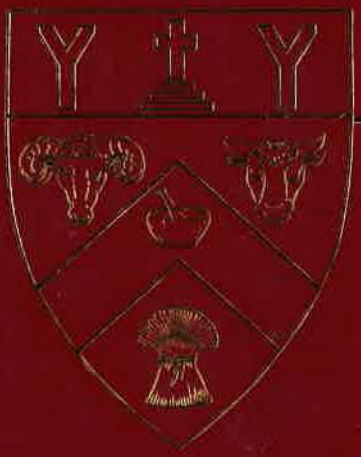
Financial Budget Manual

1985 EDITION
LINCOLN COLLEGE



FINANCIAL BUDGET MANUAL 1985 EDITION

Editors : M.B. CLARK
Senior Lecturer
in Agricultural Accounting

E.S. BURTT
Assistant Lecturer
in Farm Management

Department of Farm Management
and Rural Valuation
Lincoln College
Canterbury, New Zealand

PREFACE

1985 has already seen significant shifts in Government policies, changes in the taxation system, changes in the levels of assistance to the primary sector, the lifting of the price freeze - to name but a few - with promises of yet more to come.

Against this background of change, it was felt appropriate to introduce major changes to the Budget Manuals published by Lincoln College. The basic concept of two complementary manuals (Technical and Financial) remains unchanged, but the contents have been rationalised and reorganised. The Financial Manual will contain current information only and will be published annually as a single volume; the Technical Manual will contain information of a more stable nature and updated editions will be published less frequently than before.

To achieve this rationalisation, it has been necessary to remove some of the detail from the Financial Manual, while other information which previously has been detailed has now been summarised.

Every effort has been made to ensure that the published information is correct at the time of printing, but readers should appreciate that prices do not remain stationary. The Financial Manual should therefore be used as a guide only. Trade names have been used to acquaint the reader with some of the products available, for clarity and for convenience. No preferential endorsement by the College is intended; no criticism is implied of any alternative product or of any product which does not appear in the Manuals.

We would like to thank all individuals, organisations and commercial firms who have provided information for our use. Without their co-operation, the production of the Manuals, particularly the Financial Manual, is not feasible. We also wish to express our appreciation to Nancy McLean, Jane Price, Felecity Wright, Susan Johnston and Fiona Black who have gathered and collated this information. Last, but not least, we wish to extend our grateful thanks to Mary Lagan and Susan Trotter for providing the not inconsiderable secretarial input required to prepare the manuscript. We would hasten to add that the responsibility for errors or ommissions is ours.

M. B. Clark,
E. S. Burtt (Miss),
EDITORS.

March 1985.

Financial Budget Manual

For future editions we would like to know if the manual is meeting the needs of those it is designed for. In an attempt to ascertain this and to assist us, you are invited to fill in the brief survey form below:

1. What information which is NOT currently in the Financial Budget Manual would you like to see included in next year's edition?

2. Is all the information reported in the Financial Budget Manual adequately explained? YES/NO

   If no, what information is not adequately explained?

3. Are there any sections in the Financial Budget Manual which you think snould be omitted? If so, what are these sections?

4. Is the Financial Budget Manual always convenient to use as a reference source? YES/NO

If no why not?

5. Do you have any other comments or suggestions regarding the Financial Budget Manual?

Thank you for your co-operation.

Please post to: The Editors,
Farm Budget Manual,
Farm Management and Rural Valuation Dept.,
Lincoln College,
CANTERBURY.

CONTENTS

Page

SECTION 1 - FARM REVENUE

1.1 Sheep 1-3
1.1.1 Export Meat Schedule 1-3
1.1.2 Local Meat Prices 1-4
1.1.3 Store and Breeding Stock Prices 1-5

1.2 Wool Production 1-8
1.2.1 Wool Income Stabilisation Arrangements 1-8
1.2.2 Wool Prices in late 1984 1-11

1.3 Skins 1-14

1.4 Crops 1-15
1.4.1 Wheat 1-15
1.4.2 Barley 1-17
1.4.3 Oats 1-17
1.4.4 Peas 1-17
1.4.5 Beans 1-18
1.4.6 Cauliflower 1-19
1.4.7 Brussel Sprouts 1-19
1.4.8 Potatoes 1-19
1.4.9 Lupins 1-19

1.5 Small Seeds 1-19

1.6 Cattle 1-21
1.6.1 Export Meat Schedule 1-21
1.6.2 Local Cattle Prices 1-22
1.6.3 Store and Breeding Stock Prices 1-23
1.6.4 Minimum Price Schemes 1-24

1.7 Dairy Produce 1-24
1.7.1 Whole Milk for Manufacture 1-24
1.7.2 Whole Milk for Town Supply 1-25
1.7.3 Dairy Cattle Prices 1-27

1.8 Pig Production 1-27
1.8.1 Pork Prices 1-27
1.8.2 Live Pig Sales 1-29

1.9 Goat Production 1-29
1.9.1 Introduction 1-29
1.9.2 Chevon Production 1-30
1.9.3 Goats Milk Production 1-30
1.9.4 Mohair 1-31
1.9.5 Stock 1-31
1.9.6 Cashmere 1-32

1.10 Deer Production..... 1-32
1.10.1 Introduction..... 1-32
1.10.2 Velvet Prices..... 1-32
1.10.3 Venison..... 1-33
1.10.4 Livestock..... 1-33

1.11 Poultry Production..... 1-34
1.11.1 Introduction..... 1-34
1.11.2 Meat Chickens (Broiler)..... 1-34
1.11.3 Eggs..... 1-34

1.12 Fruit Production..... 1-35

1.13 Vegetable Production..... 1-37

1.14 Principal Price Smoothing and Price Support Schemes in New Zealand Primary Industry..... 1-40
1.14.1 Background..... 1-40
1.14.2 Dairy Industry..... 1-40
1.14.3 Meat Industry..... 1-41
1.14.4 Wool Industry..... 1-43
1.14.5 The Pipfruit Industry..... 1-45

1.15 Sundry Income..... 1-46
1.15.1 Forestry Encouragement Grants prior to 9 November 1984..... 1-46
1.15.2 National Water and Soil Conservation Authority Grants..... 1-48

SECTION 2 - FARM EXPENDITURE DATA

2.1 Wages..... 2-3
2.1.1 Farms and Stations (Dairy Farms)..... 2-3
2.1.2 Farms and Stations (Sheep Meat and Wool)..... 2-5
2.1.3 Farms and Stations (Meat (other than sheep meat) Grain, Seed and Herbage)..... 2-6
2.1.4 Shearers and Shedhands Wages..... 2-8
2.1.5 Market Garden Workers..... 2-10
2.1.6 Orchard and Vineyard Workers..... 2-11
2.1.7 Nurserymen and Gardeners..... 2-13
2.1.8 Greenkeepers, Sextons..... 2-14
2.1.9 Farm Employment Scheme..... 2-15

2.2 Animal Health..... 2-16
2.2.1 Dog Registration and Hydatid Control Fees..... 2-16
2.2.2 Contract Dipping..... 2-16
2.2.3 Sheep Dipping Guide..... 2-16
2.2.4 Sheep and Cattle Dips, Sprays and Dressings... 2-17
2.2.5 Sheep and Cattle Drenching Guide..... 2-18
2.2.6 Bloat Control..... 2-20
2.2.7 Vaccines..... 2-21

2.2.8 Antibiotics..... 2-22
2.2.9 Disinfectants..... 2-23
2.2.10 Metabolics..... 2-23
2.2.11 Poultry Remedies..... 2-23
2.2.12 Stock Identification..... 2-23
2.2.13 Mating Management Aids..... 2-25
2.2.14 Lambing and Calving Requisites..... 2-25
2.2.15 Miscellaneous Animal Health Equipment..... 2-26
2.2.16 Productivity Improvers..... 2-27
2.2.17 Miscellaneous Animal Health Products..... 2-27
2.2.18 Veterinary Club Membership..... 2-28

2.3 Breeding Expenses..... 2-28
2.3.1 Artificial Breeding Fees (Canterbury)..... 2-28
2.3.2 Herd Testing Charges..... 2-29
2.3.3 Beefplan (National Beef Recording Service)..... 2-30

2.4 Cash Cropping Expenses..... 2-30
2.4.1 Sacks..... 2-30
2.4.2 Box Hire..... 2-31
2.4.3 Seed Testing Fees..... 2-31
2.4.4 Herbage Seed Levy..... 2-31
2.4.5 Consolidated Dressing and Store Handling Charges..... 2-32
2.4.6 Grain and Seed Drying Charges..... 2-33

2.5 Contracting..... 2-33
2.5.1 Contract Heading..... 2-33
2.5.2 Baling..... 2-34
2.5.3 Contract Windrowing..... 2-34
2.5.4 Silage..... 2-34
2.5.5 Cultivation Contracts..... 2-34
2.5.6 Horticultural Contracting..... 2-35
2.5.7 Miscellaneous..... 2-36

2.6 Dairy Shed Supplies..... 2-36
2.6.1 Milking Machines..... 2-36
2.6.2 Milking Shed Equipment..... 2-37
2.6.3 Dairy Hygiene..... 2-39
2.6.4 Miscellaneous..... 2-40
2.6.5 Typical Dairy Farm Expenses for Budgeting Purposes..... 2-41

2.7 Electricity..... 2-42

2.8 Feed..... 2-48
2.8.1 Baler Twine..... 2-48
2.8.2 Stock and Poultry Feeds..... 2-48
2.8.3 Grazing Fees..... 2-52

2.9 Freight and Cartage..... 2-53
2.9.1 Railway Transport Rates..... 2-53

2.9.2 Road Transport Rates..... 2-53
2.9.3 Air Rates..... 2-59
2.9.4 Transport of Cooltainers..... 2-60

2.10 Fertilisers..... 2-60
2.10.1 Ravensdown Fertiliser Co-operative Ltd..... 2-60
2.10.2 Yates Fertilisers..... 2-62
2.10.3 Ammo-Phos N.Z. Ltd..... 2-64
2.10.4 Bell Booth..... 2-65
2.10.5 New Zealand Farmer's Fertiliser Company Ltd... 2-65
2.10.6 Fertilisers for Horticultural Use..... 2-66
2.10.7 Spreading Fertiliser and Seed..... 2-66

2.11 Lime..... 2-67
2.11.1 Cost per tonne ex quarry..... 2-67
2.11.2 Spreading Cost per hectare..... 2-67

2.12 Seeds..... 2-68
2.12.1 Wheat..... 2-68
2.12.2 Barley..... 2-68
2.12.3 Oats..... 2-68
2.12.4 Lupins..... 2-68
2.12.5 Ryecorn..... 2-68
2.12.6 Maize..... 2-68
2.12.7 Peas..... 2-70
2.12.8 Small Seeds..... 2-70
2.12.9 Seed Coating..... 2-70
2.12.10 Vegetable Seeds..... 2-71
2.12.11 Flower Seeds..... 2-73
2.12.12 Bulbs..... 2-73

2.13 Shearing Shed Expenses..... 2-73
2.13.1 Plant..... 2-73
2.13.2 Shed Expenses..... 2-75
2.13.3 Wool Charges..... 2-75

2.14 Water Charges..... 2-76
2.14.1 Irrigation..... 2-77
2.14.2 Stock Water Supplies..... 2-79

2.15 Weed and Pest Control..... 2-80
2.15.1 Herbicides..... 2-80
2.15.2 Insecticides..... 2-86
2.15.3 Fungicides..... 2-89
2.15.4 Miticides..... 2-91
2.15.5 Soil Fumigants..... 2-91
2.15.6 Growth Regulants..... 2-92
2.15.7 Wetting, Spreading and Marking Agents..... 2-92
2.15.8 Miscellaneous Chemicals..... 2-92
2.15.9 Aerial Spraying..... 2-93
2.15.10 Ground Application..... 2-94

2.16 Selling Charges..... 2-95
2.16.1 Yard Fees..... 2-95
2.16.2 Commissions on Stock Sold through Stock and Station Agents..... 2-96

2.17 Plants..... 2-96
2.17.1 Trees and Shrubs..... 2-96
2.17.2 Fruit and Nut Trees..... 2-97
2.17.3 Fruit Plants..... 2-98

2.18 Repairs and Maintenance..... 2-98

2.19 Vehicle Expenses..... 2-99
2.19.1 Vehicle Registration..... 2-99
2.19.2 Licencing Fees..... 2-99
2.19.3 Road User Charges..... 2-100
2.19.4 Refund of Taxes on Fuel..... 2-103
2.19.5 Fuel, Oil and Grease..... 2-104
2.19.6 Repairs and Maintenance..... 2-104
2.19.7 Tractor Running Costs..... 2-105
2.19.8 Costs of Cultivation..... 2-109
2.19.9 Combine Harvester Costs..... 2-114

2.20 Administration Expenses..... 2-115
2.20.1 Telephone and Toll Charges..... 2-115
2.20.2 Postage and Stationery..... 2-117
2.20.3 Subscriptions..... 2-117
2.20.4 Travelling..... 2-118
2.20.5 Bank and Stock Company Charges..... 2-118

2.21 Standing Charges..... 2-118
2.21.1 Insurances..... 2-118
2.21.2 Rates..... 2-121
2.21.3 Interest..... 2-121
2.21.4 Rent..... 2-127

2.22 Wages of Management..... 2-128

2.23 Professional Fees..... 2-128
2.23.1 Accountancy Fees..... 2-128
2.23.2 Architectural Fees..... 2-129
2.23.3 Consultancy Charges..... 2-129
2.23.4 Legal Fees..... 2-132
2.23.5 Real Estate Charges..... 2-132
2.23.6 Surveyors Charges..... 2-138
2.23.7 Land Transfer Fees..... 2-140

2.24 Forestry..... 2-140
2.24.1 Labour Costs..... 2-140
2.24.2 Other Costs..... 2-144

2.25 Fencing..... 2-144
2.25.1 Wire..... 2-144
2.25.2 Standards..... 2-144
2.25.3 Posts..... 2-144
2.25.4 Stay Blocks..... 2-146
2.25.5 Staples..... 2-146
2.25.6 Battens (Tanalised)..... 2-147
2.25.7 Gates..... 2-147
2.25.8 Gate Fittings..... 2-149
2.25.9 Wire Netting..... 2-150
2.25.10 Chicken Netting..... 2-152
2.25.11 Fencing Aids..... 2-152
2.25.12 Shade and Windbreak Cloth..... 2-156
2.25.13 Electrical Fencing Components..... 2-157
2.25.14 Contract Fencing Rate..... 2-160
2.25.15 Guide to Fencing Cost..... 2-160

2.26 Water Supply..... 2-163
2.26.1 Polythene Piping..... 2-163
2.26.2 P.V.C. Pressure Pipe..... 2-164
2.26.3 Concrete Water Troughs..... 2-165
2.26.4 Concrete Tanks..... 2-165
2.26.5 Valves and Floats..... 2-166
2.26.6 Pumps..... 2-167

2.27 Farm Machinery..... 2-169
2.27.1 Tractors..... 2-169
2.27.2 Crawlers..... 2-175
2.27.3 Trucks..... 2-175
2.27.4 Farm Bikes..... 2-177
2.27.5 Ploughs..... 2-178
2.27.6 Mole Drain Ploughs..... 2-179
2.27.7 Chisel Ploughs and Subsoilers..... 2-179
2.27.8 Discs..... 2-181
2.27.9 Power Discs..... 2-182
2.27.10 Cultivators..... 2-182
2.27.11 Rotary Cultivators..... 2-185
2.27.12 Harrows (Conventional)..... 2-188
2.27.13 Power Harrows..... 2-189
2.27.14 Rollers..... 2-189
2.27.15 Drills and Seed Boxes..... 2-189
2.27.16 Precision Drills..... 2-191
2.27.17 Transplanters..... 2-191
2.27.18 Fertiliser Spreaders, Topdressing and Manure Spreaders..... 2-191
2.27.19 Combine Harvesters..... 2-193
2.27.20 Windrowers..... 2-194
2.27.21 Mulchers (Straw Choppers)..... 2-194
2.27.22 Forage Harvesters..... 2-194
2.27.23 Silage Feed Equipment..... 2-196
2.27.24 Mowers..... 2-198
2.27.25 Ride on Mowers..... 2-200

2.27.26 Self Drive Mowers..... 2-201
2.27.27 Mower Conditioners..... 2-201
2.27.28 Hay Conditioners..... 2-202
2.27.29 Hay Rakes..... 2-202
2.27.30 Balers (Conventional)..... 2-203
2.27.31 Big Balers..... 2-203
2.27.32 Grain Handling Equipment..... 2-205
2.27.33 Hay Handling Equipment..... 2-207
2.27.34 Feed Mixers..... 2-208
2.27.35 Trailers..... 2-208
2.27.36 Chainsaws..... 2-211
2.27.37 Portable Generators and Welders..... 2-212
2.27.38 Spray Equipment..... 2-213
2.27.39 Windmills..... 2-220
2.27.40 Farm Machinery Accessories..... 2-220
2.27.41 Horticultural Machinery..... 2-221
2.27.42 Rotary Hoes..... 2-223

