm Yellow black stripe heavy wall plastic	$4.53
Suction hose (30 m coils)	
- 19 mm rubber hose 1400 kPa W.P.	$9.60
- 25 mm rubber hose	$17.20

(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)	$ 35.00
New Sprayrite Pistol	$ 49.70
Sprayrite Long Barrelled Pistol	$ 41.00
Gunjet (spraying system)	$22.00-$136.00

(vii) Control Units

Winstone MK V	13 mm intake 0-2500 kPa pressure guage	$ 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 (2m H.P. connecting hose $16 extra)	$155.00

(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
Moplen fine mesh linestrainer	$24.00
Moplen medium mesh linestrainer	$24.00
Moplen coarse mesh linestrainer	$24.00
Moplen 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 and 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

Platz Gnome motorised knapsack	$420
Platz Bass	$525

Alpha H.P. Knapsack	$150.00

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.	$8,200
AR 1500 pump 140 l p.m.	$7,700
AR 110 pump 104 l p.m.	$7,500

TU 60 30,000 CMH fan
AR 110 pump 104 l p.m. $6,700
AR 1500 pump 140 l p.m. $6,950

'Cropliner' Narrow Gauge
700 litre tank AR 110 pump
plus TU 60 fan $3,665

Mounted Sprayers

Cropland 'Crop Spray' 500 litres

AR 110 pump TU 60 fan 30,000 CMH $3,565
AR 110 pump TU 71 fan 60,000 CMH $4,270

Metter Sprayer

AF2 c/w 1900 l tank 785mm fan $11,000.00
1500 l tank 735mm fan $10,500.00

(xiii) Miscellaneous

R.A.D. Electric Foam Marker $ 433.95

4.27.37 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	$ 624
with glandless pump	$ 749
with twin 51 mm glandless pump and steel stand	$1,123
galvanised, headgear only	$ 742
galvanised, with glandless pump and steel stand	$1,064

4.27.38 Farm Machinery Accessories

(i) Tractor Trays

Drum carry-all tray 2.2 m x 1.2 m	$ 365
Complete side and back	$ 475
2.0 m x 1.2 m	$ 255
Hayes utility tray	$ 245.85
with steel stock sides	$ 457.30

(ii) Grader Blades

Kubota	
Dozer Blade	$4,995
Plus S.T.	$ 475
New World Products	
Standard	$ 645.00
Depth wheel	$ 165.00
Big Ed	$1,285.00
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
Hayes tractor fork lift	$ 160.92
Begg/Allen bucket loader (1982)	$1,600.00
Hood and Belcher crowd action loader	$1,960.00

Kubota		
F.E.L.	'M' series	$3,835.00
	'M' Hydraulic Trip Single lift	$2,250.00
	'L' Double	$3,328.00
	'L' Single	$3,070.00
Kubota Silage Grab		$1,680.00
Kubota Silage Fork		$ 480.00

4.27.39 **Horticultural Machinery**

(i) Hustler Masts Forklift 1360 kg to 2.4 m

(Category 'C')	rear mounted	$4,500
	front mounted	$5,200

(ii) Pruners

Hydraulic:		
HFS	12 x 36	$ 700
HFS	36 x 60	$ 700
HGS	24	$ 675
Pneumatic:		
E	12 x 36	$ 675
E	18 x 42	$ 675
E	24 x 48	$ 675
Vineyard Pruners:		
V3 without hose		$ 350

Hand:	Felco	No. 2	$24.00
		LH	$20.00
		No. 3	$14.78
		No. 4	$22.40
		No. 6	$24.25
		No. 7	$36.50
		No. 9	$22.65
		Loppers (pair)	$28.07
		Secateurs	$15.00
	Lion	Secateurs	$17.00
	Snapcut	Long handled loppers 145	$35.00
	Lion	Long handled loppers	$48.00
	Pradine - Various lengths		$25.00-$50.00

(iii) Picking Platforms

Hawke Hydraulic Ladder MK IV 3 position manual swing boom, Kohler engine, Hamilton hydraulic motor	$6,900
Picking frame and bucket	$ 217
Fed Joist	$7,000

(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 and Raspberry:	
Egger Bros. (Nelson)	$72,000
Egger Bros. smaller model	$48,000
Patterton machine (approx.)	$85,000
Raspberry: Peco	$50,000
Howard Grape Harvesters	P.O.A.
Hereward Potato Bag and Grader	$21,092

(v) Mechanical Protection

Hydrel 1500 Portable Moisture Indicator (N.D.A.)	$ 83

Birdscarers:

Zon Scarecrow Guns - gun only	$117.30
- tripod only	$ 60.85
- Timer only	$126.85
Complete unit (does not include L.P.G. cylinder)	$305.00
Exid birdscarers c/w clock	$ 360.00
4.5 kg cylinder	$ 50.00
Gas unit	$ 7.92
Razzo (complete)	$ 421.25

Frost Alarms:

Exale Alarm thermometer	$ 250.00
Mains and probe - extra	$ 70.00
Raco alarm	$ 300.00

(vi) Rotomow/Pulverizer
Orchard and Topping Mower

	Central	O/S Right	O/L Left
1.2 m	-	3,135	3,222
1.5 m	-	3,216	3,303
1.8 m	3,517	3,297	3,375
2.15m	3,598	3,378	3,465

(vii) Howard Wine Press $22,200-$31,300

4.27.40 Rotary Hoes

Kukje

KT6	King Tiller Power Tiller	$3,408
KT8	King Tiller Power Tiller	$4,212
KT10	King Tiller Power Tiller	$4,402

Howard

Dragon	406 mm Rotavator	$4,677
	610 mm Rotavator	$4,711
	910 mm Rotavator	$4,866

Horticultural Rotavator
GEM

Gem 20 petrol	510 mm	$5,435
Super Gem 24 petrol	610 mm	$6,025
Gem 20 diesel	510 mm	$6,653
Super Gem 24 diesel	610 mm	$7,221
Super Gem 30 diesel	760 mm	$7,725

4.28 BUILDINGS

4.28.1 Dwellings

New cost varies considerably but is approximately $500 per square metre for an average farm homestead.

4.28.2 Garages

New cost varies but on average $100 per square metre.
In the range of garages offered by Skyline the length of the buildings vary from 4.8 m to 9 m. There are eight different lengths available changing by .6 m at each step.