2.28 Buildings..... 2-223
2.28.1 Dwellings..... 2-223
2.28.2 Garages..... 2-224
2.28.3 Sleep-outs..... 2-224
2.28.4 Woolsheds..... 2-225
2.28.5 Haybarns..... 2-226
2.28.6 Glasshouses..... 2-227
2.28.7 Cool Storage..... 2-228
2.28.8 Grain Silos..... 2-228
2.28.9 Petrol Tank..... 2-230
2.28.10 Pig Shelters..... 2-230
2.28.11 Dog Kennels..... 2-230
2.28.12 Sheep Yards..... 2-231
2.28.13 Cattle Yards..... 2-231
2.28.14 Dairy Sheds..... 2-232
2.28.15 Building Materials..... 2-234

2.29 Drainage..... 2-236
2.29.1 Drainage Materials..... 2-236
2.29.2 Trenching Costs..... 2-237
2.29.3 Mole Drainage..... 2-237
2.29.4 Well Drilling..... 2-237

2.30 Irrigation..... 2-238
2.30.1 Basic Equipment..... 2-238
2.30.2 Irrigators..... 2-238

2.31 Micro-Computers..... 2-245
2.31.1 Farmers Requirements..... 2-245
2.31.2 Guides for Purchasing a Micro-Computer..... 2-245
2.31.3 General Guidelines..... 2-247

2.32 Farm Aids..... 2-248

2.33 Protective Equipment and Clothing..... 2-252

2.34 Packaging Materials..... 2-253
2.34.1 Horticultural Packaging..... 2-253

2.35 Horticultural Levies..... 2-254

2.36 Horticultural Equipment..... 2-255
2.36.1 Birdnetting..... 2-255
2.36.2 Polythene Film..... 2-256
2.36.3 Planting/Propagating Material..... 2-256

2.37 Bees..... 2-256

SECTION 3 - ENTERPRISE ANALYSIS

3.1 Introduction..... 3-3

3.2 Worked Examples of Crop and Small Seeds Gross Margins, 1985..... 3-4
3.2.1 First Wheat Crop (Oroua ex pasture)..... 3-4
3.2.2 White Clover (ex Wheat)..... 3-5
3.2.3 Field Peas (Blue Rondo ex Greenfeed Oats)..... 3-7
3.2.4 New Grass for Nui Seed (ex Peas)..... 3-8
3.2.5 Second Year of New Grass for White Clover Seed..... 3-10
3.2.6 Pasture (two years grazing)..... 3-11
3.2.7 Vining Peas..... 3-12
3.2.8 Barley..... 3-12
3.2.9 Lucerne..... 3-13
3.2.10 Carrots..... 3-13
3.2.11 Glasshouse Tomatoes..... 3-15

3.3 Sheep Gross Margins..... 3-17

3.4 Deer Gross Margins..... 3-24

3.5 Cash Flows for Long Term Crops..... 3-27
3.5.1 Sweet Cherry..... 3-27

SECTION 4 - PRODUCTION AND MARKETING STATISTICS

4.1 Sheep and Beef..... 4-3
4.1.1 Sheep Numbers by Statistical Areas..... 4-3
4.1.2 Ewe Numbers..... 4-4
4.1.3 Physical and Production Data..... 4-5
4.1.4 Wool..... 4-6
4.1.5. Beef Cattle Numbers by Statistical Areas..... 4-7

4.2 Dairy Cows..... 4-8
4.2.1 Cows in Milk in each Statistical Area..... 4-8
4.2.2 Numbers of Herds of Ten or More Cows..... 4-9
4.2.3 Trends in Average Herd Size..... 4-10
4.2.4 Total Dairy Factory Manufacture..... 4-11
4.2.5 Milk Produced and Milkfat Processed..... 4-12

4.3 Deer..... 4-13
4.3.1 Deer Numbers by Statistical Area..... 4-13

4.4 Pigs..... 4-14
4.4.1 Pig Population in New Zealand..... 4-14
4.4.2 Number of Breeding Sow and Pigs Slaughtered... 4-15

4.5 Poultry..... 4-16
4.5.1 Chicken Numbers and Production..... 4-16

4.6 Cash Cropping..... 4-17
4.6.1 Area and Production..... 4-17
4.6.2 Wheat Cultivars, Area and Yield..... 4-18
4.6.3 Barley Cultivars, Area and Yield..... 4-18
4.6.4 Oat Cultivars, Area and Yield..... 4-19
4.6.5 Pea Cultivars, Area and Yield..... 4-19
4.6.6 Other Crops..... 4-20

4.7 Small Seed..... 4-21
4.7.1 Production of Dressed Seed..... 4-21

4.8 Vegetables..... 4-22
4.8.1 Vegetable Production..... 4-22
4.8.2 Potatoes..... 4-23
4.8.3 Onions..... 4-24

4.9 Orchard Fruit..... 4-25
4.9.2 Areas Planted..... 4-25
4.9.2 Quantities of Apples and Pears..... 4-26
4.9.3 Grape Wine Production and Sales..... 4-27

4.10 Hops and Tobacco..... 4-28
4.10.1 Hops..... 4-28
4.10.2 Area and Production of Tobacco..... 4-28

SECTION 5 - TAXATION FOR PRIMARY PRODUCERS 1985

5.1 Introduction..... 5-5

5.2 Taxation in New Zealand..... 5-5
5.2.1 Overview..... 5-5
5.2.2 P.A.Y.E. Tax System..... 5-5
5.2.3 Provisional Tax System..... 5-7
5.2.4 Returns of Income..... 5-7
5.2.5 Assessment..... 5-9

5.3 Calculating Taxable Income..... 5-9

5.4 Taxation of Individuals..... 5-10
5.4.1 Overview..... 5-10
5.4.2 Exempt Income..... 5-11
5.4.3 Assessable Income..... 5-12
5.4.4 Deduction for Employment Related Expenses..... 5-13
5.4.5 Special Exemptions..... 5-14
5.4.6 Tax Rebates..... 5-15
5.4.7 Example Assessment..... 5-19

5.5 Taxation of Companies..... 5-21

5.6 Taxation of Partnerships..... 5-21
5.6.1 Overview..... 5-21
5.6.2 Family Partnerships..... 5-22

5.7 Taxation of Trusts..... 5-23
5.7.1 Classification of Trusts..... 5-23
5.7.2 Liability of Income Tax..... 5-23
5.7.3 Classification of Income..... 5-24

5.8 Farmers..... 5-25
5.8.1 Liability for Income Tax..... 5-25
5.8.2 Farm Income..... 5-26
5.8.3 Farm Expenses..... 5-27
5.8.4 Valuation of Trading Stock..... 5-31
5.8.5 Depreciation..... 5-38
5.8.6 Farming Investment Allowance..... 5-41
5.8.7 Development Expenditure..... 5-42
5.8.8 Recovery of Development Expenditure and Interest..... 5-44
5.8.9 Limitation of Tax Losses from Farming or Landowning..... 5-45
5.8.10 Timber Sales and Farm Forestry..... 5-46
5.8.11 Income Levelling Schemes..... 5-49

5.9 Horticulture..... 5-50

5.10 Fishing Industry..... 5-53
5.10.1 Spreading of Repair Costs on Fishing Boats.... 5-54
5.10.2 Depreciation..... 5-54
5.10.3 Fishing Investment Allowance..... 5-55
5.10.4 Development Expenditure - Fish Farming..... 5-55
5.10.5 Income Equalisation Scheme..... 5-57

5.11 Export Incentives..... 5-57
5.11.1 Export Performance Incentive for Qualifying Goods..... 5-58
5.11.2 Export Performance Incentive for Qualifying Services and/or Overseas Projects..... 5-60
5.11.3 Export-Market Development Expenditure Incentive..... 5-60

5.11.4 Export Market Development Activities Incentive for Self-Employed Taxpayers..... 5-62
5.11.5 Export Program Suspensory Loan Scheme..... 5-63

5.12 Dispositions of Matrimonial Property..... 5-64

5.13 Fringe Benefits Tax..... 5-66

5.14 Appendices..... 5-67
5.14.1 Last Days for Payments by Provisional Taxpayers..... 5-67
5.14.2 Rates of Income Tax for Individuals
1985 Income Year..... 5-68
1986 Income Year..... 5-69

SECTION 6 - ESTATE AND GIFT DUTY

6.1 Introduction..... 6-4

6.2 Estate Duty..... 6-4
6.2.1 Introduction..... 6-4
6.2.2 Property Liable to Estate Duty..... 6-4
6.2.3 Exemptions..... 6-6
6.2.4 Allowable Debts..... 6-6
6.2.5 Matrimonial Home Allowance..... 6-7
6.2.6 Charitable Allowance..... 6-7
6.2.7 Valuation of Estate..... 6-8
6.2.8 Valuation of Successions..... 6-8
6.2.9 Calculation of Estate Duty..... 6-10
6.2.10 Reliefs..... 6-10
6.2.11 Assessment and Collection..... 6-11
6.2.12 Example of Estate Duty Assessment..... 6-12

6.3 Gift Duty..... 6-15
6.3.1 Definitions..... 6-15
6.3.2 Valuation of Gift..... 6-16
Date of Valuation..... 6-16
6.3.3 Exemptions from Gift Duty..... 6-17
6.3.4 Disposition of Matrimonial Property..... 6-17
6.3.5 Calculation of Gift Duty..... 6-18
6.3.6 Aggregation of Gifts..... 6-19
6.3.7 Assessment and Collection..... 6-20
6.3.8 Example of Gift Duty Assessment..... 6-21

6.4 Appendices..... 6-23
I Rates of Estate Duty..... 6-23
II Tables for Valuation of Pensions etc..... 6-24
III Rates of Gift Duty..... 6-35

SECTION 1

FARM REVENUE

1. FARM REVENUE

1.1 SHEEP

1.1.1 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 1.3). 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 1985.

Grade	Weight Range (kg)	South Island c/kg
Lambs		
PL	9/12.5 kgs	218.5
PM	13/16 kgs	202.5
PX	16.5/20 kgs	198.0
PH	20.5/25.5 kgs	183.5
TL	9/12.5 kgs	162.0
TM	13/16 kgs	167.5

TH	16.5/25.5 kgs	170.5
YL	9/12.5 kgs	226.0
TM	13/16 kgs	222.5
A	Under 9 kgs	277.0
FL	9/12.5 kgs	146.0
FM	13/16 kgs	153.0
FH	16.5/25.5 kgs	154.5
CL	9/12.5 kgs	155.0
CM	13/16 kgs	167.5
CH	16.5/25.5 kgs	157.0
M	All weights	70.0
Sheep		
ML1	Under 22 kgs	112.0
ML2	0/22.5 kgs	114.0
MH	17/25 kgs	63.5
MX1	Under 22 kgs	105.5
MX2	22.5 and Over kgs	112.5
MM	All weights	93.0
MF	All weights	53.0
MP	All weights	59.5
Hoggets		
HL	Under 26 kgs	110.5
HX	26.5 to 36 kgs	108.5
Rams		
Ram	All weights	57.0

The following deductions will be made from the Killing Sheets.

Processing Charges: Lambs $7.29 per head plus 6.cents per kg, Sheep $9.18 per head plus 6 cents per kg.
Administration: 18 cents per head.
Drafting Fee: Lambs 33 cents per head, Sheep 25 cents per head.
Federated Farmers Levy: 1.75 cents per head.
Transport: Farm to Port Works.
NZMPB Levy: Lambs 20 cents per head, Sheep 29 cents per head.
A nil rate of levy will apply to any condemned stock following slaughter. The above schedule is subject to alteration without notice.

1.1.2 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 15th and Wednesday 16th January 1985 are shown below.

Prime Lambs
Heavy lambs - to $28.00 with some sales to $32.20
Medium lambs - $23.60 to $26.00
Light lambs - $20.00 to $22.80

Prime Sheep
Best hoggets - to $27.60
Medium hoggets - $24.00 to $25.60
Best old ewes - to $14.60
Medium old ewes - $11.00 to $12.80
Light old ewes - $7.00 to $10.40

1.1.3 Store and Breeding Stock Prices

Store sheep prices may vary markedly between districts and seasons. The following tables show the prices paid for store and breeding ewes throughout the country last year (summarised from the livestock pages in the N.Z. Farmer).

January - March (Average)

	North	Waikato	Hawke's Bay	Lower N.I.	Canterbury	Otago	Southland
Romney lamb	21.33	18.00	20.00	21.00	25.00	30.25	34.75
2ths	26.00	24.00	24.33	24.00	31.33	42.50	47.25*
5 yr ewes	13.66	14.75	17.00	15.50	20.50	23.05	32.00
Coopworth lambs	21.00	18.00	20.00	20.75	-	27.00	25.50
2ths	26.66	24.00	25.00	-	31.00	36.37	37.50
Corriedale lambs	-	-	-	-	24.25	23.40*	-
2ths	-	-	-	-	31.00	33.33	-
5 yr ewes	-	25.00*	-	-	25.66	20.50	-
Perendale lambs	17.66	16.50*	20.00	19.75	-	26.66	25.66
2ths	22.66	21.50	23.00	22.00	28.50*	40.50	36.00

April - June (Average)

	North	Waikato	Hawke's Bay	Lower N.I.	Canterbury	Otago	Southland
Romney lambs	20.83	20.83	24.66	24.00	27.00	29.50	30.33
2ths	23.83	23.50	25.00	24.00	30.00	36.00	37.50
5 yr ewes	16.00	15.40	17.00	18.00	21.20	23.50	22.50
Coopworth lambs	20.83	20.66	24.00	22.88	-	26.00+	25.00+
2ths	23.66	23.60	25.00	22.50	27.80	35.00+	31.25
Corriedale lambs	-	-	-	-	26.33	22.00+	-
2ths	-	-	-	-	28.60	21.00+	-
5 yr ewes	-	-	-	25.00	19.40	27.00+	-
Perendale lambs	19.00	18.33	22.00	22.38	-	25.50+	25.00
2ths	20.50	21.60	23.33	22.00	26.20	35.00+	29.00

* March price only.
\+ April price only

July - September (Average)

	North	Waikato	Hawke's Bay	Lower N.I.	Canterbury	Otago	Southland
Romney lambs	25.25	22.00	26.66*	-	-	31.00*	38.00+
2ths	27.00	24.00	27.00	27.20	29.00	36.75	40.40
5 yr ewe	21.00	17.50	24.16	23.20	23.13	27.35	26.80
Coopworth lambs	25.00	-	26.00*	-	-	26.66*	32.00+
2ths	26.66	24.66	27.60	27.00	28.00	33.75	30.60
Corriedale lambs	20.00+	-	-	-	-	-	-
2ths	-	-	-	-	29.00*	-	-
5 yr ewe	-	-	25.00+	-	21.40	22.00=	-
Perendale lambs	21.25	20.00=	23.33*	-	-	25.16*	30.00*
2ths	23.00	22.83	26.00	24.00	25.50*	33.75	27.40

October - December (Average)

	North	Waikato	Hawke's Bay	Lower N.I.	Canterbury	Otago	Southland
Romney lamb	-	-	-	23.00**	-	-	-
2ths	29.20	25.00	28.00	24.75	28.80	35.00**	41.20
5 yr ewe	15.25	15.20	-	-	-	-	-
Coopworth lambs	-	-	-	23.00**	-	-	-
2ths	28.40	25.20	24.50	24.60	26.80	-	29.60
5 yr ewe	15.25	15.20	-	-	-	-	-
Corriedale lambs	-	-	-	-	-	-	-
2ths	-	-	-	-	25.50	-	-
5 yr ewe	-	-	-	-	-	-	-
Perendale lambs	-	-	-	21.50**	-	-	-
2ths	25.60	23.20	23.00	21.13	25.50**	30.00**	26.80**

** December price only
* July/early August price only.
+ August price only
= September price only

Rams

The following figures are the approximate values for flock rams.

Southdown	$60-$100
Dorset Down	$60-$100
South Dorset Down	$60-$100
Hampshire	$60-$110
South Suffolk	$70-$100
Suffolk	$60-$100
Romney	$70-$120
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.

1.2 WOOL PRODUCTION

1.2.1 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 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.

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
1983/1984	.....	250 cents/kg
1984/1985	.....	275 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.

(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 individ-

ual 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 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

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

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.