Single Garage

4.8 m x 3 m	Windows 3	$1,398
9.0 m x 3 m	Windows 8	$2,165

4.8 m x 3.6 m	Windows 4	$1,577
9.0 m x 3.6 m	Windows 9	$2,311

Garage Workshop

4.8 m x 4.2 m	$1,726
9.0 m x 4.2 m	$2,510
4.8 m x 4.8 m	$1,843
9.0 m x 4.8 m	$2,689
4.8 m x 5.4 m	$2,009
9.0 m x 5.4 m	$2,935
4.8 m x 6.0 m	$2,102
9.0 m x 6.0 m	$3,061

Double Garage

4.8 m x 5.4 m	$2,089
9.0 m x 5.4 m	$3,015
4.8 m x 6.0 m	$2,182
9.0 m 2 6.0 m	$3,141

4.28.3 Sleepouts (Skyline)

2.4 m x 3.0 m	$2,016
2.4 m x 3.6 m	$2,192
3.0 m x 3.0 m	$2,313
3.0 m x 4.2 m	$2,754
3.6 m x 3.6 m	$2,859
3.6 m x 4.8 m	$3,445

4.28.4 Woolsheds

(i) Fletcher Brownbuilt Shearing Shed and Covered Yards

3 bay Woolroom - 3 stand - 5 bay covered yard.

	Kitset	Est. to Erect
Concrete floor	$28,915	$7,106
Wooden floor	$31,515	$6,040
Standard Shearing shed - 3 bay woolroom, 3 stand, for concrete floor.	$19,688	$5,692
3 bay woolroom, 3 stand, wooden floor	$22,088	$4,744
Woolroom extra bays		

For concrete floor, grating, stand excluded	$ 3,134	$ 818
For wooden floor, grating, stand excluded	$ 4,195	$ 526
For concrete floor, grating, stand included	$ 4,589	$ 948
For wooden floor, grating, stand included	$ 5,466	$ 658
Covered yard extra bays		
11 m x 4.235 m	$ 1,730	$ 260
Extra for netting and foil per bay	$ 154	$ 32
Standard Sheds		
Extra Stands	$ 675	$ 71
Return race conversion kit	$ 55	$ 15

(ii) Woolaway Construction

Costs exclude cartage, electrical and plumbing installations:

Small woolshed (1-3 stand) per square metre	$132-187/m^2
Medium woolshed (4-5 stand) per square metre	$132-170/m^2
Large woolshed (6-8 stand) per square metre	$142-175/m^2

e.g.	
8 stand 22.5 x 27.0 m	$95,000
6 stand 13.5 x 18.0 m	$45,000
4 stand 9.3 x 18.0 m	$35,000
2/3 stand 7.6 x 13.5 m	$25,000

Covered Yards:

Small (per square metre)	$34.90-$45.80/m^2
Large (per square metre)	$36.90-$43.70/m^2
Grating Below (per square metre)	$40.20-$42.50

Rough guide to cost breakdown as follows: 1981/82

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 1981-82
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 Novaroof per bay) per metre	$34.35
(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

Aabaas Bros.
Woolshed
Steel frame $38.80-$42.20 per sq. metrekitset.
Timber frame cheaper.

4.28.5 Haybarns

(i) New World Round Barns

	Length	Kitset Form	Erected
2 bay	6 metre	$1,570	$2,050
3 bay	9 metre	$2,240	$2,850
4 bay	12 metre	$2,920	$3,720
5 bay	15 metre	$3,530	$4,550
6 bay	18 metre	$4,160	$5,440
7 bay	21 metre	$4,840	$6,250
8 bay	24 metre	$5,520	$7,100
9 bay	27 metre	$6,190	$8,030
10 bay	30 metre	$6,850	$8,800
Blank end		$ 525	$ 575
Door end		$ 840	$ 890

(ii) Hawker Engineering

Round Haybarns	
Bale capacity 1100	$2,015
1650	$2,796
2200	$3,666
2750	$4,436
3300	$5,295
Implement Sheds	
10.8 x 6 x 2.7 stud	$3,490
14.4 x 6 x 2.7 stud	$4,324

(iii) Fletcher Brownbuilt Utility Shed

	Kitset	Estimate to Erect
Standard 3 bay	$6,970	$1,726
Extra bays	$1,690	$ 320
All materials for closing in front of shed.		
1 bay	$ 241	$ 54
2 bays	$ 457	$ 95
3 bays	$ 631	$ 136

(iv) Fletcher Brownbuilt Implement Shed

Standard 3 bay	$7,450	$1,726
Extra bays	$1,810	$ 320
All materials for closing in front of shed.		
1 bay	$ 190	$ 54
2 bays	$ 360	$ 95
3 bays	$ 498	$ 136
Netting and foil.		
To roof slopes only (per bay)	$ 110	$ 35
Spouting D.P.s (both sides)	$ 32	$ 15

(v) Aabaas Bros Oval Hay Barns

		Pole Building
6.1 m lean-to 2.44 m rear wall		
6.1 m x 9.14 m 650 bales	$2,954	$1,717
6.1 m x 22.86 m 1625 bales	$4,712	$3,305
Iron on 3 walls		
7.01 m lean-to 2.44 m rear wall		
7.01 m x 9.14 m 760 bales	$3,109	

7.01 m x 22.86 m 1900 bales $6,026

Available in 4 lengths, 9.14 m to 22.86 m.

10 m arched roof steel frame iron

10.06 m x 9.14 m	2000 bales	$4,145
10.06 m x 27.43 m	6000 bales	$8,967

9 m Gable steel frame iron on 3 walls.

9.14 m x 9.14 m	1300 bales	$4,036
9.14 m x 27.43 m	3900 bales	$8,983

Available in 5 lengths, 9.14 m to 27.43 m.

4.28.6 Glasshouses

(i) Fletcher Brownbuilt

Size (m)	Area (sq.m.)	Kitset
16.4 x 9.2	133	$13,258
19.5 x 9.2	175	$16,272
24.4 x 9.2	218	$19,326
20.3 x 9.2	262	$23,150
34.2 x 9.2	306	$25,374
19.5 x 18.3	349	$28,652
24.4 x 19.3	437	$33,596
29.3 x 18.3	524	$38,930
34.2 x 18.3	612	$44,114
39.0 x 18.3	699	$49,258
43.9 x 18.3	786	$54,410

Size (m)	Area (sq.m.)	
29.3 x 27.4	802	$55,530
34.2 x 27.4	937	$62,864
39.0 x 27.4	1068	$70,118
43.9 x 27.4	1202	$77,442
29.3 x 36.6	1072	$72,420
34.2 x 36.6	1231	$81,544
39.0 x 36.6	1427	$90,918
43.8 x 36.6	1603	$100,352

(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.

4.28.7 Cool Storage

Coolstores = 2.4 m x 3 m x 2.4 m

Medium temperature 1^{o} to 4^{o}C (18.84 cubic metres)
(Cool room): no floor, hinged door, inside
75 mm polystyrene insulating panel. $5,200

Coolpak (hiring)
Berryfruit: 5.75c/kilo for first month
(if fruit is soft)
4.6c/kilo for first month
(if fruit is frozen)
3.45c/kilo thereafter.

4.28.8 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	2,315
68	4.6	4.9	2,700
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
180	6.4	6.4	5,480
201	6.4	7.38	6,007
154	7.38	3.82	4,577

182	2.38	4.9	5,182
209	7.38	5.69	5,815
237	7.38	6.4	6,448
265	7.38	7.38	7,274

36.7437 bushels to the tonne.

(ii) Springston Agricultural Engineering

V bottom on legs, gravity feed

10 tonnes	$1,450
15 tonnes	$1,900
25 tonnes	$2,350
35 tonnes	$2,450

(iii) Cyclone Silo Mesh

Roll Size: 16 m long x 2365 mm wide $257.62

(iv) Oxford Industries
(on skids)

20 tonnes	$2,000
30 tonnes	$2,500
15 tonne	$1,900
25 tonne short leg	$2,175
25 tonne long leg	$2,200
35 tonne	$2,550

(v) Bisley
Diameter 4.27m to 16.46m P.O.A.
6 diameter sizes

4.28.9 Pig Shelters

Springston Agricultural Engineering:

Small)
Large) P.O.A. but in the range $150 to $200

4.28.10 Dog Kennels

Aabaas Dog Motels:

Single	$199
Double	$352
3 berth	$492
4 berth	$620

Drum Machinery and Engineering:

Dog Kennel and Run .8 m sq. - single	$198.00
- double	$351.00

- triple	$499.00

4.28.11 Cages and Accessories

Riverview Rabbit Cages (1982 prices)

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

4.28.12 Sheep Yards

Cyclone Sheep Yards (made in panel form, add 30% for cost of erection).

Yard for handling 1,200 sheep	P.O.A.

4.28.13 Cattle Yards

Cyclone Cattle Yards (materials only)	P.O.A.

Standard Cattle Gates 1.68 m high by 2.1 m wide.
- 4 rail
- 5 rail
- 6 rail

Yard Fences 2.0 metre panel, 5 rail. From $138.90 per panel.
Forcing Pen Race $57.34 and Drafting Gates. From $95.16.

Head Bail	$ 502.00
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 1982/83 are shown below. The figures are taken from Mr D. Woollertons Honours Project, Massey University.

Item	Herringbone			Rotary Herringbone	
	12 Aside	16 Aside	20 Aside	20 Bail	28 Bail
BUILDING					
Permit	224	224	224		
Concrete blocks	740	902	1,039		
Timber	2,846	3,469	3,994		
External walls	1,583	1,929	2,221		
Wall linings	1,932	2,354	2,712		
Roof	1,554	1,894	2,181	15,000	18,350
Spouting	461	562	647		
Roller door	414	414	414		
Joinery	1,250	1,523	1,754		
Reinforcing steel	907	1,105	1,273		
Labour	6,285	7,660	8,821		
Concrete		1,061	1,054		
YARD	4,858	4,860	5,764	7,500	9,700
BAILWORK	8,054	10,817	13,818	24,524	33,277
MISCELLANEOUS					
Painting	997	1,011	1,202	1,500	1,750
Electrical	2,047	2,050	2,202	3,350	3,450
Sundries	67	82	95		
TOTAL STRUCTURE	34,219	41,917	49,415	51,874	66,532
PLANT	13,000	15,990	18,390	18,000	24,000
TOTAL DAIRY	47,219	57,907	67,805	69,874	90,532
$/BAIL	3,935	3,619	3,390	3,494	3,233

Item	Rotary Turnstyle		
	20 Bail	24 Bail	36 Bail
BUILDING			
Concrete blocks	2,663	3,269	3,840
Timber	416	511	600
Walls and Roof	6,022	7,390	8,682
Internal Walls	486	596	700
Drainage	694	851	1,000
Roller Door	414	414	414
Joinery	964	1,183	1,390

Steel - Reinforcing	423	519	610
- Structural	2,982	3,660	4,300
Concrete	4,809	6,927	8,170
YARD	3,662	4,494	5,280
BAILWORK	14,400	17,280	25,920
MISCELLANEOUS			
Painting	1,512	1,728	1,200
Electrical	3,075	3,383	2,000
Labour	4,508	5,533	6,500
Sundries	209	255	300
TOTAL STRUCTURE	47,239	57,993	70,906
PLANT	21,000	22,200	32,592
TOTAL DAIRY	68,239	80,193	103,201
$/BAIL	3,412	3,341	2,867

4.28.15 Building Materials

(i) Fletcher Construction Plywood

Aorangi Construction

	7.0 mm	9 mm	12 mm	17.5 mm
2400 x 1200 A-C	$28.25	$30.73	$39.80	$52.50
2400 x 1200 B-C	$24.20	$29.83	$36.28	$48.71
2400 x 1200 Cp-C	$20.65	$26.01	$30.02	$40.25
2400 x 1200 C-C	$14.93	$20.47	$25.08	-

(ii) Durolite

8 corrugated Durolite (per metre)	$14.39
10.5 corrugated Durolite (per metre)	$16.11
900 mm Flat Durolite (per metre)	$18.30
1200 mm Flat Durolite (per metre)	$21.61

(iii) Particle Board

		2400 x 1200	2400 x 1800	3600 x 1800
Super Flake	9 mm	$15.96	$22.64	$33.97
Super Flake	12 mm	$18.27	$25.97	$38.95
Super Flake	15 mm	$21.75	$31.00	$46.49
Super Flake	18 mm	$24.66	$35.19	$52.80
Pyne Floor	21 mm	$31.12	$46.68	$70.25

(iv) Corrugated Iron

Standard 706 mm wide	1500 mm	$ 7.74
	1800 mm	$ 9.29
	2100 mm	$10.84
	2400 mm	$12.38
	2700 mm	$13.93
	3000 mm	$15.48
	3300 mm	$17.03
	3600 mm	$18.58

(v) Galvanised Weatherboard

	1800 mm	2100 mm	2400 mm
Galvanised weatherboard	$11.87	$13.55	$15.15
Galvanised plain ridging (450 mm)	$ 7.90	$ 9.22	$10.54
Galvanised 75 mm downpipe	$ 6.88	$ 8.02	$ 9.17

(vi) Nails

	Steel/ case	Steel/ kg	Galv./ case	Galv./ kg
100 x 4	$51.22	$ 2.48	$72.88	$ 3.53
75 x 3.15	$52.77	$ 2.55	$74.41	$ 3.60
60 x 2.8	$54.98	$ 2.66	$77.22	$ 3.74
50 x 2.5	$55.71	$ 2.70	$77.92	$ 3.77
40 x 2.0	$57.11	$ 2.76	$79.61	$ 3.85
60 x 3.55 (lead nails)	$80.21	$ 3.88	$81.82	$ 3.96
75 x 3.55 (lead nails)	$80.42	$ 3.89	$80.96	$ 3.92