1.2.2 Wool Prices in late 1984

(i) North Island Wool Prices 1984/85 Season (average over-all North Island sales)

	10/08	06/09	20/09	11/10	25/10	25/10	01/11	15/11	23/11	29/11	6 & 7/12	13 & 14/12
Crossbred												
32F2E B Fleece	-	-	536	541	537	553	541	548	545	535	-	547
34f2D Fleece	-	-	527	527	523	532	527	525	521	525	-	514
37F2D B Fleece	508	496	510	506	512	509	-	509	504	499	492	494
37F3D B/C Fleece	-	-	501	-	-	507	513	506	501	495	486	489
37F4F C Fleece	-	-	497	-	-	-	-	-	489	487	477	-
37F2L B 2/Shear	464	461	484	-	480	493	490	491	480	479	468	468
37F3L B/C 2/Shear	452	450	470	461	472	-	484	477	474	462	451	458
37G3F Av/Inf Soft Cotts	-	-	466	-	-	-	-	-	-	-	458	468
30L2O Av First Lambs	-	-	-	-	-	-	-	-	-	-	-	-
35P3G Av/Inf Pieces	-	-	456	-	-	-	-	-	471	463	449	456
35C3L Av/inf 2/s Bels & Pcs	372	361	388	401	401	-	-	428	422	397	395	402

NOTE: The first two figures of N.Z.W.B. type denote microns 'N' denotes nominal quotation "-" denotes none available.

(ii) South Island Wool Prices 1984/85 season (by Region)

N.Z.W.B.	DESCRIPTION	OPENING CH 09/8/84* DN 16/8/84** TM 23/8/84*** DN 13/9/84**** CH 28/9/84 DN 12/10/84***** TM 26/10/84******	CHCH 09/08/84	DUNEDIN 16/08/84	TIMARU 23/08/84	IN'GILL 30/08/84	DUNEDIN 13/09/84	CHCH 26/09/84
Merino								
21F2W	B Fleece	1011*****	-	-	-	-	-	-
22F1W	BB/B Fleece	908******	-	-	-	-	-	-
22F2W	B Fleece	985	985	-	-	-	-	925
23F2W	B Fleece	831****	-	-	-	-	-	-
Quarterbred								
24F2W	B Fleece	783***	-	-	-	-	-	776
Halfbred								
25F2W	B Fleece	714**	-	-	714	-	766	756
26F2W	B Fleece	685	685	-	689	-	690	670
27F2W	B Fleece	659	659	647	657	-	654	623
28F2W	B Fleece	623	623	622	608	-	613	588
29F2W	B Fleece	585	585	580	564	-	567	554
30F2W	B Fleece	558	558	544	538	-	553	546
31F2W	B Fleece	552	552	540	534	-	553	546
28P2X	Av Pieces	564	564	-	563	-	568	560
Crossbred								
32F2E	B Fleece	542	542	542	563	-	-	-
34F2D	Fleece	528	528	-	517	-	527	532
37F2D	B Fleece	508	508	500	493	496	502	500
37F3D	B/C Fleece	500*	500	495	485	487	495	500
37F4F	C Fleece	464	-	464	-	480	-	-
37F2L	B 2/Shear	469	469	465	465	454	492	495
37F3L	B/C 2/Shear	458	458	458	455	448	489	-
37G3F	Av/Inf Soft Cotts	471	471	445	449	-	-	-
30L20	Av First Lambs		-	-	-	-	-	-
35P3G	Av/Inf Pieces	472	472	463	445	-	461	4772
35C3L	Av/Inf 2/s Bels & Pcs	419	419	368	382	353	-	412

NOTE: The first two figures of N.Z.W.B. type denote microns 'N' denotes nominal quotation "-" denotes none available.

CHCH/TIM	DUNEDIN	IN'GILL	TIM/DND	CHCH	IN'GILL	DUNEDIN	CHCH	TIM/CHCH	IN'GILL	DUNEDIN
28/09/84	12/10/84	18/10/84	26/10/84	02/11/84	16/11/84	22/11/84	30/11/84	06/12/84	10/12/84	14/12/84
-	1011	-	1015	1026	-	1021	1014	1019	-	1018
-	-	-	908	910	-	934	-	963	-	-
908	898	-	905	907	-	908	915	945	-	932
831	835	-	828	848	-	869	898	893	-	915
-	-	-	770	772	-	-	806	887	-	-
721	723	-	729	731	-	735	-	724	-	730
665	665	-	667	677	-	682	692	698	-	698
624	630	-	639	646	-	659	672	679	-	692
583	581	-	597	602	-	608	626	642	-	646
552	556	-	558	568	-	595	577	581	-	585
540	539	-	548	557	-	564	557	550	-	-
536	543	-	546	556	-	551	549	546	-	-
545	549	-	567	586	-	594	590	584	-	-
-	-	-	-	549	-	549	540	535	-	550
-	534	-	-	532	509	525	506	500	506	516
496	505	505	503	511	502	509	494	492	492	492
495	499	501	501	507	499	504	491	485	484	487
-	-	495	-	-	-	-	-	-	482	-
475	484	-	496	-	496	500	-	-	-	481
469	-	-	-	-	488	496	-	-	477	-
-	-	-	-	-	495	490	475	468	471	473
-	-	-	-	-	-	-	-	-	-	-
457	470	470	-	499	471	476	464	460	-	456
420	403	392	-	-	-	-	405	-	-	422

1.3 SKINS

The skin payments as at 14 January 1985 were as follows:

Skin Payments (Pelt & Wool) Per Head

1 Kilo - 2.205 lbs

WOOL PULL LAMBS		LAMBS		SHORN LAMBS		SHEEP		SHEEP	
0.20 kg		1.10 kg	770	0.50 kg		0.20 kg	635	1.10 kg	897
0.25		1.15	790	0.10	379	0.25	644	1.15	908
0.30		1.20	810	0.15	389	0.30	653	1.20	919
0.35		1.25	830	0.20	399	0.35	662	1.25	930
0.40		1.30	850	0.25	409	0.40	671	1.30	941
0.45		1.35	870	0.30	420	0.45	680	1.35	950
0.50	530	1.40	890	0.35	430	0.50	724	1.40	962
0.55	550	1.45	910	0.40	440	0.55	733	1.45	975
0.60	570	1.50	930	0.45	451	0.60	745	1.50	988
0.65	590	1.55	950	0.50	493	0.65	755	1.55	1001
0.70	610	1.60	970	0.55		0.70	766	1.60	1015
0.75	630	1.65	990	0.60		0.75	776	1.65	1028
0.80	650	1.70	1010	0.65		0.80	788	1.70	1041
0.85	670	1.75	1030	0.70		0.85	798	1.75	1054
0.90	690	1.80	1050	0.75		0.90	810	1.80	1068
0.95	710	1.85	1070	0.80		0.95	821	1.85	1081
1.00	730	1.90	1090	0.85		1.00	859	1.90	1094
1.05	750	1.95	1110	0.90		1.05	885	1.95	1107
		2.00	1130	0.95				2.00	1121
				1.00					
				1.05					
				1.10					
				1.15					
				1.20				Plus 15c for .1	
				1.25				kg over 2 kg	
				1.30					
				1.35					
				1.40					

Seed wool and seedy pelts will be adjusted as follows:
Light: 75 cents per head deduction.
Medium: $1.00 per head deduction.
Heavy: $1.25 per head deduction.
Deductions will also be made for black fibres of 10 cents per kilo. Interior and cotted full wools and ribby type pelts are also subject to deductions: Sheep $1.50 per head, Lambs $1,00 per head.

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

1.4 CROPS

1.4.1 Wheat

(i) Prices:
The prices for milling standard wheat for the 1985 harvest are as follows:

		$ per tonne
Aotea, Kopara, Hilgendorf and equivalent		274.00
Arawa		267.15
Karamu contract	North Island	274.00
	South Island	260.30
Non contract	North Island	253.45
	South Island	232.90
Oroua (Category A)		287.70
(Category B)		274.00

The above prices are fixed as for delivery F.O.R. grower's station. Retention of 12.5% ($34 per tonne on basic price will be deducted by the Wheat Board on all Category B (baking score of between 12 and 14) wheat harvested in the 1984/85 season.

(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	6.17
	16-30	8.22
May	1-15	10.28
	16-31	12.33
June	1-15	14.39
	16-30	16.44
July	1-15	18.50
	16-31	20.55
August	1-15	22.61
	16-31	24.66
September	1-15	26.72
	16-30	28.77
October	1-15	30.83
	16-31	32.88
November	1-15	34.94
	16-30	36.99

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 1985). 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 82.5c 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 Category A Oroua is 5.0% of the basic Aotea price; it amounts to $13.70 per tonne and will apply only to wheat which has been positively identified as Category A Oroua 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 will be 2.5%, or $6.85 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 there will be a 7.5% discount on non contract Karamu, or $20.55 while in the South Island, the discount is 15%, or $41.10. Karamu grown on contract, in the South Island only, is discounted by 5.0% or $13.70.

1.4.2 Barley

The Canterbury Malting Company contract price for No. 1 Grade Malting barley for the 1985 harvest is $180 per tonne in the South Island (delivered Heathcote), and $195 per tonne in the North Island delivered to the nearest depot of the malting company. If the distance is greater than 48 kilometres, the malting company will pay the additional cost of cartage to the grower in the South Island. There are specified delivery points in the North Island - Palmerston North, Feilding, Marton, Wanganui and Woodville.

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

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

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 1984/85 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 $165 per machine treated tonne delivered Christchurch.

Participation contracts through the South Island Barley Society and Merchants Consortium (Cereal Exports Ltd) are complex and information is available through those sources concerning terms and conditions of payment.

1.4.3 Oats

The price offered for good quality feed grade oats this season is $150/tonne (bulk).

1.4.4 Peas

The prices offered for field dressed peas in bulk grown under contract for the 1985 harvest are:

(i) Field peas - average of $260 per tonne.

(ii) Garden peas - average of $275 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	$ per packed weight/tonne
0	not exceeding 90	313.10
1	over 90, not over 95	291.10
2	over 95, not over 100	265.10
3	over 100, not over 105	237.10
4	over 105, not over 110	215.10
5	over 110, not over 115	206.10
6	over 115, not over 120	191.10
7	over 120	174.10

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

1.4.5 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	242.25
1	over 8.5mm, not over 9mm	234.00
2	over 9mm, not over 9.5mm	227.35
3	over 9.5mm, not over 10mm	222.20
4	over 10mm, not over 10.5mm	217.10
5	over 10.5mm, not over 11mm	214.15
6	over 11mm, not over 11.5mm	212.10
7	over 11.5mm, not over 12mm	210.10
8	over 12mm, not over 12.5mm	208.15
9	over 12.5mm, not over 13mm	206.20
10	over 13mm	203.90

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

1.4.6 Cauliflower

Cauliflower grown for process freezing is paid for at $361 per tonne packed weight.

1.4.7 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)

1.4.8 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.

Process Potatoes -
Price paid for process potatoes of acceptable quality in the 1984/85 season is:

$ 95.00 per tonne (130 - 170 g)
$115.00 per tonne (greater than 170g)

A $5 per tonne premium will be paid for Rua, Kennebec and Aucklander varieties.
Deductions will be made for diseased or defective potatoes, where earth content is greater than 1% of total weight, and for rocks or other foreign material.
Allowances of $2 per tonne will be made for grower owned bins and of $2 per tonne delivered in bulk.

1.4.9 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 $300 per tonne.

1.5 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 1985, many prices had not been finalised

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

Grass Seed:		$
Ruanui Ryegrass	)	
Nui Ryegrass	)	
Ariki Ryegrass	)	
Manawa Ryegrass	)	Average price paid .90
Paroa Italian Ryegrass	)	
Tama Ryegrass	)	
Moata Ryegrass	)	
Apanui Cocksfoot		1.70
Crested Dogstail		3.90
Matua Prairie Grass		1.80
Browntop		4.00
Clover Seed:		
Huia White		1.80
Turoa Montgomery Red	)	2.80
Hamua Broad Red	)	
Lucerne:		
Wairau	)	
Rere	)	3.50
Saranac	)	
Kale:		
Medium Stemmed	)	2.20
Giant	)	
Turnips:		1.00

1.6 CATTLE

1.6.1 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 14th January 1985
Prices are quoted delivered to our nearest port works.

Grade	Weight Range (kg)	Cents Per Kilo Ox	Heifer	Cow
P1	160 to 195	207.5	200.5	195.5
P1	195.5 to 220	207.5	207.5	203.5
P1	220.5to 245	217.5	217.5	206.5
P1	245.5 to 270	223.5	223.5	213.5
P1	270.5 to 295	229.5	230.5	219.5
P1	295.5 to 320	231.5	-	-
P1	320.5 to 345	237.5	-	-
P1	0 to 345.5	240.5	-	-
G	160 to 195	-	191.5	190.5
G	195.5 to 220	198.5	198.5	198.5
G	220.5 to 245	208.5	208.5	201.5
G	245.5 to 270	214.5	214.5	208.5
G	270.5 to 295	220.5	221.5	214.5
G	295.5 to 320	222.5	-	-
G	320.5 to 345	228.5	-	-
G	Over 345.5	231.5	-	-
L1	160 to 195	-	208.5	
L1	195.5 to 220	213.5	213.5	
L1	220.5 to 245	217.5	217.5	
L1	245.5 to 270	223.5	223.5	
L1	270.5 to 295	229.5	229.5	
L1	Over 295.5	236.5	-	
L2	160 to 195	-	195	
L2	195.5 to 220	200	200	
L2	220.5 to 245	204	204	
L2	245.5 to 270	208	208	
L2	270.5 to 295	214	214	
L2	0 to 295.5	221	-	

M	Under 145	171	171	171
M	145.5 to 170	192	192	192
M	170.5 to 195	196	196	196
M	195.5 to 220	201	201	201
M	Over 220.5	205	205	205
T	160 to 270	205.5	205.5	198.5
T	270.5 to 295	211.5	211.5	205.5
T	0 to 295.5	215.5	215.5	209.5
E	160 to 270	195.5	195.5	190.5
E	270.5 to 295	201.5	201.5	198.5
E	0 to 295.5	205.5	205.5	201.5
BULL	Under 195	216.5		
	195.5 to 220	233.5		
	220.5 to 245	241.5		
	245.5 to 270	245.5		
	270.5 to 295	249.5		
	295.5 to 320	252.5		
	320.5 to 345	257.5		
	0 to 345.5	263.5		

1.6.2 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, 15th, Wednesday 16th and Tuesday 25th January 1985.

Prime Steers:
Heavy - to $1030 with odd sales $1298
Medium - $596 to $700
Light - $470 to $580

Prime Heifers:
Heavy - to $690
Medium - $490 to $560
Light - $432 to $480

Prime Cows:
Heavy - to $828
Medium - $440 to $512
Light - $356 to $440

1.6.3 Store and Breeding Stock Prices

The following tables show the prices paid for store and breeding cattle throughout the country last year (summarised from the Livestock pages in the N.Z. Farmer).

March (Average)		North	Waik.	H.B.	Lower NI	Cant.	Otago	S/land
Steers	30 mth	567	490	563	510	600+	573	495
	18 mth	446	388	430	498	475	446*	418
	Weaner	373	278	348	333	393	395	-
Hfrs	18 mth	-	270*	310*	-	300*	350*	345*
	Weaner	287	242	285	268	338	385+	-
Breeding Cow		420	515	500	460	-	-	-

* January price only
\+ March price only

April - June (average)

		North	Waik.	H.B.	Lower NI	Cant.	Otago	S/land
Steers	30 mth	530	502	516	500	524	493	575
	18 mth	447	423	428	433	441	433	450
	Weaner	298	293	309	319	338	317	345
Hfrs	Weaner	251	237	242	262	295	251	244
Breeding Cow		400	437	455	440	470	470	455

July - September (average)

		North	Waik.	H.B.	Lower NI	Cant.	Otago	S/land
Steers	36 mth	617	558	517	540	500	497	515
	24 mth	527	473	448	474	435*	453	434
	Yearling	375	368	319	345	334	356	399
Heifer	Yearling	302	281	263	284	338*	275	321
Breeding Cow		472	467	474	440	525	457	458

* August and September prices only

October - December (average)

	North	Waik.	H.B.	Lower NI	Cant.	Otago	S/land
Steers 36 mth	706	654	612	660	586	550	554
24 mth	638	558	550	585	550	477	508
Yearling	474	445	408	481	421	420	406
Heifer Yearling	357	348	337	365	345	323	309
Breeding Cow	590	556	596	547	573	-	460

1.6.4 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 1.14.3 in this manual.

1.7 DAIRY PRODUCE

1.7.1 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 6% of the basic milkfat price 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 355 cents/kilogram milkfat for 1984/85.

The Tai Tapu Central Co-op Dairy Company Ltd payout for 1984/85 is as follows:

The basic values for the 1984/85 season remain at 250 kg milkfat and 105 kg SNF, totalling 355/kg milkfat in wholemilk at farm gate.

The following advance payments for cream will operate effective June 1984.

Finest	200 cents per kg
First Grade	182 cents per kg
Second Grade	150 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	284 cents per kg
First Grade	259 cents per kg
Second Grade	214 cents per kg

The penalty for antibiotics will be 64c per kg and penalty for added water 30 cents per kg.