(vii) Concreting Requisites

Cement bagged

	Per Tonne	Bags
Guardian	$155.28	$6.56
Milburn	$155.28	$6.56
Rapid Hardening	$174.84	$7.39

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	5.30	$ 34.96
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	$28.35	Bags $2.44
Mortar Ex Yard		
Per cubic yard (0.76 cubic metres)	$48.95	Bags $3.96

Posts

1.35 m butt	$7.43
1.85 m	$8.10
2.77 m	$11.48

Fletchers Concrete Piles and Posts

30 cm	$1.86
38 cm	$2.00
45 cm	$2.40
53 cm	$2.81
60 cm	$3.21
69 cm	$3.75
76 cm	$5.03
90 cm	$6.32

Fletchers Ready Mix (per cubic metre)

(viii) Steel

665 mesh	10 metres square	$42.32
668 mesh	10 metres square	$27.04
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	$1.38
150 mm	$2.05

(ii) Novaflow/Novacoil Pipe

Drain Flow (A.H.I.)

65 mm	150 metre coils	$115
110 mm	100 metre coils	$184
160 mm	45 metre coils	$363

(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	$516

(Plus 10% sales tax)

4.29.2 Trenching Costs

These charges are for average conditions.

Cable	30c per metre
Irrigation	60c per metre
Drainage	90c to $1.00 per metre

Cartage costs are extra.

4.29.3 Mole Drainage

Rate of work approximately 2.5 hours per ha. Approximate cost $110.00 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	$151
200 mm	$178
250 mm	$198
300 mm	$247

Unit rates are:

	150 mm	200 mm	250 mm	300 mm
To supply and drive well casing	$151.00	$178.00	$198.00	$247.00
To supply and install 3 m stainless steel screen	$442.00	$647.00	$924.00	$1,040.00
Development work - per hour	$ 60.00	$ 60.00	$ 60.00	$ 60.00

Test pumping:
includes pump and generator, etc. - per hour.

- up to 5 kW pump	N/A
- up to 15 kW pump	$ 60.00
- up to 35 kW pump	$ 60.00
- over 35 kW pump	$ 60.00

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
51 mm	$ 6.57/m
76 mm	$ 8.82/m
102 mm	$11.48/m
127 mm	$20.40/m

(ii) Sprinklers

From $13.50 to $25.50 each

Naan	213/98 Glass house	$ 8.20
	233/96 Frost protection	$16.00-$31.10
	322/34 11° part circle	
	3.5 mm nozzle	$20.40
	Under-free 501	$ 4.65
	223/94	$13.50

(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
PVC Z-Joint (price per metre)		
125 mm	$ 7.30	$10.35
150 mm	$10.40	$14.90
200 mm	$15.10	$23.00

(iv) Outlets

(Cast iron, complete with T-Joint, Valve and hydrant)

150 mm x 150 mm x 100 mm	$311 each
200 mm x 200 mm x 100 mm	$334 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 to $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 clox	RC 7A	$442
Series Controller	CRC4	$360
	CRC6	$403
	CRC8	$422
	CIC8	$785
	CIC12	$997

(viii) Connectors (Harvin)

ST - 103 (per bag of 10)	$12.50

(ix) Valves

Harvin:	
No. 3 quick coupling	$34
valve key	$15
No. 5 quick coupling	$42
valve key	$31
Hydro sense controller plastic	
- 1 station valve	$260-$428
- 5 station valve	$300-$463

(x) Rotors (Harvin)

Model 27	$164
Model 47	$164
Model 61	$120
Model 62	$121
Model 63	$124
Model 64	$125
Model 81 B	$415
Model 87	$424
Model 15103 Mini Pour	$ 32.50
Model 15111 Pop-a-way	$ 58
Rubber Tops - Models 61, 62, 63, 64 Add	$ 16

(xi) Spray Heads (Harvin)

2200 Flower bubbler	$ 5.35
2400 Full: square or part circle	$ 5.35
2400 Strip and three quarter	$ 5.35
2400 Flat	$ 5.35
A7 Adapter	$ 2.25

(xii) Impact Sprinklers (Harvin)

25 AFP	$ 23.00
35 ADJ	$ 64.10
40 EFCH	$ 34.50
80 ETNT	$132.50
70 EW	$ 81.50
140 70 WH	$ 32.00
P5 Blackbird	$ 17.20
85 E	$172.25

(xiii) Irrometers (Soil moisture indicators - Harvin)

15 cm Model R	$53.50
30 cm Model R	$54.50
45 cm Model R	$55.50
60 cm Model R	$56.50
90 cm Model R	$58.50

(xiv) Swing Joints (Harvin)

150 mm x 25 mm	$17.30
225 mm x 25 mm	$19.50

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 Poweroll 400 metre line
(All prices ex Factory, Christchurch)

Pipe diameter	100 mm	
Wheel diameter	145 cm	
	$	
1 x Hydrostatic mover	2,580	
1 x End adaptor	50	
1 x End plug	105	

2 x Stabilisers	160
	2,895
2 x 6 m T/T lengths (complete)	420
32 x 12 m T/T lengths (complete)	13,440
Assembled on site	400
	17,155

Torque Tube Lengths	Per 12 metre length 100 mm
Complete with FWTD Coupler, Drain valve and Ring lock	$225
As above plus 145 cm wheel	$385
Fibreglass engine cover for 70 Series Mover	$140
Riding stand for 70 Series Mover	$110

(ii) Harvin 'Omme' Travelling Irrigator

Retail price (complete): $30,120-$30,860
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	75[1]	125[1]	175[2]	250[2]
Price ($)	20,000	20,000	28,000	28,000
Hose length (m)	100	200	200	200
Hose Int. Dia. (mm)	76	103/90	112	125
Drum Rope (m)	220	440	440	440
Boom Length (m)	30	43/30	68	68
Irrigating width (m)	60	75/60	100	100
Area Covered/Run (ha)	1.2	3/2.4	4	4

[1] Wetting 72 m.
[2] Wetting 90 m.

Extension Kit To Wet 110 m or 80 m.	$500.00

75	125	175	250
23,000	23,000	31,500	31,500

Optimum Working Pressure (all models) 280 kPa.

Model 205L Linear-Rain Fixed
Boom Travelling Irrigator

(iv) Andrews and 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)	89mm	102mm	114.0-127mm
Hose lengths (m)	150/200	200	200
Price (depending on accessories)	Prices range from	$20,000-$30,500	
A model T25 is available		$16,000-$17,000	

(v) Andrews and 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) Southern Cross Machinery
Various options are available for these standard machines.