1.7.2 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. The basic price is set in accordance with an agreed formula at the beginning of each milk year. Any movement in the manufacturing price is usually reflected in the town milk price in the the relationship of 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 1.7 cents/litre (finest and first grade milk) for the 1983/84 production year and is reviewed annually. As at January 1985 the new supplement for 1984/85 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 1985 is 24.3645 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 1984/85

Month	Full Price Paid for: (% of quota)	Quota Milk Cents per litre Finest	Surplus Milk Cents per litre Finest
Sept. 84	112	24.012	13.0
October	105	19.436	13.0
November	105	19.677	13.0
December	105	19.677	13.0
Jan. 85	105	19.677	13.0
February	112	19.677	13.0
March	112	24.311	13.0
April	115	24.311	13.0
May	120	31.264	13.0
June	120	31.264	13.0
July	120	31.264	13.0
August	120	31.264	13.0

These are advance prices and it is normal to make an end of season adjustment depending on company profitability for the year. Over the past few years the advance price for suprlus milk has been increased during the winter months inaccordance with market demands for surplus milk.

All milk supplied is subject to grading and a penalty of 0.6888 c.p.l. is imposed for milk grades "first" and 2.2959 c.p.l. for milk graded "second" (plus loss of special production allowance in winter months). There is also an additional penalty equivalent to the second grade penalty for persistent offenders and where a supplier fails to give the Company prior notification of contamination of milk with water or antibiotics.

Mandatory tests are senses, milkfat (daily), sediment, standard plate count, inhibitory substances, freezing point and total solids (random, three times per month). When milk is downgraded there are daily follow up tests carried out until such time as three consecutive "finest" grades are achieved.

The Company also conducts advisory tests for thermodurics and somatic cell counts, and applies an 'in house' penalty for excessive cell counts.

1.7.3 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.

January - March (average)

	North	Waikato	Cant.	Otago/ Southland
Fresian 2nd/3rd calver	450	513	438	640
Jersey 2nd/3rd calver	393	475	-	-
Fresian heifer ic or rwb	390	340	428	338
Jersey heifer ic or rwb	320	303	-	-

April - June (average)

Fresian 2nd/3rd calver	542	504	518	550*
Jersey 2nd/3rd calver	458	460	423	500*
Fresian heifer ic or rwb	382	406	444	420*
Jersey heifer ic or rwb	295	348	327	350

* Southland - June prices only

July - September (average)

Fresian 2nd/3rd Calver	523	522	515	554
Jersey 2nd/3rd Calver	415	467	448	449
B & W heifer ic or rwb	423	428	467	467
Jersey heifer ic or rwb	307	350	384	363

October - December (average)

Fresian 2nd/3rd calver	568	544	578	573*
Jersey 2nd/3rd calver	454	484	475	503*
Fresian heifer ic or rwb	368	318	500	440

* October/November prices.

1.8 PIG PRODUCTION

1.8.1 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 21 January 1985

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

Hot Weights

27.5 - 45 kg	PRIME	230 cents per kilogram
	CHOICE	180 cents per kilogram
	STANDARD	100 cents per kilogram
	MUTILATED	100 cents per kilogram
45.5 kg - 72 kg	PRIME	206 cents per kilogram
	CHOICE	180 cents per kilogram
	STANDARD	125 cents per kilogram
	MUTILATED	100 cents per kilogram
72.5 kg - 83 kg	PRIME	174 cents per kilogram
	STANDARD	100 cents per kilogram
	MUTILATED	100 cents per kilogram

Premiums

27.5 - 45 kg	PRIME	10 mm and less	15 cents per kg
45.5 - 54 kg	PRIME	12 mm and less	20 cents per kg
54.5 - 63 kg	PRIME	14 mm and less	20 cents per kg
63.5 - 72 kg	PRIME	16 mm and less	20 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)	
Pork Marketing Board Stabilisation Levy)	$2.65
Federated Farmers Levy	.01
	$2.66 per pig

1.8.2 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 tables of prices are summarised information from the livestock pages published in the N.Z. Farmer:

January - March (average)

	North	Waikato	Canterbury
Weaner	50	-	43
Prime under 50 kg	127	-	118
Prime under 75 kg	137	-	135
Choppers over 100 kg	145	-	137

April - June (average)

Weaner	45	-	42
Prime under 50 kg	102	-	101
Prime under 75 kg	133	-	127
Choppers over 100 kg	132	-	139

July - September (average)

Weaner	47	52	48
Prime under 50 kg	102	99	92
Prime under 75 kg	123	127	125
Choppers over 100 kg	178	167	146

October - December (average)

Weaner	50	51	45
Prime under 50 kg	113	96	95
Prime under 75 kg	128	129	140
Choppers over 100 kg	160	177	150

1.9 GOAT PRODUCTION

1.9.1 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 meat, milk and fibres. In conjunction with 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 fibre have respectively lower outputs but higher unit values.

1.9.2 Chevon Production

Chevon differs from mutton in that it has a lower fat percentage. This values chevon for export to countries where consumer demands require lean meat. The majority of chevon exported from New Zealand is derived from the feral goat population of New Zealand. Prices paid for feral goats for meat vary, but generally worth $1.00 to $1.50 per kg carcase weight. Preferred are animals between 10-15 kg liveweight. Goats are killed at several freezing works around the country during the off season. Game meat packing houses will also accept feral but not farmed goats.

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 importers of New Zealand chevon.

Male animals, both wethers and bucks, provide the bulk of animals for slaughter as, at present, feral does are worth far in excess of meat value for breeding purposes. Does for upgrading have, with the recent boom, been known to fetch up to $200 per head. This situation is unlikely to last for very long as numbers available for breeding increase rapidly.

1.9.3 Goats Milk Production

Milk is produced from specially selected breeds such as the Saanen, Toggenburg, British Alpine and Anglo Nubian. Milk produced is processed as either raw milk, dried milk powder or cheese. Raw milk is marketed privately by the producer through supermarket and delicatessen outlets or alternatively by co-operatives. The gross return to the producers per litre, varies as to the producer's direct or indirect distributing method, and is fetching approximately between 35c per litre in the Nelson area at present.

Producers of goats milk in the Tasman/Nelson area have successfully produced goats milk cheese. The return from cheese making to the producer was about the same as above (35c per litre).

1.9.4 Mohair

This fibre is produced by the Angora goat. Production in New Zealand is currently increasing at a rate of 100% per year. For 1983/84 30,000 kg was produced with export receipts amounting to $500,000.

The Mohair Producers' Association of New Zealand operates a pool where mohair and Angora x feral crossbred fibre (cashgora) is classified and offered for sale by tender. Prices realised from Pool 2/84 are as follows:

A kid	$29.00
B kid	$23.00
2nd kid	$18.00
Young goat	$27.60
2nd young goat	$17.00
A doe	$25.75
2nd doe	$24.00
A buck	$18.75
B buck	$19.50
Steins	$16.50
Cotted	$17.60
Cashgora	up to $20.00

The bulk of Mohair is exported worldwide, a small quantity being purchased by New Zealand manufacturers. Mohair also finds a small but ready market in private sales to homecraft interests.

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

1.9.5 Stock

Due to the lack of available animals, prices are at present very high.

At a recent sale (Christchurch, January 31 1985) the following prices were paid:

Pure-bred 2th does	average $21,000
Pure-bred m.a. does	average $12,300
Grade one does	average $10,500
Grade two does range	range $3,000 to $5,500
Grade three does range	range $1,000 to $1,800
Grade four does range	range $ 350 to $ 600
Pure bred bucks	average $22,800; range $9,000 to $90,000
Grade one bucks	average $ 4,100; range $5,000 to $13,000

1.9.6 Cashmere

Approximately 30,000 captured feral goats are at present being farmed as Cashmere type goats. Cashmere is the very fine undercoat or down fibre obtained from certain types of goat and is separated from its associated coarse guard hair.

All fibre is eventually shipped to Australia where it is sold according to a schedule of prices, based on average fibre diameter and colour.

Prices vary from $110 per kg for white fibre of 15.9 microns and finer to $35 per kg for brown fibre of 18.0 to 19.0 microns. Production varies widely between animals from approximately 10g to 250g per year (with a majority of fleeces ranging from 30 to 40g).

1.10 DEER PRODUCTION

1.10.1 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.

1.10.2 Velvet Prices

Prices as at January 1985 were as follows:

Super A_1 Grade	$100/kg
Super A_2 Grade	$88/kg
A_1 Grade	$100.00/kg
A_2 Grade	$75/kg
B_1 Grade	$60.00/kg
B_2 Grade	$50/kg
C Grade	$40.00/kg
D Grade	$10.00/kg
T Grade (Taiwan)	$40/kg

1.10.3 Venison

The schedule for venison in the 1984/85 killing season is as follows (Canterbury Venison (N.Z.) Ltd) for deer killed at the Ashburton deer slaughtering plant.

Grade AP1 - prime over 70 kg	$6.50 per kg
- prime 50.1 to 70 kg	$7.00 per kg
- up to 50 kg	$6.50 per kg
Overfat	$5.00 per kg
AD (prime or overfat carcase with at least one damaged primal)	$4.00 per kg
Manufacturing	$2.50 per kg

A transport subsidy is paid as follows:

* North of the Waiau River and the West Coast $10 per animal.
* Between the Hurunui and Waiau Rivers $5 per animal.
* South of the Waiau to a defined line from Dunedin through Middlemarch, west and up to Twizel - $5 per animal.
* South of this line $10 per animal.

1.10.4 Livestock

The following tables of live deer prices are summaries of information taken from the livestock pages of the N.Z. Farmer over the latter part of 1984:

August/September

	North	Waik.	H.B.	Cant.	Otago	S/land
Weaner Hinds	1850	1863	1900	2000*	1700*	1800
18 mth Hinds	2675	2450	2650	2800*	2300*	2550
M.A. Hinds	2550	2250+	2400	2700*	2800*	2650
Weaner Stags	215	215+	200	220*	220	200
Stags to 18 mths	285	260	350	400	-	300

* August price only
\+ September price only

October - December

Weaner Hinds	2225	-	2270	-	2100*	2100
18 mth Hinds	2965	-	3020	-	2600	2875
M.A. hinds	2875	-	2710	-	2800*	3035
Weaner Stags	260	-	250	-	260	225
Stags to 18 mths	325	-	390	-	-	300

* October price only

1.11 POULTRY PRODUCTION

1.11.1 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.

1.11.2 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 1985, was approximately 110c 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.

1.11.3 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 1984, the prices received by farmer (Entitlement Levy deducted) was:

North Island	126.09 cents per dozen
South Island	125.41 cents per dozen

1.12 FRUIT PRODUCTION

The prices paid to growers by Christchurch Markets in 1984 were as follows:

	Apples per kg	Apricots per half case-20lb	Avocados per tray (14 in a tray)
May 1984	83c-$1.26	-	$25.00-$30.00
June	83c-$1.18	-	$25.00-$40.00
July	83c-$1.15	-	$30.00-$37.00
August	83c-$1.15	-	$15.00-$30.00
September	86c-$1.21	-	$22.00-$28.00
October	86c-$1.55	-	$20.00-$35.00
November	86c-$1.62	-	$20.00-$35.00
December	-	-	$20.00-$30.00
January 85	-	$10.00-$15.00	$25.00-$40.00

	Cherries per kg	Grapefruit per bushell	Grapes per 2 kg tray
May 1984	-	-	$ 6.00-$ 9.00
June	-	-	$ 8.00-$ 9.00
July	-	$10.00-$16.00	-
August	-	$ 8.00-$15.00	-
September	-	$10.00-$15.00	-
October	-	$10.00-$16.00	-
November	$ 2.00-$12.00	$10.00-$23.00	-
December	$ 3.00-$ 4.00	$20.00-$30.00	-
Jan 1985	$ 3.50-$ 5.00	-	-

	Kiwifruit per 20 (tray)	Lemons per bushell	Mandarins per half case
May 1984	$ 6.00-$ 7.00	-	$14.00-$16.00
June	$ 5.00-$16.00	$18.00-$20.00	$14.00-$16.00
July	$ 5.00-$10.00	$14.00-$20.00	$14.00-$15.00
August	$15.00-$18.00	$15.00-$28.00	$35.00-$45.00
September	$14.00-$18.00	$12.00-$20.00	-
October	$16.00-$25.00	$12.00-$18.00	$12.20
November	$ 8.00-$13.00	$12.00-$18.00	$16.00-$20.00
December	$13.00-$13.50	$16.00-$20.00	-
Jan 1985	$12.00-$13.50	$16.00-$25.00	-

	Nectarines per tray	Oranges per bushell	Passionfruit per 1/4 carton
May 1984	-	-	$ 8.00-$12.00
June	-	-	$ 8.00-$12.00
July	-	-	$10.00-$14.00
August	-	$18.00-$25.00	$10.00-$20.00

September	-	$15.00-$22.00	$13.00-$16.00
October	-	$15.00-$24.00	$14.00-$20.00
November	-	-	-
December	$12.00	-	-
Jan 1985	$ 7.00-$10.00	-	-

	Peaches per tray	Pepinos per tray	Plums per half case (20lb)
May 1984	-	$ 4.00-$ 6.00	-
June	-	$ 3.00-$ 5.00	-
July	-	$ 2.00-$ 4.00	-
August	-	-	-
September	-	-	-
October	-	-	-
November	-	-	-
December	$ 5.00-$10.00	-	$10.00-$20.00
Jan 1985	$ 4.00-$ 8.00	-	$10.00-$16.00

	Raspberries per tray	Rockmellons per carton	Strawberries per punnet
May 1984	-	$15.00-$20.00	$15.00-$20.00 (per tray)
June	-	-	-
July	-	-	-
August	-	-	-
September	-	-	$ 4.50-$16.00
October	-	-	$ 1.50-$ 4.00
November	-	-	$ 1.50-$ 2.00
December	$11.00-$12.00	-	$ 9.00-$12.00 (per tray)
Jan 1985	$12.00-$16.00	$10.00-$12.00 (6-7 count)	$12.00-$20.00 (per tray)

	Tamarillos per half case	Tangelos per bushell	Watermellons (per kg)
May 1984	$13.00-$16.00	-	-
June	$12.00-$15.00	-	$ 1.50
July	$12.00-$17.00	-	$ 1.50
August	$10.00-$17.00	-	$ 1.50
September	$14.00-$18.00	$18.00-$21.00	$ 1.50
October	$14.00-$30.00	$16.00-$22.00	$ 1.00-$ 1.50
November	$30.00-$40.00	$15.00-$22.00	$ 1.00
December	$30.00-$40.00	$18.00-$22.00	-
Jan 1985	-	-	$ 1.00-$ 1.20

1.13 VEGETABLE PRODUCTION

The estimated prices paid to growers by Christchurch markets in 1984 were as follows:

	Asparagus per kg	Beans per kg	Beetroot per case
May 1984	-	$ 6.00	$ 2.00-$ 3.00
June	-	-	$ 2.00-$ 3.50
July	-	-	$ 3.00-$ 4.50
August	$ 6.00-$ 7.00	-	$ 6.00-$ 8.50
September	$ 3.50-$ 6.00	-	$ 3.00-$ 7.50
October	$ 2.00-$ 3.50	-	$ 3.00-$ 6.00
November	$ 2.00-$ 3.20	$10.00-$14.00	$ 3.00-$ 7.00
December	$ 2.00-$ 3.50	$10.00-$12.00	$ 3.00-$ 4.00
Jan 1985	-	$ 2.00-$ 8.00	$ 3.00-$ 4.00

	Broccolli per half case	Brussel Sprouts per bag	Cabbage per bag
May 1984	$ 3.50-$ 4.50	$ 6.00-$ 8.00	$ 1.50-$ 2.00
June	$ 4.50-$ 9.50	$ 5.00-$ 7.00	$ 1.50-$ 3.00
July	$ 4.00-$10.00	$ 5.00-$ 7.00	$ 2.50-$ 3.60
August	$ 4.00-$ 8.50	$ 4.00-$ 8.50	$ 3.50-$ 5.00
September	$ 5.00-$10.00	$ 7.00-$20.00	$ 5.00-$ 9.00
October	$12.00-$20.00	-	$ 2.50-$12.00
November	$ 4.00-$16.00	-	$ 2.00-$10.00
December	$ 6.00-$11.00	-	$ 4.50-$ 7.00
Jan 1985	$ 8.00-$11.00	-	$ 3.50-$ 4.50