Travelling Irrigators

Model 30 c/w 100 m x 51 mm hose, Power wind	$4,876
50 c/w 100 m x 625 mm hose, Nelson P100 gun	$7,031
75 c/w 150 m x 76 mm hose, Nelson P150 gun	$15,590
NCL c/w 200 m x 102 mm hose, Nelson P150 gun	$22,792
NCL c/w 200 m x 127 mm hose, Nelson P200 gun	$26,228
LHW Fixed Boom c/w 200 m x 11.25 cm hose	$38,778
LHW Fixed Boom c/w 200 m x 12.5 cm hose	$40,049

(vii) Homersham

Turborain Low Energy Linear Travelling Boom Irrigator.

	B70	B80	B90	B100
Discharge	18.0 litres/sec to 45 litres/sec.			
Hose Length	Up to 300m (enabling 600m runs)			
Hose Diameter	Up to 125 mm			
Irrigated Width	70m	80m	90m	100m
Area covered/run	From 2.8 ha to 6 ha.			
Optimum operating pressure	All models 70 to 100 kPa.			
Price	$34,000 to $49,000.			

Bisleys

Electric Lateral Irrigation System. P.O.A.
Span length 60 m or 48 m.
Pipe size 125 mm.
Travel speed 1-140 m/hr
Watering system - low pressure sprinklers.
83-138 kPa or drop tubes, or spray booms.
Wetted width 15m to 30m.

Nu-Way Irrigator

Model 1576	Hose length 176.8 m	$33,392
Model 1560	Hose length 371.9 m	$33,392
Model 1553	Hose length 254.5 m	$25,642

(viii) Trickle Irrigation

Homershams

AMIAD Filtration Equipment

Amiad filter sizes	20mm to 350mm
Mesh sizes	120 micron to 22 micron
Prices	Ex store, Christchurch

20mm filter 130 micron	$ 28.50
25mm filter 130 micron	$ 61.15
40mm filter 130 micron	$163.00
50mm filter 130 micron	$296.30
50mm double filter 130 micron	$407.25

Larger sizes in stock, prices available on request.

L.D. Tubing		Cut Lengths	
20 mm	200 m	0.81 m	$ 45.00
25 mm	200 m	1.04 m	$ 72.20
32 mm	200 m	1.25 m	$110.00
40 mm	200 m	1.49 m	$150.66
50 mm	150 m	1.77 m	$275.00

Lateral Tubing

13 mm x 25 m Coil	$3.67 each
13 mm x 50 m Coil	$7.34 each
13 mm x 100 m Coil	$14.47 each
13 mm x 400 m Coil	$58.68 each

(ix)

Hydratal 3000 - soil moisture operated controller	P.O.A.
3003 - Central controller for six separate plots	
Amiad Fertiliser and chemical injector unit	$987.00
Irrigation Controller - Irritrol weatherproof solid state microprocessor	$290.00 to $560.00
NADAFLO-HOSE	
2400 m coils, 30 cm & 60 cm spacings	$700.00
Fitter 2.54 cm - 7.62 cm	$112.00 to $594.00

(x) Horticultural Irrigation Equipment - Southern Cross

Controllers

Richdel	3 station controller c/w transformer	$159.00
	6 station controller c/w transformer	$202.00
	12 station controller inbuilt transformer	$456.00

Irrigation Pump Sets

RHB 22 kW 2 pole	$3,783.00
RHC 30 kW 2 pole	$4,237.00
RHD 37 kW 2 pole	$4,718.00
RHE 45 kW 2 pole	$5,366.00

RHE 55 kW 2 pole	$5,538.00
RHF 75 kW 2 pole	$6,114.00

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

(i) Require 48 to 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 to 30K.

(ii) Need two disk drives to increase backing storage.

(iii) Visual display unit (V.D.U.) with 24 lines by 80 characters.

(iv) 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.

(v) 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
TOTAL COST	$3,000-$3,500

4.31.4 Models Available

The following table contains a range of micro-computers available as at February 1983.

Manufacturer	Model	Type of CPU	ROM	RAM Min	RAM Max	Colour	Screen Lines	Screen Charac/	Operating System Available	Disk Drives Size of Disks	Disk Drives St. No of Drives Min	Disk Drives St. No of Drives Max	Amount of Mem/ Disk	Retail Prices Dual Disk System Max RAM or as stated	Retail Prices Printer 132 Column	Cost of Basic if extra
APPLE	II	6502	12k	48k	560k	All options	24	40 (or 80)	APPLE DOS CP/M	5¼"	1	12	143k*	$6070 (48k)	$1450	
APPLE	III	6502	4k	128k	256k	All options	24	80 (or 40)	APPLE SOS CP/M	5¼"	1	4	143k	$8800	$1450	
CANON	CX1	MC680G	4k	64k	128k	Green	24	80	MCX, BASIC PASCAL, COBOL	5¼"	2	4	320k	$11625 (64k) $11875 (64k)	incl. 80 cps incl. CX1	
COMMODORE	VIC(20)	6502A	20K	5K	32K	Full colour	23	22	Commodore O/S	5¼"	1	15	170k*	$4437	2056	
	4000	6502	18k	16k	96k	Green	25	40	Commodore, CP/M	5¼"	1	15	170k*	$15645(340k)	$2056	
	8000	6502	18k	32k	96k	Green	25	80	Commodore, CP/M	5¼"	1	15	170k*	$8089 (2MB total)	$2056	
	SP9000	6809,6502	36k	96k	96k	Green	25	80	Commodore	5¼"	1	15	170k*	$8016 (1MB total)	$2056	
EPSON	QX10	Z80		128k	256k	B/G, Colour	25	80	CP/M	5¼"	2	4	320k	$4600 (128k)	$1896 (MX100)	
	HX20	Dual 6301 CMOS 6800	32k	16k	32k	none Colour	4	20	MBASIC on bd	5¼"	2	4	340k	$2600 (32k)	$1896 (MX100)	
HITACHI	MC 6890	6809	24k	32k	40k	Colour	25	40	FLEX, OS.9	5¼" 8"	2 2	9 4	320k 1.2 MB	$8338 $10714	$1199 $1199	
IBM	IBM Personal	8088 Interchip	40k	64k	544k	B/G	25	80	CPM, MS, DOS, USCD, PSYSTEM	5¼"	0	2	160k*	$9511 (128k)	$1421 IBM $1895 Itoh	
ICL	PC10	Intel 8085A		64k		Green	24	80	CP/M, BASIC	5¼"	2	2	256	$8778	$2132	
	30			64k	256k	Green	24	80	CP/M, BASIC	5¼"	2	2	256		$2132	
	31 & 32			128k	256k	Green	24	80	MP/M, BASIC	5¼"	2	2	256		$2132	
ICL (MicroAge)	PC10	8085		64k		B/W	25	80	CP/M	5¼"	2		249k	$8778	$2170	
Non-Linear Systems	KAYPRO II	Z80		64k	64k	Green	24	80	CP/M	5¼"	2	2	191k	$4790	$1100	
MONROE	EC8800	Z80A		128k	128k	B/W, RGB	24	RGB 40 B/W m80	CP/M, Monroe O/S	5¼"	1	4	320k	$6150 $1695 RGB	$2575 (120cps)	
	OC8820	Z80A		128k	128k	Amber	24	80	CP/M, Monroe O/S	5¼"	2	4	320k	$8975	$2575 (120cps)	
Micro Processor Devel.	Mx Series(6)	Z80A		64k	64k	All options	24	80 (132)	CP/M TURBODOS	5¼"	1	4	800k	$7854	$1896 (MX100)	$516 MBASIC

										8"			1.2MB	$7877		
NEC	PC8001B	Z80	24k	32k	64k	B/G, Colour	25	80	CP/M, NECDOS	5¼"	2	4	312k	$7200	Incl.	MBASIC incl. BASIC80 $598
North Star	Advant-age	Z80	2k	64k	192k	G/G	24	80	CP/M, North Star ODS	5¼"	1	2	360k	$9772 (64k)	$1855 (120cps)	$500 MBASIC
OSBORNE	1	Z80A	4k	64k	64k	B/W	24	52 (128)	CP/M	5¼"	2		92k	$3650	$1495, $1950	
M/A COM	OSI	6502 6502+Z80		48k	720k	All	24	80	OS-65U, CP/M, PASCAL	8"	2	4	275k	$7894-$20453	$2200	
OTRONA	ATTACHE	Z80		64k	64k	Green	24	80	CP/M	5¼"	2		630k	$8600	$1100	
POLYCORP NZ Ltd	POLY I	6809/Z80	20k	64k	128k	Full Colour	24	40	FLEX, POLYSYS, CP/M	8"	1	4	600k	$1107inc.tax $8390ex. tax	$2500inc.tax	
	PROTEUS	6809/Z80	4k	64k	64k	B/G	24	80	FLEX, CP/M	8"	1	2	600k	$8375inc.tax	$2500inc.tax	
SANYO	MBC1000	Z80A, 4MHZ	2k	64k	64k	B/G	25	80	Sanyo SDOS, CP/M	5¼"	1	5	328	$5950	$1995	MBASIC or CBASIC $4-500
	MBC3000D	twin 8085s	4k	64k	128k	B/G	25	80	Sanyo DOS, CP/M	8"	2	4	1.2MB	$9500	$1995	
	MBC2000	twin 8085s	4k	64k	128k	B/G	25	80	Sanyo DOS, CP/M	5¼"	2	4	328k	$6500	$1995	MBASIC or CBASIC $4-500
SHARP	PC3540	Z80A, 80C49	8k (32k)	64k	256k	B/G, Colour	25	80	SHARP, CP/M	5¼" (or 8"	2	4	.75MB (1.2MB0	$7000		
SHARP	PC3201	Z80A, 8048	32k	64k	112k	B/G	25	80	SHARP, CP/M 2.2	5¼"	2	2	286k	$7500(64k)	incl.	
										8"				$10900(112k)		
OLIVETTI	M20	28001-16 bit bus.	84k	128k (38k to user)	512k	B/W, Colour	16/25	64/80	MSDOS, PCOS, CP/M 86, CP/M 80	5¼"	2	2	300k	$9300 (128k)		
SORD	M23P MkI	Z80A	4k	64k	128k	LCD or Std VDU	8 25	80 80	SORD, CPM SB.80	3¼"	2	2	290k		Any series or parallel	
SORD	M203, M223 Mk III, V, VI	Z80A	84 (48k)	64k	64k	B/G	24	80	SORD, CP/M 2.2	5¼" (8")	2	4	350*	$9702 5 "(M203) $14586 8"(M203)		

SORD	M23 A/C Mk III/V/ 2D	Z80A	Boot	64k	128k	B/G, Colour	25	80	SORD, S.B.80 (CPM 3.2)	5¼" 8"	1	4	330k 1.2MB	$7276 (col.) $6132 (green) $12138 (col.) $10946 (green)	$2373		
SYSTEMS GROUP	Systems Gp 2900	Z80A	N/A	64k	512k	B/W, Green	25	80	CP/M, MP/M, OASIS	8"	2		1.26MB	$12575 (64k)	$2170	$400	
INTERTEC DATA SYSTEM	Super-brain II	Z80A	2k	64k	64k	B/W, Green	24	80	CP/M	5¼"	2	16	328k*	$7995	$1350		
SWTPC	S	6809		8k	1016	Green	24	80	FLEX, UNIFLEX	Range	2	24	180k*	$13000	$1100	$180 Std $259 XBASIC $444 Uniflex Basic	
TELEVIDEO SYSTEMS	TS802	Z80A	4k	64k		Green	25	80	CP/M	5¼"	2		367k	$8578	$2170	$400	
VECTOR GRAPHIC	Vector 4	8088	8k	128k	256k	Full with monitor Green	24	80	CP/M 86	5"	2	2	630k	$11245	$1100		
VICTOR BUSINESS PRODUCTS	Victor 900	8088		128k	896k	Green	25/50	80/132	CPM/ 86, MSDOS	5¼"	2		600k	$9500 (128k RAM)	$1896		
WANG	Wang Prof-essional	8086		128k	640k	B/W, Colour			CPM/, MDSDOS	5¼"	1	2		$10000	N/A	$1000	
RANK XEROX	XEROX x 820	Z80	4k	64k	64k	B/W	24	80	CP/M	5¼" (8")	2	2	241k (8")	$5500-$6000 (5") $6875-$7995 (8")	$4850	$272	
RANK XEROX	XEROX	Z80A	8k	64k	96k	B/W, B/G	24	80	CP/M	5¼" (8")	2	4		$7500 (5 ") $9995 (8")	$4850	$272	

* Options with greater disk capacity are available.
There may be an additional charge for different operating systems.