	Capsicum per 2 kg	Carrots per bag	Cauliflower per bag
May 1984	-	$ 4.00-$ 6.00	$ 5.00-$ 7.00
June	-	$ 3.00-$ 5.00	$ 5.00-$10.00
July	$12.00-$20.00	$ 3.60-$ 5.60	$ 3.00-$ 5.00
August	$ 4.00-$20.00	$ 3.00-$ 6.50	$ 4.00-$ 9.00
September	$20.00-$22.00	$ 6.00-$12.00	$ 4.00-$ 8.00
October	$18.00-$22.00	$ 8.00-$25.00	$ 2.50-$ 8.00
November	$ 6.00-$18.00	$10.00-$22.00	$ 3.00-$ 8.00
December	$ 5.00-$ 8.00	$12.00-$20.00	$ 4.00-$ 8.00
Jan 1985	$ 3.00-$ 4.50	$ 5.00-$10.00	$ 6.00-$ 9.00

	Celery per case (12 bundles)	Courgettes per half case	Cucumbers per half carton
May 1984	$ 5.00-$ 7.00	$25.00-$30.00	$ 4.50-$ 8.50
June	$ 5.00-$ 9.00	$25.00-$30.00	$ 8.00-$18.00
July	$ 6.00-$10.00	-	$12.00-$15.80
August	$ 8.00-$12.00	$ 7.00-$ 8.00	$12.00-$20.00
September	$ 8.00-$10.50	-	$10.00-$15.00
October	$ 8.50-$20.00	$ 3.00-$ 6.00	$ 6.00-$15.00
November	$15.00-$35.00	$ 2.00-$ 4.50	$ 6.00-$16.00
December	$12.00-$15.00	$ 1.00-$ 2.00	$ 5.00-$12.00
Jan 1985	$ 8.00-$16.00	$ 4.00-$ 8.50	$ 3.00-$ 6.00

	Garlic per 100g	Kumara per 15kg	Leeks per case
May 1984	$ 2.50-$ 3.50	$16.00-$19.00	-
June	$ 2.50-$ 3.50	$16.00-$20.00	$ 4.00-$ 7.50
July	$ 2.50-$ 3.50	$14.00-$18.00	$ 5.00-$ 7.50
August	$ 2.50-$ 3.00	$10.00-$16.00	$ 3.00-$ 8.00
September	$ 3.00-$ 4.00	$12.00-$24.00	$ 4.50-$ 6.00
October	$ 4.00-$10.00	$20.00-$26.00	$ 4.50-$ 6.50
November	$ 6.00-$10.00	$12.00-$24.00	$ 3.00-$10.00
December	$ 5.00-$ 8.00	$15.00-$25.00	-
Jan 1985	$ 5.00-$ 7.00	$ 4.00-$ 8.50	$ 3.00-$ 6.00

	Lettuce per case	Marrows per case	Mushrooms per 3 kg
May 1984	$ 3.00-$ 5.00	-	$11.00-$12.50
June	$ 4.00-$ 9.00	-	$10.00-$15.00
July	$ 3.00-$ 7.50	-	$12.00-$15.00
August	$ 4.00-$12.00	-	$11.00-$15.00
September	$ 8.00-$18.00	-	$12.00-$14.00
October	$ 4.00-$10.00	-	$12.00-$14.00
November	$ 2.00-$11.50	-	$11.00-$14.00
December	$ 1.50-$ 3.50	$ 8.00-$12.00	$11.00-$14.00
Jan 1985	$ 4.00-$ 6.50	$ 2.00-$ 5.00	$12.00-$14.00

	Onions per bag	Parsley per bunch	Parsnip per bag
May 1984	$13.00-$15.00	.80-$ 1.00	$ 5.00-$ 7.00
June	$12.00-$14.00	$ 1.00-$ 2.50	$ 3.50-$ 6.80
July	$12.00-$15.00	$ 2.00-$ 3.50	$ 3.50-$ 6.00
August	$12.00-$15.00	$ 3.00	$ 4.00-$ 6.00
September	$12.00-$14.00	$ 1.00-$ 2.00	$ 4.00-$ 8.00
October	$12.00-$14.00	$ 1.20-$ 1.50	$ 6.00-$ 8.00
November	$15.00-$22.00	$ 1.00-$ 1.50	$ 6.00-$24.00
December	$20.00-$24.00	$ 1.00-$ 1.50	$14.00-$18.00
Jan 1985	$ 9.00-$19.00	$ 1.50-$ 2.00	$14.00-$16.00

	Peas per kg	Potatoes per bag	Pumpkin per 20 kg
May 1984	-	$ 1.50-$ 5.50	$ 1.50-$ 5.00
June	-	$ 1.50-$ 5.00	$ 2.00-$ 5.00
July	-	$ 1.00-$ 3.50	$ 2.50-$ 7.00
August	-	$ 1.00-$ 3.50	$ 2.00-$ 7.00
September	-	$ 1.00-$ 1.50	$ 2.00-$10.00
October	-	$ 6.00-$11.00 (new)	$ 5.50-$10.00
November	$ 1.00-$ 3.00	$ 6.00-$20.00 (new)	$ 5.50-$16.00
December	$ 1.00-$ 1.50	$ 5.00-$ 7.00 (new)	$ 8.00-$16.00
Jan 1985	-	$ 2.50-$ 4.00	$ 6.00-$13.00

	Radish per 12 bunches	Rhubarb per 6 bunshes	Silverbeet per 5 kg case
May 1984	$ 3.00-$ 4.00	$ 4.00-$ 6.00	$ 2.50-$ 4.50
June	$ 3.00-$ 4.00	$ 8.00-$10.00	$ 3.00-$ 9.00
July	$ 3.00-$ 5.00	$ 8.00-$10.00	$ 3.00-$ 6.00
August	$ 4.00-$ 5.00	$ 7.00-$ 9.00	$ 2.00-$ 5.00
September	$ 4.00-$ 8.00	$ 5.00-$ 8.00	$ 2.00-$ 4.00
October	$ 3.00-$ 4.00	$ 2.00-$ 5.00	$ 2.00-$ 4.50
November	$ 3.00-$ 4.00	$ 1.50-$ 2.50	$ 4.00-$ 8.00
December	$ 3.00-$ 3.60	$ 2.00-$ 2.50	$ 5.00-$ 6.50
Jan 1985	$ 3.00-$ 6.00	$ 3.00-$ 3.50	$ 4.00-$ 9.00

	Spinach per bunch of 6	Spring Onions per dozen bunch	Tomatoes per 4.5 kg
May 1984	$ 6.00-$ 8.00	$ 5.00-$ 6.00	-
June	$ 5.00-$ 9.00	$ 5.00-$ 8.00	-
July	$ 3.00-$ 9.50	$ 6.00-$ 9.50	$12.00-$18.00
August	$ 3.00-$ 7.00	$ 5.00-$ 6.00	$12.00-$20.00
September	$ 6.00-$ 9.00	$ 4.00-$ 5.50	$20.00-$28.00
October	$ 4.00-$ 7.50	$ 4.50-$ 5.00	$15.00-$26.00
November	$ 3.00-$ 4.50	$ 4.50-$ 5.00	$15.00-$19.00
December	$ 5.00-$ 6.50	$ 4.50-$ 5.00	$ 7.00-$14.00
Jan 1985	$ 4.00-$ 7.50	$ 4.00-$ 5.00	$ 6.00-$ 9.00

	Yams per 4 kg
May 1984	-
June	$ 5.00-$12.00
July	$ 2.50-$ 8.50
August	$ 2.50-$ 3.00
September	$ 2.00-$ 3.00
October	$ 2.00-$ 4.00
November	$ 3.00-$ 4.00
December	-
Jan 1985	-

1.14 PRINCIPAL PRICE SMOOTHING AND PRICE SUPPORT SCHEMES IN NEW ZEALAND PRIMARY INDUSTRY

(Compiled by L.D. Woods, Department of Agricultural Economics and Marketing, Lincoln College - Revised September 1984)

1.14 Background: Industry vs Government Schemes

Industry financed price smoothing schemes have operated, in various forms, in the New Zealand dairy, meat, wool and pip-fruit industries for several years. Within-season smoothing currently operates in the dairy and pip-fruit industries through fixed pricing of all export production. Proposed pooling arrangements in the sheep meat industry will achieve similar results. In the beef and wool industries minimum and trigger prices, plus arbitrary market intervention (purchase and resale of product) operate. Between-season smoothing is attempted in all these industries through legislative limits on the extent by which guaranteed or minimum prices can move between successive seasons. 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 (for dairy, meat and wool only) 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, were set each year until 1984. For 1984/85 a slightly modified "lump sum equivalent" S.M.P. scheme is due to operate.

In times of low market receipts the producer boards are themselves responsible for bringing producer returns up to their own "fixed prices" or "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 can build up their price-smoothing funds.

1.14.2 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	Supplement
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[2]	-
1981/82	268.0	285.0	280.0[1]	339.6	-
1982/83	318.0	-	325.0	360.7	-
1983/84	340.0	-	325.0	350.0	-
1984/85	355.0		-		

[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.

1.14.3 Meat Industry

(a) Period to 30 September 1984

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 were related to a moving average of market returns.

If the average meat exporters' schedule price (before supplementation) for any benchmark grade was below the minimum level, the Board had to also establish minimum prices for other grades of that type of meat. It had to then ensure that producers received these minimum prices by making industry funded supplementary payments via exporters schedules; purchasing the meat itself; or doing both.

If the meat export schedule (inclusive of possible N.Z.M.P.B. support) was below the Government SMP price then the Board also established SMP's for other grades of that type of meat and made additional, Government-funded, supplementary payments via exporter's schedules.

(b) Current Period (from 1 October 1984)

In the beef industry, price smoothing arrangements are continuing bascially as previously - with emphasis on supplementary rather than buying in during low price periods.

In the sheepmeats industry a prolonged period of buying - in dating from 1981 (mutton) and 1982 (lamb), together with an appreciation that a changed market environment required structural changes in sheepmeat marketing lead to the establishment of a national export grade pools system of payment for lamb and mutton operative as from October 1 1984.

In this system, a "basic" price (expressed "ex scales" rather than "delivered port-works" as previously) by M.E.P.C. (benchmark grades) and N.Z.M.P.B. (other grades) prior to each season. These basic prices are to be based on "realistic forecasts" of the coming season, but are not to vary more than 15% from previous season's values. A stabilisation levy, of up to 5%, is deducted from the basic prices. Should N.Z.M.P.B. earn a trading profit on any grade, a retrospective supplement is paid next season. Should this supplement mean that the final price for a grade exceeds a trigger price (approx. 150% of basic price), a supplementary stabilisation levy of up to 50% of the excess will be imposed. Any credit or debts remaining at season end are transferred to the next seasons accounts for the same export grade pool.

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.

1.14.4 Wool Industry

Under its Minimum Prices Scheme the Wool Board sets a table of minimum prices for all types of shorn wool (excluding dagwool) 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 level of sale bidding is below appraisal minimum price levels, the Board may itself bid. If the price finally bid is still below the appraisal minimum, the board will supplement that price up to its minimum level through a supplementary payment made from the Minimum Wool Prices Funding Account.

At each auction sale, the level of successful bids, including those arising from NZWB intervention is reflected in the auction average. The "adjusted weighted average sale price" or AWASP quotation represents grower's market returns (winning auction bids plus any NZWB supplement) averaged using constant weightings to overcome differences due to auction ale composition. 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, and will continue until this account reaches a balance equal to 9% of growers' gross proceeds in the previous season.

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

1.14.5 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.

1.15 SUNDRY INCOME

1.15.1 Forestry Encouragement Grants for Expenditure prior to 9 November 1984

Claims for expenditure incurred under the Forestry Encouragement Grant Scheme prior to 9 november 1984 will be accepted up to 31 January 1985.

Forestry encouragement Grants are available in one of two categories:

* Production grants: trees established for commercial purposes only.

* Protection/production grants: trees which, besides being productive, also have a soil protection role.

Production Grants: These are paid to any forest grower holding a verifiable interest in an existing or proposed forest area. There is no minimum or maximum qualifying area, but such plantings must be completed with a recognised commercial wood-producing species. Annual grant payments apply at the rate of 45 percent of qualifying costs incurred in the establishment, tending, and maintenance of forest crops.

The following costs qualify for reimbursement:

a) Expenditure incurred in planting, restocking, tending, or maintaining trees on the land, or in preparing or otherwise developing the land for forestry operations.

b) Expenditure incurred by way of rents, rates, land tax, insurance premiums, or other like expenses.

c) Expenditure incurred in way of interest on money borrowed and employed as a capital for the purpose of forest planting, restocking, tending, or maintaining trees on the land, including the purchase of vehicles, plant, or machinery directly associated with the forest crop and land.

d) Depreciation on plant and machinery, acquired or constructed on or after 1 April 1983, and used wholly or principally in preparing or developing forestry land or in planting, tending, or maintaining the tree crop, not exceeding the rate as determined for tax purposes by the Commissioner of Inland Revenue.

e) The value of the owner's labour or of the labour of his/her family at no higher than the rate of payment known in the New Zealand Forest Service as "forest hand 1".

Protection/Production Grants: These are similar to production grants except that the concurrence of a district catchment board officer regarding the need for protection planting is required in writing prior to the first payment being made.

These grants are available for areas where soil and/or water protection is required, but the plantings must, predominantly, fulfil a production role. annual grant payments at the rate of 66.66 percent of qualifying expenditure during the preparation and establishment phase are paid under this category of grant. Following establishment, or in any case not later than year three, this grant is terminated.

Transitional Provisions for Special Situations

As already stated, Forestry Encouragement Grants are available to growers for qualifying expenditure incurred prior to Budget night providing claims for payment are received by the Conservator of Forests on or before 31 January 1985. Expenditure incurred on or after 9 November 1984 is tax deductible.

Transitional provisions were provided in the 1984 Budget for local bodies, Maori authorities and for protection/ production grants already approved.

Protection/Production Grants are available in addition tp tax deductibility, at a rate of 39.40 percent provided the grower has received the necessary approval for eligibility for a protection/production grant prior to 8 November 1984. The termination date for qualifying expenditure is 31 March 1990 and claims for payment will be received up to and including 30 June 1990.

Local authorities are able to receive a production Forestry Encouragement Grant of 45 percent or a protection/production grant of 66.66 percent on qualifying expenditure incurred up to and including 31 March 1986 if they can provide documentary evidence that they entered into a commitment to undertake the expenditure prior to 8 November 1984. Claims under this provision will be allowed up to and including 30 June 1986.

Maori authorities are able, in addition to tax deductibility, to receive grants under the same conditions as local bodies. Production grants will be paid at the rate of 31.25 percent while protection/production grants will be paid at the rate of 58.33 percent.

1.15.2 National Water and Soil Conservation Authority (NWASCA) Grants

These grants are of two types and the prime function of both is to provide protection to both water and soil and not to promote the growing of timber.

Protection Grants

These vary in the grant payment, depending on the size of the project:

a) Up to a maximum of 40 percent of the project cost is available as a grant for isolated projects.
b) Up to a maximum of 60 percent in grant payment may be paid for a farm scale project.

c) Up to a maximum of 70 percent may be paid as a grant if the project involves more than one property, i.e. there is a community of interest, and entire catchment is involved.

Windbreak Grants

Catchment boards provide grants to private landowners, with funds allocated by NEASCA who are responsible for approving this type of grant on a regional scale. These grants are only available in areas where the arable soils are classified as being prone to wind erosion. The grant payment is made at the rate of 60 percent of the project cost incurred.

Effects of Claims

Prior to the implementation of a scheme, catchment boards draw up an overall farm plan, and the landowner is required to sign a Land Improvement Agreement (LIA) which is usually registered against the land title. This agreement is considered nec protect the financial investment by the catchment board and to ensure that management performance levels, as laid out in the overall farm plan, are achieved.

Catchment boards levy an administrative service fee which is charged against the grant. Costs not covered by the grant are tax deductible.

SECTION 2

FARM EXPENDITURE

2. FARM EXPENDITURE

2.1 WAGES

The following awards are currently under review (February 1985). The $8 per week general wage order of early 1983 should be added to these figures.

2.1.1 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.

2.1.2 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).

2.1.3 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).

2.1.4 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.

2.1.5 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.

2.1.6 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.

2.1.7 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.

2.1.8 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

2.1.9 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 six 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).

2.2 ANIMAL HEALTH

2.2.1 Dog Registration and Hydatid Control Fees

These vary depending on the Local Body involved. However a typical fee would be $22.00 per dog or bitch over 3 months of age.

2.2.2 Contract Dipping

Sheep Dipping -

Mobile Shower:

The basic cost is 10c per 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: $25.00 per 100.

2.2.3 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.	$625.02	10 l	Plunge	1:2000	$6.25
Ked					1:4000	$3.12
Fly				Shower	1:2000	$6.25
					1:4000	$3.12
				C.R.		
				Shower	1:1280	$9.76
					1:2560	$4.88
Lice	Asuntol	$422.32	20 l	Plunge	1:2000	$2.11
Ked						
Fly				C.R.		
				Shower	1:2000	$2.11
Lice	Diaz-O-					
	Spray	$547.67	10 l	Plunge	1:4000	$2.73
Ked	D.F.F.				1:8000	$1.37
Blowfly				Shower	1:4000	$2.73
					1:8000	$1.37
				C.R.		

	Shower	1:2000	$5.46
		1:4000	$2.73

(C.R. shower denotes continuous replenishment)

From the above guide it can be seen that cost per 100 head on average varies from $1.38 to $9.76 with an average overall cost of $3.85 per 100 head.

2.2.4 Sheep and Cattle Dips, Sprays and Dressings

Trigon D.F.F. Powerpack	3 litre	$207.38
Trigon D.F.F.	10 litre	$625.82
Diaz-O-Spray D.F.F. Powerpack	3 litre	$182.56
Diaz-O-Spray D.F.F.	10 litre	$547.67
Supreme D.F.F. Powerpack	3 litre	$237.85
Supreme D.F.F.	10 litre	$713.55
Bacteriostat Powder	600 g	$ 13.54
Decovet	2 litre	$ 52.29
Decovet	5 litre	$124.19
Nemafax Plus	2 litre	$ 34.85
(Back pack)	5 litre	$ 85.85
	20 litre	$289.68
	25 litre	$352.40
Vermadax (back pack)	5 litre	$136.55
	25 litre	$576.00
Trodax	250 ml	$ 44.50
Ivomec Liquid (Sheep)	20 litre	$483.00
	5 litre	$127.50
Ivomec Injection (Cattle)	200 ml	$ 96.60
	500 ml	$229.60
Ivomec Injection (Pigs)	100 ml	$ 43.20
Ivomec Oral (Cattle)	1 litre	$167.00
Diazotas Dust	25 kg	$ 55.33
Diazotas 40%	10 litre	$235.00
Grenade	2 litre	$ 83.58
	5 litre	$206.45
	10 litre	$411.13
Diazinon 40%	20 litre	$225.00
	2 to 9 x 20 litre	$220.00
	10 or more x 201	$215.00
Asuntol Powder (Bayer)	4 x 1 kg	$153.90
Asuntol 16% liquid (Bayer)	200 ml	$ 6.28
	5 litre	$129.11
	20 litre	$422.32
Summer Dip Powerpack	3 litre	$166.62
Summer Dip	10 litre	$508.54
Diazinon 40%	10 litre	$300.00
Cythion (cattle)	5 litre	$ 44.42
Warbex (cattle)	1 litre	$ 26.65
	5 litre	$126.57

Jerrycan	5 litre	$151.79
Tiguvon Pour-on	5 litre	$ 44.89
Tiguvon Spot-on	500 ml	$ 28.54
Wipe out Spot-on	500 ml	$ 15.60
Defiance Blowfly Dressing	5 litre	$ 27.50
Ciodrin Animal Spray	5 ml	$ 6.78
Lypor	2.5 litre	$ 58.97
Paraban	20 litres	$190.39
Mange and Lice Dressing	2 kg	$ 10.06
Bactas	500 gm	$ 12.13
Banmag	500 ml	$ 12.25
Combat	5 litre	$ 73.85
	20 litre	$283.45
Combat 40% Jerrycan	10 litre	$297.92
Combat Concentrate 75%	5 litre	$264.32
Parasite spray	50 ml	$ 2.10
	5 litre	$ 39.55
Taslin	500 ml	$ 5.13
	5 litre	$ 36.03

2.2.5 Sheep and Cattle Drenching Guide

(i) Drench

Systamex	10 litre	$211.36
	25 litre	$517.52
Systamex Cattle Drench	2.5 litre	$188.31
Panacur	1 litre	$ 20.52
	5 litre	$ 89.75
	25 litre	$458.47
Panacur 10	1 litre	$ 60.38
Panacur Ewe Strength	2.5 litre	$131.40
Valbazen	25 litre	$456.25
Thibenzole	20 litre	$307.30
	1 litre	$ 31.11
Nilverm Oral Front Pack	5 litre	$ 92.22
	12 litre	$205.54
	24 litre	$397.95
	45 litre	$726.78
Nilverm Concentrate kit	6 x 625 ml	$421.87
Nilverm Injection	500 ml	$ 28.55
Nilzan Front Pack	1 litre	$ 33.27
	5 litre	$123.13
	12 litre	$284.03
	24 litre	$535.22
Nilzan Tapeworm Pack	5 litre	$123.13
Ranide (Sheep and Cattle)	20 litre	$217.40
	5 litre	$ 67.10

(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 25 litre
			$458.47 (cents per dose)
Lambs	15kg	3 ml	5.50
Lambs & Hoggets	21-30kg	6 ml	11.00
	30-40kg	8 ml	14.67
Sheep	40kg & over	9 ml	16.50

Thibenzole

Type of Animal	Weight Range	Dose Rate	Pack Size & Cost of Pack 20 litres
			$307.30 (cents per dose)
Lamb	Up to 20kg	4 ml	6.15
Lambs & Hoggets	21-30kg	6 ml	9.22
Hoggets	31-40kg	8 ml	12.30
Sheep	Over 41kg	10 ml	15.37
Rams		15 ml	23.05

(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 20 litres $307.30 (cents per dose)
Up to 50 kg	17ml	26.12
51- 75 kg	25ml	38.41
74-100 kg	35ml	53.78
101-125 kg	45ml	69.14
126-150 kg	55ml	84.50
151-175 kg	65ml	99.87
176-200 kg	75ml	115.00
201-225 kg	85ml	130.60
226-250 kg	95ml	145.97
251-275 kg	105ml	161.33
276-300 kg	115ml	176.70

2.2.6 Bloat Control

Product	Pack Size	Price
No Bloat	20 litre	$ 56.45
	200 litre	P.O.A.
Bloatas	200 litre	P.O.A.

		N.I.	S.I.
Bloatenz Two in One	5 litre	33.76	34.63
	20 litre	129.59	132.15
	200 litre	1059.55	1085.00
Bloatenz Plus	5 litre	38.32	39.30
	20 litre	147.14	150.86
	200 litre	1236.08	1265.00
Bloateric Two in One	20 litre	$132.22	
	200 litre	P.O.A.	
Bloateric Premix			

2.2.7 Vaccines

M.S.D. Agvet

Product	Size of Pack	Cost
5 in 1	100 ml	$ 9.80
	200 ml	$16.15
	500 ml	$35.00
	1000 ml	$63.00
	Thermo-vac (6 x 500 ml)	$199.50
Trip-tet	100 ml	$ 8.60
	200 ml	$14.15
	500 ml	$30.65
	1000 ml	$55.20
	Thermo-vac (6 x 500 ml)	$174.75
Triple	200 ml	$12.60
	500 ml	$27.40
PK-Tet	200 ml	$ 9.50
	500 ml	$20.55
BL-MO	100 ml	$ 7.35
	200 ml	$ 9.90
	500 ml	$21.35
P.K.	100 ml	$ 6.30
	200 ml	$ 7.35
	500 ml	$12.70
PK-ATS	100 ml	$13.20
	200 ml	$21.80
	500 ml	$47.35
	1000 ml	$85.20
	Thermo-vac (6 x 500 ml)	$269.75

Foot Abcess	200 ml	$20.00
Scabby Mouth	125 doses	$ 4.70
	250 doses	$ 7.35
Coopers		
BL-MO	200 ml	$ 7.57
	500 ml	$17.22
Convax 5	200 ml	$14.80
(BL-MO-PK-8O-TET)	500 ml	$33.63
Multine 5	100 ml	$ 8.97
	200 ml	$15.95
	500 ml	$35.88
PK	500 ml	$12.32
PK-ANTITET	200 ml	$21.17
	500 ml	$47.64
PK TET	200 ml	$ 8.94
	500 ml	$20.31
QUAD (BL-MO-PK-TET)	200 ml	$12.80
	500 ml	$29.09
Multine 4	200 ml	$13.73
	500 ml	$30.91
Triple (BL-MO-PK)	200 ml	$11.74
	500 ml	$26.67
Nilvax 5	500 ml	$38.70
	1000 ml	$77.40
Scabine	150 dose	$ 7.14
Scabivax	125 dose	$ 5.20

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

2.2.8 Antibiotics

	Size of Pack	Price
Durapen 3 in 1	20 tubes	$16.16
Procal 100	20 tubes	$13.10
Procal 500	20 tubes	$13.10
Procal 1500	10 tubes	$10.80
Adpen 100	20 tubes	$10.50
Emtryl Premix	10 kg	$194.45
Emtryl	125 gm	$ 14.78
	500 gm	$ 44.05
Prolopen 3 in 1	12 tubes	$ 9.70
Vetspen "500"	30 tubes	$ 19.66
Vetspen "1500"	12 tubes	$ 12.96
Vetspen "5000"	3 vials	$ 10.10
Vetspen Milking Cow	20 syringe	$ 12.64

2.2.9 Disinfectants

Hibitane MCC (ICI)	25 l	$150.77
	5 l	$ 32.69
Hibitane MCC Plus	25 l	$167.41
Hibitane MCC Plus	5 l	$ 36.74
Syvel	200 l	$490.00
	5 l	$ 17.50
Anisep	2 l	$ 12.84
	5 l	$ 25.54

	Per Litre	Per Pack
Mycojet 20 l	3.84	$ 76.80
Mycortnse 5 l	2.18	$ 10.90
20 l	2.08	$ 41.60
180 l	1.93	$347.40
Mycosan 5 l	3.79	$ 18.95
20 l	3.61	$ 72.70
180 l	3.35	$603.00

2.2.10 Metabolics

Coopers Borophos	450 ml	$ 6.20
Calcium Borogluconate	450 ml	$ 4.68
Boromag Plus	450 ml	$ 4.36
	350 ml	$ 3.14
Sulphamag Injectable	350 ml	$ 1.65

2.2.11 Poultry Remedies

Antibiotics	Tylan 100 Premix	20 kg	$501.41

2.2.12 Stock Identification

(i) Eartags

'Allflex' Plastic Delta Plastics Ltd

	Blank ¢ each	Numbered ¢ each
Small tag 2/1	.27	.32
Single - medium 4/1	.33	.42
Double - medium 4/3	.39	.57
Maxi Tag 7/1	.52	.62
Medium maxi 7/3	.58	.77
Large maxi 7/5	.67	.86
Single large 6/1	.42	.51
Medium large 6/3	.48	.66

Double large 6/5	.57	.75
Hi-Vu	.55	.67

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 $13.95. Spare applicator pins $0.90 each.

'Kenmor' Nylon Mainspan Enterprises.

One-piece self piercing eartags available in 12 colours - red, blue, yellow, orange, purple, white, light brown, dark brown, grey, light green, dark green and black. Up to 18 letters, and numerals (including spaces) available.

Tags plain	$11.00 per 100
Stamped	
One standard price for stamped tags whether named, numbered, or both.	$17.00
Applicator pliers	$11.12

"Stand-up" Tags Mainspan Enterprises	
Cattle and Deer	$39.00 per 100
Sheep and Goats	$28.00 per 100

"Back-up" Tags	
Cattle and Deer	$21.00 per 100
Sheep and Goats	$17.00 per 100

Ritchey Eartags	
Ritchey Sheep tags - blank	.30
- numbered front	.39
Ritchey Cattle tags- blank	.45
- numbered front	.49
Fluid	2.30
Inserting tools	2.00

'Farm-Acy'

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

Stamped	$14.00 per 100
Stamped, nickel plated	$ 3.50 per 100

Ear punch $13.75

Tag Closing pliers $ 5.10

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

Stamped	$12.00 per 100
Applicators	$13.00

'Wallace' Milking Systems D. McL. Wallace Ltd

Rototags 100 plain (Black, Blue, Green, Orange, Red, White, Yellow)	$10.50
Stamped one side per 100	$14.50
Stamped two sides per 100	$17.85
Rototag Pliers	$20.70

(ii) Brands and Tattoos

Sets of Brands	
Station Brands - Double letter	
- Single letter or figure	$ 6.23
Brands set 0-8	$ 6.23
Tattoo Outfit - Basic outfit	$51.90

(iii) Raddles and Markers

Raddle stick chalk	.70
'Sprayline' Aerosol Markers (Red, Blue, Green, Orange, Purple, Black, Yellow)	
- 400 gm	$ 4.69
- 170 gm	$ 2.92
'Top-Mark' Aerosol Markers (Purple, Red, Blue, Green, Yellow, Orange, Black) - 170 gm	$ 4.13

2.2.13 Mating Management Aids

Ram Harness Bell Booth - Leather	$21.83
- Nylon	$16.10
Stafix Crayons (Red, Blue, Green, Yellow, Orange, Black)	$ 2.25

2.2.14 Lambing and Calving Requisites

Maskit Aerosol	$ 3.99
'Acceptron' Aerosol	$ 4.85
Stafix Stadry Lamb Covers	$ 20.95

Denkavit 20 kg		$ 37.08
Ancalf 20 kg		$ 33.63
Anlamb 10 kg		$ 22.13
Lamb teats		$ 1.70
Calfeteria		$146.00
Udder-mother		$ 11.50
Shepherds Crooks		
- extending		$ 9.75
- long leg		$ 9.10
- long neck and leg		$ 10.25
- short leg		$ 10.75
- cane		$ 9.45

2.2.15 Miscellaneous Animal Health Equipment

Footrot shears - cock		$ 19.85
Footrot shears - Arnolds		$ 27.29
Footrot shears - Wilkinson		$ 24.72
Emasculators		$ 20.19
Burdizzo Emasculator 225mm		$ 93.70
300mm		$158.20
Footrot Aerosol		$ 5.70
Rubber Docking Rings (per packet of 500)		$ 9.64
Coopers-P20 Drench Gun (Auto) 20 ml		$ 69.31
-P60 Drench Gun (Auto) 60 ml		$ 74.66
-P20 Injection Attachment		$ 7.43
P4 Drench Gun non-auto 60 ml		$ 58.06
P74 Vaccinator Auto	5 ml	$ 41.52
5 litre Back Pack	each	$ 14.06
Gleptosil Vaccinator	each	$ 74.85
Ralogan Implanter	each	$ 47.56
Ralgro Needles 3's	each	$ 2.71
MSD Sure-Shot Drench Gun 15 ml		$ 56.25
MSD Ridlice Applicator		
Sure shot back pack 5 l		$ 12.75
Vaccinator (auto-adjustable) 5 ml		$ 11.25
Bash Gun (Cooper Colt) Auto 20 ml		$ 86.30
Vaccinators - Cooper 5 ml		$ 5.31
Vaxigun (Coopers) 5 mls adjustable		$ 5.95
'Farm-Acy' Hoofcutters		$ 46.30
Domatic Gun 15 ml		$ 76.13
Lipiodol injection 1 ml		$ 49.90
4 ml		$ 83.16
Heavy Duty Hoof Cutter		$ 86.20
'Farm-Acy' Calf dehorners		$ 15.00
Hoof parer		$ 29.87

Hoof pincers		$ 26.70
Anvil		$154.00
Rumbul Administration Guns		$ 43.99
Phillips Cattle Drencher 'Vaxmaster'		$ 72.00

2.2.16 Productivity Improvers

Ralgro (Beef)	240 dose	$599.00
(Inc. 2 Implanters)	960 dose	$2443.56
Ralgro (Lambs)	240 dose	$131.84
(Inc. 1 Implanter)	960 dose	$562.49
Multilamb	12 x 100 ml	$900.00

2.2.17 Miscellaneous Animal Health Products

'Hornex' dehorning paste (per tube)		$ 1.85
'Vigest' Predigested Tonic	500 ml	$ 6.93
	2 l	$ 18.90
'Dexolyte' Enteritis & Diarrhoea Remedy	1 kg	$ 11.30
	3 kg	$ 24.56
	25 kg	$153.66
'Zawbolyte' Diarrhoea & Scours Remedy	1 kg	$ 11.34
	20 x 30 g	$ 13.37
'Vetadine' P.V.P. Iodine Spray	150 g	$ 7.00
'Vetadine' Iodine Animal Wash	500 ml	$ 8.40
	2 l	$ 25.20
'Vet Nuvan' aerosol flea & tick control	170 g	$ 5.58
'Seleen' Suspension non-specific dermatoses control	125 ml	$ 6.31
Formalin	20 litre	$ 41.45
	200 litre	$302.67
'Ban Mag' + applicator		$ 12.25
Fleaban 30	110 g	$ 5.10
Flea powder	100 g	$ 1.80
Mange and Lice dressing	2 kg	$ 10.06
'Paraban'	20 litres	$190.39
Rumbul magnesium bullets	10 bullets	$ 37.72
Otoryl ear drops	15 ml	$ 6.63
Coopers		
Rovisol Oral	1 litre	$ 37.15
Tascat	130 gm	$ 3.95
Tasdog	250 gm	$ 6.11

	1 kg	$ 13.52
	10 kg	$ 67.65
Tasvite Plus	2 litre	$ 14.15
	5 litre	$ 36.15
Lipiodol	20 ml	$ 10.94
	100 ml	$ 38.06
Hydrovit	1 litre	$ 47.25
	5 litres	$200.75
Supremecalf	2 kg	$ 18.00
	5 kg	$ 40.20
	10 kg	$ 69.90
Camplan Plain	500 gm	$ 4.66
	1 kg	$ 7.25
Farax Plain	250 gm	$ 2.08
Glucodin	500 gm	$ 2.08

2.2.18 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		$ 15.00
on farm	$1.00 an hour	
Ram Bleeding		$2/head
Ram Palpation		40c/head
Cow Pregnancy Testing		$80c/head
X-Ray without anaesthetic		$ 15.20
Additional plate		$ 5.00
Anaesthetic Intitial Dog		$ 16.00
Cat		$ 10.00
Surgery		$ 80 an hour

Drugs and mileage fee extra.