4.32 FARM AIDS

(i) Weighing Platforms

Hayes Cattle Weighing platform	$ 752.00
With 3 point linkage	$ 924.03
Sheep Weighing platform (squeeze)	$ 581.80
With drafting gate	$ 666.50
Sheep/Pig Weighing platform (with crate)	$ 581.70
Donalds Sheep and Pig Hydraulic weighing platform Draftmaster 100	$ 680.00
Draftmaster 100 with wheels and handles	$ 740.00
Cattle weighing platform 1000 kg	$ 830.00
Cattle weighing platform 1500 kg	$ 960.00
3 point linkages for above	P.O.A.
Donalds Grain weigher 120 cm x 66 cm	$ 855.00
Fleece weigher	$ 180.00
Model 1000 Hopper weigher	$ 855.00
Model 1500 Hopper weigher	$ 985.00

(ii) Animal Crushes

Donalds Squeeze Cattle Crush (with sliding gate and walk-through head bail)	$1,860.00
Sliding Gate	$ 200.00
Head Bail Automatic Walk-through	$ 605.00
Head Bail Gate Type	$ 296.00
Easybail Enterprises Combined: Headbail and Racegate	$ 865.00
Hayes Walk-through Cattle Head Bail	$ 378.00
Squeeze Cattle Crush with Floor (no head bail)	$1,339.60
Squeeze Cattle Crush with Head Bail (no floor) 446/416	$1,588.60
Squeeze Cattle Crush with Head Bail and floor 446F/416	$1,695.40
Squeeze Cattle Crush with Head Bail, Floor and Rear Operating Attachment 446F/449	$1,797.70
Sliding Cattle Gates	$ 286.50
New World Dehorning Bail	$ 98.00

(iii) Loading Ramps

Donalds Sheep Loading Ramps with walkway	
40 cm wide, 5.0 m long	$ 945.00
50 cm wide, 6.0 m long	$ 985.00

Springston Agri. Eng. Sheep Loading Ramps
6.1 m long mobile height adjustable $ 830.00

(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
$315.00	$352.00	$473.00

With Stand $52 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
Wasp Shepherd's Crook	$ 16.60
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	$ 7.97
50 mm double, 136 kg	$ 11.15
75 mm single, 114 kg	$ 25.34
75 mm double, 275 kg	$ 46.68
75 mm triple, 430 kg	$ 58.90
100 mm single, 160 kg	$ 34.45
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)	$ 30.71
Hayes All Metal Gambrel	$ 5.00
Hayes Snig Chains 10 mm to 16 mm with Slip or Grab Hooks and with/without swivel	$43.78 to $105.78
Hayes Dipping Crutch	$ 15.89

Hayes Scrub Puller	$ 33.29
Hayes Snig hook for light chain	$ 7.20
Hayes Snig hook for 10 mm chain	$ 11.60
Hayes Grab gook for 13 mm chain	$ 20.73
Gambrel (sheep) restrainer	$ 7.95
Hayes Dog Chains - 9 gauge twisted link	$ 6.97
- 12 gauge twisted link	$ 6.22
Bay Lambing Instrument	$ 3.45
Bale Hook - wool	$ 6.10 to $ 7.62
Bale Hook - Bent Hook	$ 6.40
Bag Hooks - narrow and wide	$ 5.82
Hay Hooks	$ 6.05
Animal Weight Banks	$ 0.52
Sack Barrow	$ 94.15

Varteg Portable Saw Mill	from $7,900 complete
Batten Mill	
- mechanical	from $4,500 complete
- hydraulic	from $5,500 complete

Wellsford Offal Cooker (oil fired)	$120.00
Ace galvanised and stainless steel	
63 litre boiler pail	$320.00-$408.00
94 litre	$364.00-$474.00
200 litre boiler pail	$551.75-$893.72
Ace Electric offal cooker 14 to 200 litres	from $220.70

Secateurs:	
Felco No. 2	$ 24.00
Pradine	$ 25.00
ARS 120B (super sharp precision blade)	$ 10.93
Fumigun (glasshouse fumigation)	$255.75

Manual Pipe Bender	$135.00

Aitchison	
Tree Planter Auger	
Replaceable Cutter and Tungsten Carbide Breaker Tip	
1560TP 432mm adjustable to 610mm long x 152mm Dia.	$ 74.92
1580TP 432mm adjustable to 610mm long x 203mm Dia.	$ 78.05
15010TP 432mm adjustable to 610mm long x 254mm Dia.	$ 90.80
15012TP 432mm adjustable to 610mm long x 305mm Dia.	$ 96.60

Fischbein Bag sewing machine (1982 price)	$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 (KN)	$1.20
	- work gloves	$5.44
	- leather (heavy duty)	$9.00
	- Rubber	$8.00
	- Hay (Leather)	$12.00
Safety spectacles (Wormald)		
	- Dax a Vis	$12.00
	- WS 621-CRP	$ 9.75
Airstream Anti-Dust Helmet (Wormald)		
	Complete with battery	$419.63
	Battery charger	$ 54.51
Wormald Safety Helmet H46		$ 9.66
Wormald Welding Equipment:		
	Helmets - Hiderok lift up	$ 24.00
	- fixed front	$ 20.40
	- Nylerok	$ 36.60
	Goggles	$ 8.00 to $ 12.00
	Face Shield	$ 22.50
	See through Welding Curtain	$ 22.40
	Gloves	$ 10.28 to $ 19.80
Aprons	- Hay	$ 12.00
	- Dairy shed (with pocket)	$ 9.00
Goggles	- G2 (Dust Wormald)	$ 3.75
	- 'North' G4 (Chemical splash Wormald)	$ 7.13
Ear muffs		
	- Wormald Silencer Mark II	$ 13.00
Dust guard Masks Single		$ 2.73
	- Filler PKT of 20	$ 3.21
Respirators		
	- 'Agriculture' Single Filter	$ 13.20
	Double Filter	$ 16.40
	Complete with Hood	$ 80.00
	X219 Filters	$ 6.39
	Caskco Respirator	$550.00
Overalls		
	- Zip comb. Size 3- 8	$ 25.80
	Size 9-10	$ 26.34
	- Bib and brace	$ 18.00
Boots	- Safety cap Medium duty	$ 51.62
	- Heavy duty	$ 58.93

Gumboots	
- Marathon Knee	$ 37.81
- Perth Knee 6-12	$ 29.68
- White & Black Bata Jobmaster	$ 20.36
Bata Capwell	$ 22.66
- Redband Short	$ 27.14
Shearers Moccasins (leather)	$ 11.50
Parkas - Oilskin	$ 45.00 to $ 60.00
- P.V.C. coated	$ 28.72
Swandri Zip front jacket	$ 70.00
- Bushshirt	$ 38.00
Leggings	
- Oilskin	$ 27.00
- P.V.C. coated	$ 16.77
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. Farmers Jacket three-quarter unlined coat No. 701	$ 58.62
P.V.C. Overtrouser (tie waist) No. 702	$ 34.11
P.V.C. Overtrouser (elastic waist) No. 703	$ 34.11
P.V.C. Ranger Nylon Jacket No. 720	$ 63.30
P.V.C. Ranger Nylon Overtrouser No. 721	$ 28.07