Annual animal health expenditure is generally in the range of 80c-$1.20 per stock unit.

2.3 BREEDING EXPENSES

2.3.1 Artificial Breeding Fee (Canterbury)

For the 6 week group membership, the fee is $65.00 plus $10.55 per cow. The seventh week, if required, is at cost. Nominated service $2.55 reduction per cow.

Cow Numbers	Cost
10	$170.50
20	$276.00

30	$381.00
40	$487.00
50	$592.50
60	$698.00
70	$803.50
80	$909.00
90	$1,014.00
100	$1,120.00
110	$1,225.50
120	$1,331.00
130	$1,436.50
140	$1,542.00
150	$1,647.50
160	$1,753.00
170	$1,858.50
180	$1,964.00
190	$2,069.50
200	$2,175.00

With two free returns, and subsequent returns at $3.00 each.

2.3.2 Herd Testing Charges

(i) Dairy Cows

Cow No.	Monthly	Alternate Monthly	Production Ranking Test
	Herd Fee $100 Plus $10.20 Per Cow	Herd Fee $65 Plus $6.65 Per Cow	Herd Fee $60 Plus $3.90 Per Cow
30	$406.00	$264.50	$177.00
50	$610.00	$331.00	$255.00
60	$712.00	$464.00	$294.00
70	$814.00	$530.00	$333.00
80	$916.00	$597.00	$372.00
90	$1,018.00	$663.50	$411.00
100	$1,120.00	$730.00	$450.00
110	$1,222.00	$796.50	$489.00
120	$1,324.00	$863.00	$528.00
130	$1,426.00	$925.50	$567.00
140	$1,528.00	$996.00	$606.00
150	$1,630.00	$1,062.50	$645.00
160	$1,732.00	$1,129.00	$684.00
170	$1,834.00	$1,195.50	$723.00
180	$1,936.00	$1,262.00	$762.00
190	$2,038.00	$1,328.50	$801.00
200	$2,140.00	$1,395.00	$840.00
250	$2,650.00	$1,727.50	$1,035.00

Somatic Cell Count $1.70/cow in conjunction with milkfat testing.

(ii) Goats

15 (minimum) Same Fees as cows.

2.3.3 Beef Plan (National Beef Recording Service)

$3.00 per cow pre-listed for the performance options. This fee covers details at calving, weaning, yearling and rising 2 years of age. Breeders taking the pedigree option in Beefplan enter a contract price through their Breed Societies which is generally about $1.00/cow.

2.4 CASH CROPPING EXPENSES

2.4.1 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 $2.95. A 46 inch standard sack is now 116 cm, cost $2.35. A 37 inch sack is now 94 cm and costs $1.95.
N.B. A bale holds 250-300 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.

2.4.2 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 $4 to $10.

2.4.3 Seed Testing Fees

Seed testing charges set by the M.A.F. vary according to the type of seed being tested. To obtain the various fees contact the M.A.F. office in Palmerston North.

2.4.4 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 are the Herbage Seed Subsection levies for 1985.

	Cultivar	1985 Levy (cents per kilogram of seed)
Red Clover	Grasslands Hunua	.96
	Grasslands Turoa	.96
	Grasslands Pawera	1.8
White Clover	Grasslands Huia	.6
	Grasslands Pitau	1.9*
	Permanent pasture	.6
Cocksfoot	Grasslands Apanui	.54
	Grasslands Wana	2.14*
Crested Dogstail		.9
Lotus	Grasslands Maku	2.8*
Prairie Grass	Grasslands Matua	1.45*
Ryegrass	Grasslands Paroa	.24
	Grasslands Tama	.27
	Grasslands Ruanui	.22
	Grasslands Nui	.22
	Permanent pasture	.22

	Ellett	.22
	Uncertified	.22
	Grasslands Ariki	.22
	Grasslands Manawa	.27
	Grasslands Moata	1.24*
Timothy	Grasslands Kahu	.9
Browntop		1.2
Yorkshire Fog		1.05
Lucerne	Grasslands Oranga	1.2
Phalaris	Grasslands Maru	1.2
Tall Fescue	Grasslands Roa	2.5*
Yarrow		2.4
Chewing Fescue		1.05*
Other Lucernes		1.2

* 1 cent special levy included

2.4.5 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	10.30	cents per kg
Cocksfoot	27.60	cents per kg
Clovers - White, Red and Alsike	27.00	cents per kg
Lucerne	27.00	cents per kg
Grass seed (Fine - Browntop, Fescue, Dogstail and Timothy	28.00	cents per kg
Turnips, Chou Moellier, Kale and Mustard	26.50	cents per kg
Rape	19.20	cents per kg
Prairie Grass	44.40	cents per kg
Yarrow	57.60	cents per kg
Separating White clover and Ryegrass	$ 1.50	per sack
Separating mixed oats and Ryegrass	$ 1.50	per sack
Slurry treating $22 for process plus cost of chemical		
Blending clovers and blending grass seeds	$ 2.59	per sack
Wheat and Ryecorn	$38.64	per tonne
Barley	$45.12	per tonne
Field Peas and Lupins	$44.40	per tonne
Garden Peas and Beans	$55.43	per tonne
Oats (dressing and clipping)	$53.76	per tonne
Linseed	$79.68	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.

2.4.6 Grain and Seed Drying Charges

Peas	to 17% moisture	$23.00 per tonne	
	17-18% moisture	$27.00 per tonne	
	over 18% moisture	$31.00 per tonne	
	second time over	Half of the above	
		South-land	Canty
Wheat, Oats and Barley	to 17% moisture	$18.75	$21.00
	17-18% moisture	$22.33	$25.00
	over 18% moisture	$25.40	$27.00
	second time over	$ 6.00 per tonne	
Small Seeds	to 17% moisture	8.125 cents/kg	
	17-18% moisture	9.735 cents/kg	
	over 18% moisture	11.250 cents/kg	
	second time over	11.00 cents/kg	

2.5 CONTRACTING

2.5.1 Contract Heading

Minimum charge in all cases should not be less than $14.50 per ft front per hour.

Wheat, Barley, Oats	Wheat	$31.60 per tonne
	Barley	$37.90 per tonne
	Oats	$47.30 per tonne
Peas and Lupins		$41.10 per tonne
Grasseed		$93.50 per hectare
Clover and Linseed		$103.80 per hectare
All bagging by arrangement		Cartage at Transport Schedule Rates
Standing time for trucks		By arrangement
Labour requirements		By arrangement

2.5.2 Baling

Standard Bales: 65c/bale half tonne bales $10.17/bale
Collecting: 5c/bale
For small quantities of less than 20 tonnes - Price by arrangement.
Surcharge of 20% for work on hill country.

2.5.3 Windrowing

$52.50 per hectare - above 100 mm $54.20 with conditioner
$54.20 per hectare - Under 100 mm $56.20 with conditioner

2.5.4 Silage

Charged in several different ways depending on contractor.

One local contractor charges $44 per truck load (3 to 6 tonnes). Average is 4 tonnes per load ie $11 per tonne.

2.5.5 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)	$30.00
22 - 30	(30 - 40)	$32.00
31 - 37	(41 - 50)	$36.00
38 - 44	(51 - 60)	$38.50
45 - 51	(61 - 69)	$42.00
52 - 58	(70 - 77)	$44.00
59 - 64	(78 - 89)	$53.00
65 - 74	(90 - 98)	$53.00
75 - 88	(99 - 119)	$67.00
89 - 103	(120 - 140)	$74.00
104 - 120	(141 - 160)	$79.00

(ii) 4 Wheel Drive Tractors

Up to 15	(Up to 20)	$26.50
16 - 21	(21 - 29)	$30.50
22 - 30	(30 - 40)	$33.00
31 - 37	(41 - 50)	$38.00
38 - 44	(51 - 60)	$40.50
45 - 51	(61 - 69)	$43.50
52 - 58	(70 - 77)	$46.00
59 - 64	(78 - 89)	$56.00

65 - 74	(90 - 98)	$58.00
75 - 88	(99 - 119)	$68.00
89 - 103	(120 - 140)	$76.00
104 - 120	(141 - 160)	$79.50
121 - 133	(161 - 190)	$96.50
134 - 170	(191 - 225)	$107.00
171 - 190	(226 - 252)	$114.50

(iii) Track Machines

30 - 37	(44 - 50)	$44.00
38 - 50	(51 - 66)	$54.00
Over 50	(Over 66)	$69.00

(iv) Extra Implements

Plus the following extra charges for implements.

Up to 30	$ 4.75
31 - 44	$ 6.50
45 - 55	$ 9.00
59 - 74	$13.40
75 - 88	$15.30
88 - 103	$16.80
104 - 120	$19.40
Over 120	$70.50

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

Up to 1.3 metres	$ 6.60
1.3 - 1.5 metres	$ 7.70
1.5 - 1.8 metres	$ 9.00
1.8 - 2.0 metres	$11.00
2.0 - 2.3 metres	$12.90
2.2 - 2.5 metres	$15.30
Over 2.5 metres	$21.50
Or sickle mowers	$ 6.60
Or disc mowers	$10.60
Or hay rakes	$ 5.90
Or hay tedder	$ 8.50

Special equipment by negotiation.

2.5.6 Horticultural Contracting

Rotary Hoeing	$50/hour
Discing	Larger Tractors - $50/hour
	Smaller Tractors - $43/hour

Subsoiling	$ 43.00/hour 100 hp tractor
Direct drilling	$50/hr + $3/hr for implement

2.5.7 Miscellaneous

Gorse cutting	$36.75 per hour
Tree topping	$82.30 to $90.80 per hour.
Potato Harvesting	$114.70 per hour or $31.30 per tonne plus extra labour
Drilling	$34.90 per hectare
Direct Drilling	$47.50 per hectare
Precision drilling	By arrangement.

2.6 DAIRY SHED SUPPLIES

2.6.1 Milking Machines

National Dairy Association (N.D.A.)

17 Cluster Turn Style Milking System	$12,248.00
22 Cluster	$13,915.00
28 Cluster	$19,032.00
36 Cluster	$22,982.00
8 Cluster Herringbone Hiline Milking System	$ 7,464.00
10 Cluster	$ 8,469.00
12 Cluster	$ 9,292.00
14 Cluster	$10,155.00
16 Cluster	$10,706.00
18 Cluster	$12,092.00
20 Cluster	$12,805.00
20 Cluster Rotary System	$17,295.00
24 Cluster	$20,535.00
28 Cluster	$21,913.00
32 Cluster	$26,349.00
10 Cluster Bodmin New Pulse Milking System includes	$ 9,561.00
12 Cluster Milk Plant and Washing System	$10,575.00
14 Cluster	$11,675.00
16 Cluster	$12,686.00
18 Cluster	$12,686.00
20 Cluster	$14,634.00

Instalment costs vary from $1,200 to $3,500.

2.6.2 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
	Alfa	3,741	$ 3.65 each
		600	$ 3.65 each
		3,150	$ 3.65 each
		960,016 - 03	$ 3.65 each
		960,016 - 01	$ 3.65 each
N.D.A. Cups and Claws	-	N.D.A. S/S Cups Bare	$46.80 set
		Cluster Claws S/S	$35.50 each
		Look-in Claw S/S	$46.10 each
		Sight Cluster Claw S/S	$49.25
		AHI Milking Claw	$88.00
Claw 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 ID	$ 3.69
		1420 mm Air Tubing 9.5 mm ID	$ 4.66
		1730 mm Air Tubing 9.5 mm ID	$ 4.24
		4270 mm Air Tubing 9.5 mm ID	$14.23
Milk tubing			
		1220 mm Milk Tubing 12.7 mm ID	$ 5.32
		1420 mm Milk Tubing 12.7 mm ID	$ 6.55
		1730 mm Milk Tubing 12.7 mm ID	$ 8.13
		4270 mm Milk Tubing 12.7 mm ID	$19.59
Milk Pump tubing (black and white)			
		Suction: 4.27 mm x 15.9 mm x 6.4 mm	$26.46 each
		Delivery: 3.66 mm x 19.1 mm x 7.9 mm	$31.22 each
		Suction: 4.00 mm x 22.2 mm x 9.5 mm	$50.93 each
Sleeve Tubing (black)			
		3 m x 28.6 mm x 9.5 mm	$45.40 each
		2 m x 35 mm x 6.4 mm	$30.87 each
Milk Pump Diaphrams			
		Efco No. 18A (for Efco 228 mm pumps - male thread - moulded insert piston plate)	$15.30 each

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

Wallace Milking Systems

Calfeteria complete Feeds up to 15 calves at once	$146.00
- Bawl only	$ 64.00
- Tubing 30 m coils	$ 25.70
- Valve	$ 1.70
- Lid	$ 23.00
- Stand (Stackable)	$ 36.52

Feltex plastic shed hose

- 25 mm x 30 m coil	$ 90.00
- 32 mm x 30 m coil	$126.00
- 38 mm x 30 m coil	$152.00

Stainless Steel Milk Filters (complete) $238.00

Filter Socks (100/pack)
ALFA $27.76-$45.23

Wholesale Filters

10 x 76 cm	$ 35.25
8 x 61 cm	$ 27.79
7 x 58 cm	$ 25.46
6 x 30 cm	$ 16.71

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	$463/ 625
250	21/39	1150/1150	3450/3450	$490/ 671
300	23/45	1350/1350	4050/4050	$504/ 725
350	25/51	1600/1600	4800/4800	$521/ 769
400	29/57	1850/1850	4700/4700	$548/ 811
500	35/67	2300/2300	5800/5800	$595/ 914
600	41/79	2700/2700	6900/6800	$600/1004
700	47/-	3200/-	6400/-	$693
800	53/95	3700/3700	7200/7400	$737/1126

2.6.3 Dairy Hygiene

(i) Detergents and Sanitizers

Nadarince		20 litre	$ 34.20
Nadasan		20 litre	$ 58.40
		200 litre	$486.35
		N.I.	S.I.
Klenz-Iodophor	5 litre	$ 16.98	$ 17.63
	20 litre	$ 63.01	$ 64.66
Q-Klenz	5 litre	$ 18.17	$ 18.86
	20 litre	$ 71.03	$ 73.58
Blu-Gard	5 litre	$ 35.18	$ 36.57
	20 litre	$131.21	$136.39
	200 litre	$1,163.10	$1,208.90
Klenzaid		5 litre	$ 13.42
		20 litre	$ 44.86
		200 litre	$367.34
Stainless Steel Detergent	5 kg	$ 16.91	$ 17.55
	6 kg bucket	$ 25.37	$ 26.58
	20 kg bucket	$ 71.16	$ 74.45
Tri-Klenz		5 litre	$ 12.25
		20 litre	$ 44.98
Klenzphos H.C.	5 litre	$ 26.37	$ 27.34
	20 litre	$100.06	$103.62

(ii) Dairy Ointments, Soaps and Teat Protectants

Redene - Teat Dip and Spray	5 litre	$ 21.81
	20 litre	$ 88.41
Teatspray Plus	5 litre	$ 33.58
	20 litre	$129.27
	200 litre	$1,148.00
Telmin RLT	20 litre	$373.60
Mineralised Telmin RLT	5 litre	$111.40
	20 litre	$418.60
Topclip 40(B)	5 litre	$ 69.30
	10 litre	$131.70
	200 litre	$2,338.00

Redene udder cream	3.25 kg	$ 18.42
	8 kg	$ 47.73
Elthamol Ointment	1.5 kg	$ 9.26
	4.5 kg	$ 23.56
	8.5 kg	$ 41.06
	17 kg	$ 77.04
Milkeeze Ointment	450 gm tin	$ 5.32
	1.75 kg tin	$ 14.37
	18 kg pail	$117.80
Hibitane Antiseptic Dairy Cream	3.5 kg	$ 16.08
	8 kg	$ 34.92
	17 kg	$ 68.73
Elthamol Soap	100 x 85 gm	$ 23.30
Klenzade Teat Guard	20 litre	$ 45.35
Teat Spray PVP-1	5 litre	$ 35.63
	20 litre	$125.97