4.34 PACKAGING MATERIALS

4.34.1 Horticultural Packaging (N.Z. Fruitgrowers Federation)

Apple Bags: polythene with holes	per thousand
Printed: 5 kg	$ 95.65
10 kg	$117.65
Plain: 5 kg	$ 42.60
9 kg	$125.30

Cellophane:	
255 x 255 pkt plain	$ 13.85 less 5% disc.
300 x 400 pkt plain	$ 22.61 per thousand

Containers: Berry (ex factory)	per thousand
L.M. Strawberry tray with 2 dividers	$544.00
Export Strawberry Tray	$1,079.00

3 kg bulk berry pack	$226.00
Raspberry pack 6 lbs	$344.00
9 kg gate sale box (white)	$431.00
2.5 kg gate sale box (white)	$215.00
4.5 kg tomato/stone fruit box and full liners	$417.00
plus liners	$164.00

Punnets:	per thousand
8 oz. No. 50	$ 54.70
12 oz. No. 75	$ 57.80
1.5 kg light	$159.50
1.5 kg heavy	$234.40

Strawboard liners:	
(per bundle of 200)	$ 60.16
Metal containers:	
5 litre	$ 2.14
4 gallon (honey) 4 kg	$ .99
20 litre	$ 3.81
Plastic containers:	
5 litre	$ 1.45
Bag ties:	
10 mm x 19 g wire ties (per coil)	$ 18.33
Twistits - 10 cm boxes	$ 4.70
- 20 cm boxes	$ 9.20
- 10 cm pkts (100)	$ 0.45
- 20 cm pkt (100)	$ 0.66
Shredded paper:	
55 kg (approx.) bales (per kg)	$ 0.68
Sundries:	
Stamp pad	$ 4.88
Stamp pad ink - 110 ml	$ 2.11
Markers - radiant	$ 1.60
- vivid	$ 0.92

4.35 HORTICULTURAL LEVIES

Berryfruit:

	Berryfruit Levy 1981
Less than 250 sq metres	Nil
250 sq m but not over	

8000 sq m	$ 80.00
8000 sq m and over	$150.00

Blackcurrants:
A levy of 3 cents per kilogram shall be paid in respect of all blackcurrants sold for processing or export (over and above the general berryfruit levy).

Blueberries:
A special levy is payable.

Less than 250 square metres	Nil
Greater than 250 square metres	$80

All growers pay 20c per kilogram for all blueberries sold fresh or for export.

Boysenberries:
A 2.5c per kilogram voluntary levy applies for all export and processed boysenberries.

Raspberries:
North Island raspberries under The Berry Federation.
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.

Pip and Stonefruit, Kiwifruit, Avocardos, Citrus:
$40 per registered holding in excess of 4,000 square metres.
Stonefruit advertising levy 5 to 7c per 7 kg.

Citrus Fruit:
6c per bushel levy for promotion.

Vegetables:
Registration fee to Vegetable Federation.
Fresh vegetables: 4% of purchasing price.
Processed vegetables: .5625% of price at which vegetables are purchased for processing or canning.

Auction Rates:
Flowers: 12.5%
Fruit: 10%
Vegetables: 10% (except watermellons - 12.5%)

4.36 HORTICULTURAL EQUIPMENT

4.36.1 Birdnetting

4m x 3m		$ 6.08 each
50m x 3m		$42.75 (or $1.15 per metre)
50m x 1m	(12mm gauge)	$36.51

4.36.2 Polythene Film

	per metre	
	black	clear
1000mm x 50mm	.31	.33
1000mm x 80mm	.42	.48
1000mm x 125mm	.66	.67
2000mm x 50mm	.55	.60
2000mm x 80mm	.76	.82
2000mm x 125mm	1.10	1.24
2000mm x 250mm	2.13	2.70
4000mm x 50mm	1.01	-
4000mm x 80mm	1.37	1.52
4000mm x 125mm	2.04	2.30
4000mm x 200mm	3.13	-
5000mm x 80mm	1.78	-

Lining film 2000mm x 100mm (black) $1.24

4.36.3 Planting/Propagating Material

(i) Planterbags:
Range from $2.24 to $32.53 per 100 depending on pot size.

(ii) Propagating trays $2.44 each.

(iii) Peat - growers bale 100 litres $8.33.

(iv) Plastic labels 13cm $26.68 per 1000.

4.37 BEES

Hives - complete		
A6	each	$ 64.30
Hive Mats		
Hardboard with Wood Rim	each	$ 2.97
	per 10	$ 24.75

	per 100	$225.00
Hardboard only	each	$ 1.35
	per 10	$ 11.25
	per 100	$102.25
Roofs		
With iron	each	$ 10.31
	per 10	$ 99.01
Iron only	each	$ 3.68
	per 10	$ 36.63

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	$ 395.00
Cappings Spinner:		
760mm Model, made by Maxant Industries, U.S.A.	each	$1,975.00
Honey Pumps:		
'Ecroyds' 31.4mm Gear Type	each	$ 177.00
Honey Tanks - Stainless Steel:		
.25 tonne - fitted with 44.1mm Nylon Honey Gate	each	$ 222.00
.50 tonne - fitted with 63.7mm Socket	each	$ 330.00
1 tonne - fitted with 63.7mm Socket	each	$ 500.00
Honey Cartons:		
500 g	per 100	$ 16.99
	per 1000	$137.16
900 g	per 100	$ 24.43

	per 1000	$197.25
Honey Containers - Plastic:		
200 per carton		
2 kg - in carton lots	each	42.5c
less than carton lots	each	.51c
Embedders:		
Hand - spur type	each	$ 4.53
Fumidil B		
0.5 g bottle	each	$ 7.56
9.5 g bottle	each	$ 87.17
Hats		
Ventilated Bee Helmets	each	$ 12.30
Smokers		
75 cm stainless steel	each	$ 31.52
100 cm tin with shield	each	$ 26.25
Replacement bellows for Dadant Smokers	each	$ 11.08
Study Prints:	per set	$ 31.50
25 cm plain uncapping knife	each	$ 17.50
25 cm steamheated uncapping knife:	each	$ 34.25
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	.12
	per 100	$ 9.25
Bee Brushes:		
Double sided		$ 13.00
Honey Refractometers: (complete)		$210.00
Bee Feeders: (plastic)		
Holds 4 litres syrup		$ 3.80

NOTES

NOTES

Purchase orders to: Accounts Office,
Lincoln College,
Canterbury,
New Zealand.