(iii) Dairy Sanitizers

Redene Iodophor	5 litre	$ 17.09
Redene Milkstone Remover	5 litre	$ 17.49
	20 litre	$ 60.30
Redene Milkstone Remover HAF	5 litre	$ 26.00
Redene Multiflow	200 litre	$442.00
Redene Non-Ionic Rinse	200 litre	$336.00
Redene Stainless Steel Detergent	20 kg	$ 68.89
Redene Vat Cleanser	5 litre	$ 21.35
	20 litre	$ 79.00

2.6.4 Miscellaneous

Yard Broom	$ 13.00
Scrubbing Brushes - wooden handle	$ 3.00
Gumboots - Marathon knee	$ 57.00 per pair
- Redband short	$ 41.83 per pair
Dairy Aprons - with pocket	$ 17.04
- no pocket	$ 16.45
Buckets - 14 litre	$ 14.39 10/bundle
- 23 litre	$ 15.25 10/bundle
'Teatmaster' Teat sanitizer Spray Kit - including Fox diapnragm 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	$436.37
Carlyle Bloatenz Dispenser	$403.75
AHI Mastitis Detector -	
"Wallace" Milking Systems	
Telby Teat Spray System	$306.00
Tetspray Hose nozzle with	
13 mm tailpiece	$ 13.75
19 mm tailpiece	$ 13.75
25 mm tailpiece	$ 13.75
32 mm tailpiece	$ 13.75
WS44 Spray Gun (Complete)	$ 9.62

2.6.5 Typical Factory Supply Dairy Farm Income and Expenses for Budgeting Purposes (Canterbury)

	1982/83
Number of Farms	551
Milkfat Total (kg)	18,407
Herd Size (cows)	126
Effective hectares incl. run-off	64
Milkfat per Cow (kg)	146
INCOME ($ per farm)	
Dairy Produce (Dairy Company payout)	
- advance for current season	54,604
- deferred from previous season	11,026
- TOTAL	65,630
Bobby Calves	1,341
Gross Profit - Cattle	6,987
- Pigs	94
- Other Stock	281
Cash Crops	245
Contracting	557
Other Farm Income	841
GROSS FARM INCOME	75,976
EXPENDITURE	
Administration	1,743
Animal Health	2,053
Breeding Expenses	1,314

Contractors	549
Dairy Shed Expenses	867
Electricity	1,332
Feed and Grazing	3,941
Fertilizer and Seed	6,368
Freight	404
General Weed and Pest Control	536
Vehicle Expenses	5,037
Repairs and Maintenance	6,238
Development Expenditure	1,132
Insurance, Accident Comp.	864
Rates	1,437
Labour and Rations	4,495
Interest	10,087
Rent and Bailment Fees	742
Cash Expenses	49,139
Depreciation - Ordinary	5,074
- Special	954
Cash Expenses and Depreciation	55,167
NET FARMING INCOME	20,809
Deferred Expenditure	- 55
Income Equalisation	101
Total Farm Expenses	55,213
Adjusted Farm Income	20,763
Non Farm Income	1,316
Taxable Income	22,079

Ref: An Economic Survey of Factory Supply Dairy Farms in New Zealand.

2.7 ELECTRICITY

(i) Central Canterbury Electric Power Board Farm Tariffs. (N.B. These tariffs apply from 1st April 1985).

There is no "Farm Tarriff" now and the following tarriffs are classified as "Non Domestic".

A discount of 10% applies to all accounts paid within fourteen days after date of rendering.

A consumer intending to change tariff code must give at least one months notice of intention to change and

undertake to remain on the new tariff for at least twelve months. Where the Board determines that a consumer's tariff code should be changed, at least one months notice of the change will be given. These periods may be varied at the discretion of the Board.

All tariffs are subject to the Board's Conditions of Supply which are available on application.

NON-DOMESTIC TARIFFS:

Where two rate tariffs apply, day hours are between 7.00 am and 9.30 pm and night hours are between 9.30 pm and 7.00 am.

Night hours will be reduced to between 11.00 pm and 7.00 am in 1985/86. This change is to coincide with NZE night rate hours.

Code

N1 NON-DOMESTIC TARIFF NO. 1 - GENERAL SUPPLY
Applicable to installations used for all non-domestic purposes (except irrigation pump motors) where the maximum demand is 40 kVA or less. Applicable to irrigation pumps up to 5 kW.

(ES) Supply charge $107.31 per annum. (29.4c/day).

(E1) Plus all units at $12.70 each.

Consumers whose consumption patterns have a significant seasonal variation resulting in only a small proportion of their daytime maximum demands being above 40 kVA may, at the discretion of the Board, be permitted to take supply under this tariff.

N2 NON-DOMESTIC TARIFF NO. 2 - GENERAL SUPPLY (TWO RATE)
Applicable to installations used for all non-domestic purposes (except irrigation pump motors) where the maximum demand is 40 kVA or less. Applicable to irrigation pumps up to 5 kW.

(GS) Supply charge $132.50 per annum. (36.3c/day).

(G2) Plus day units at 12.70c each.

(G3) Plus night units at $3.96c each.

Consumers whose consumption patterns have a significant seasonal variation resulting in only a small proportion of their daytime maximum demands being above 40 kVA may, at the discretion of the Board, be permitted to take supply under this tariff.

N3 NON-DOMESTIC TARIFF NO. 3 - CONTROLLED SUPPLY
Applicable to all permanently connected appliances used for non-domestic purposes and approved by the Board, except irrigation pump motors. Consumers on this tariff will be controlled off-peak at the discretion of the Board.

All waterheater installations on this tariff must comply with N.Z. Standard Specifications 4602 and 4603.

(H4) All units at $5.25c each.

(HN) The Board will install and maintain an approved time switch or other means of control at a rental of $107.31 per annum. (29.4 c/day).

(HS) If supply is taken on this tariff only, a supply charge of per annum will also apply.

N4 NON-DOMESTIC TARIFF NO. 4 - LARGE USER SUPPLY
Applicable to installations used for all non-domestic purposes (except irrigation pump motors) where the maximum demand is between 40 kVA and 250 kVA.

(JS) Supply charge of $132.50 per annum. (36.3c/day).

(J2) Plus day units at $6.99c each.

(J3) Plus night units at $3.96c each.

(JD) Plus a demand charge of $7.51 per kVA per month for day-time demadns with a minimum chargeable demand of 20 kVA. (24.7c/kVA/day).

Consumers whose consumption patterns have a significant seasonal variation resulting in only a small proportion of their daytime maximum demands being in the range 40 - 150 kVA may, at the discretion of the Board, be permitted to take supply under tariff codes N1 or N2.

N5 NON-DOMESTIC TARIFF NO. 5 - BULK SUPPLY
Applicable to installations - used for all non-domestic purposes (except irrigation pump motors) where the maximum demand is more than 150 kVA.

(KS) Supply charge of $132.56 per annum. (36.3c/day).

(K2) Plus day units at $5.45c each.

(K3) Plus night units at $4.77c each.

(KD) Plus a demand charge of $15.88 per kVA per month for day-time demands in the months of May, June, July, August, September, with a minimum chargeable demand of 150 kVA.

(KD) Plus a demand charge of $4.62 per kVA per month for day-time demands in those months not included above, with a minimum chargeable demand of 150 kVA.

Meters will normally be read on the last working day of each month except December. In December, meters will normally be read on the working day closest to December 20. These dates may be varied at the discretion of the Board.

Consumers whose consumption patterns have a significant seasonal variation resulting in only a small proportion of their daytime demands being above 150 kVA may, at the discretion of the Board, be permitted to take supply under tariff codes N1, N2 or N4.

(ii) Rates for Irrigation

Where two rate tariffs apply, day hours are between 7.30 am and 9.30 pm and night hours are between 9.30 pm and 7.00 am.

Night hours will be reduced to between 11.00 pm and 7.00 am in 1985/86. This change is to coincide with NZE night rate hours.

Code

I1 IRRIGATION SUPPLY
Applicable to irrigation pump motors with a connected load in excess of 5 kW.

Up to 5 kW of other load may be connected at the

day rate on this tariff. Each standard 10 amp socket for portable appliances will be assessed at 1 kW.

(WC) Annual capacity charge of $18.98 per kW of connected load.

(W2) Plus day units at 9.22c each.

(W3) Plus night units at 3.96c each.

(WR) A rebate of 12% will apply to the capacity charge only, if power factor correction capacitors are fitted and functioning to the satisfaction of the Board.

The capacity charge is an annual charge and will normally be charged in instalments with each account, adjusted on a daily basis to the appropriate billing period. For the purposes of calculating the capacity charge the year begins on the first of April each year.

In the event of the disconnection of an existing installation the outstanding balance of the capacity charge will become immediately due for payment.

If an existing installation is reconnected during a year for which no capacity charge has been paid, then the full capacity charge for that year will be payable, with payment for the year to date becoming due at the time of reconnection.

New installations will only be charged a capacity charge from the time of first connection. The charge will be pro rata for the current year.

Where a change of consumer occurs, the capacity charge will be apportioned between the old and new consumer on a pro rata basis for the year in which the change of consumer occurs.

I2 IRRIGATION SUPPLY - SMALL USERS
An optional tariff available to irrigation pump motors with a connected load between 5 kW and 20 kW.

Up to 5 kW of other load may be connected at the day rate on this tariff. Each standard 10 amp socket for portable appliance will be assessed at 1 kW.

(I5) Supply charge of $132.50 per annum.

(I2) Plus day units at 12.70c each.

(I3) Plus night units at 3.96c each.

Consumers must take supply for not less than twelve consecutive months in each year.

(NB: If Sufficient daytime usage is made of pumps between 7 kW and 20 kW, it may be cheaper to run on the I1 tariff. If so, contact your Central Canterbury Power Board for further advice).

(iii) Electricity - South Island Concession

This scheme at present 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. In the 1984 Budget it was announced that this concession will be phased out with termination on 31 March 1987.

2.8 FEED

2.8.1 Baler Twine

Heavy Sisal	$134.82 per bale ($3.75 kg)
Medium Sisal	$139.78 per bale ($3.88 kg)
Superfilm Polypropylene	$ 94.69 per bale ($5.92 kg)
Howard Baler Twine	$147.94 per bale ($5.92 kg)
Hesston 4800 baler twine	$147.94 per bale ($5.92 kg)
Binder Twine (untreated sisal twine)	$100.50 per bale ($4.02 kg)
Big Round Superfilm Baler Twine	$113.40 per bale ($7.09 kg)

2.8.2 Stock and Poultry Feeds

(i) Cattle

	Price per 40 kg bag	Price per tonne Bulk	Price per tonne Bagged
Fleming-NRM Calf Crumbles	$14.06	$288.30	$329.00
Hi Protein Dairy		$262.60	$303.25
Hi Energy Dairy Pellets	$11.89	$233.90	$274.75
Cattle Pellets	$13.03	$262.60	$303.25

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

	Suggested Prices
Ex store - 40kg bag	$320 per tonne $15.36 per bag*
Denkavit calf milk (20 kg) Ex store - up to 25 bags	$31.00 per bag

(ii) Sheep

Fleming-NRM Sheep Pellets (40 kg)	$ 12.76
(per tonne bagged)	$296.50
Sheep Nuts (Hi Protein)	$334.25
Tomoana Sheep Nuts F.O.R. Mataura add freight	
Overline - 20 kg bags -	$ 6.72
25 bags or more	$380.00 per tonne*
Overline - 40 kg bags -	
13 bags or more	$275.00 per tonne*
Denkavit Lamb Milk Replacer (5 kg)	
Container 5 x 5 kg	$ 61.75 per container

(iii) Pigs

	Price/ 40 kg bag	Price Per Tonne Bulk	Bagged
Fleming-NRM			
Pig Creep Crumbs	$21.87	$483.50	$524.25
Weaner Meal	$17.35	$370.40	$411.25
Pig Weaner Pellets	$17.59	$376.40	$417.25
Grower Meal	$15.24	$317.80	$358.50
Pig Grower Pellets	$15.48	$323.80	$364.50
Finisher Meal	$13.91	$284.50	$325.25
Finisher Pellets	$14.15	$290.50	$331.25
Breeder Meal	$13.15	$265.40	$306.25
Pig Breeder Pellets	$13.39	$271.40	$312.25
Weaner Superblend	$32.15	$740.60	$781.25
Grower Superblend	$25.77	$581.00	$621.75
Breeder Superblend	$26.89	$609.00	$649.75
Coopers			
Hi-Breed Sow Premix (10 x 2.5 kg)		25 kg	$160.67
Hi-Breed Sow Premix		25 kg	$152.29
Pig Breeder (10 x 2.5 kg)		25 kg	$106.95
		25 kg	$104.55
Pig Creep (5 x 5 kg)		25 kg	$ 92.24
Pig Creep and Dynamutilin (5 x 5 kg)		25 kg	$208.52
Pig Grower/Finisher (10 x 2.5 kg)		25 kg	$113.94
		25 kg	$101.41
Pig Standard (10 x 2.5 kg)		25 kg	$ 74.62

(iv) Deer

Fleming-NRM Deer Pellets	$11.91	$257.00

Tomoana Deer Nuts F.O.R. Mataura add freight
Overline - 13 bags or more $317.00 per tonne*
- 40 kg $ 15.21

(v) Horses

	Price per 40 kg bag ex store	Price per tonne Bulk	Bagged
Fleming-NRM			
Stud horse pellets	$13.99		$327.25
Horse & Pony Pellets	$12.43		$288.25
Pony Meal	$ 7.82	(25kg)	$288.80
Racehorse Pellets	$13.16		$306.50

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

Suggested Price
$316.00 per tonne

Tomoana Hack & Hunter Pellets $312.00 per tonne
25 bags or more $ 6.93 per bag*

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

(vi) Goats

Fleming - N.R.M. Goat Pellets	-	-	$296.25

(vii) Rabbits

Fleming Rabbit pellets -	10 kg	$ 4.83
	40 kg	$ 18.08
	bagged per tonne	$429.25

(viii) Dogs

Tux Dog Biscuits (30 kg) $34.60

Tomoana Dog Crackers F.O.R. Mataura add freight

Ex Store - 10 kg bags	$10.65 per bag
Ex Store - 20 kg bags	$19.95 per bag
Ex Store - 40 kg bags	$38.00 per bag

(ix) Poultry

		Price per tonne Bulk	Bagged
Fleming-NRM			
NRM Chick Mash	$17.01	$366.40	$402.75
Chick Crums	$17.43	$372.40	$413.25
Pullet Grower Mash	$13.09	$263.90	$304.75
Pullet Grower Pellets	$13.13	$269.90	$310.75
Pre Lay Mash		$276.85	
Hi-Lay Super Pellets		$313.70	
Hi-Lay Super Mash		$307.70	
Hi-Lay Pellets	$14.68	$303.80	$344.50
Hi-Lay Mash	$14.44	$297.80	$338.50
Layer Pellets	$14.03	$287.60	$328.25

		Price per tonne Bulk	Bagged
Layer Mash	$13.79	$281.60	$322.25
Meat Bird			
Starter Pellets	-	$458.00	-
Finisher	-	$379.90	-

Coopers			
Chick Starter (5 x 5 kg)		25 kg	$ 72.19
Poultry Layer (10 x 2.5 kg)		25 kg	$ 92.52
		25 kg	$ 83.15
Poultry Grower (10 x 2.5 kg)		25 kg	$ 90.90
		25 kg	$ 33.44

(x) Miscellaneous

Molasses 250kg drum	$150.00
Agricultural Salt 50 kg	$ 11.93
Bran per 40 kg	$ 10.27
Summit Salt Blocks	
Magnesium	$ 13.48
Copper Cattle	$ 11.63
Multi-Mineral	$ 11.93
Just Salt	$ 11.35
Standard Blocks	$ 11.28
Nutriex	
Seawood Standard	$ 12.33
Nutriex Magnesium	$ 12.92

(x) Medication and Feed Supplements
Coopers (Tasmix)

Dog Food Supplements	25 kg	POA
Pig Products		
Sol Min Pig	20 kg	$ 53.12
Tas Sel	25 kg	$ 33.44
Nilverm Pig Wormer	200 gm	$ 12.60
	1 kg	$ 46.51
	5 kg	$215.31
	20 kg	$750.33
Gleptosil Iron Injection	100 ml	$ 25.25
Vitamin E50	2 kg	$ 83.66
Vitamin K	1 kg	$ 9.03
Vitamin A, B2, D3	25 kg	$ 64.69
Lysine	25 kg	$187.50
Nemax Pig Wormer	1 kg	$ 25.61
Horse Products		
Hl, E, + Sel	1 kg	$ 28.55
Ephocal	2.5 kg	$ 15.30
	10 kg	$ 38.55
Equine Iron Tonic	5 l	$ 20.78
Horse Supplement + Sel	1 kg	$ 15.38
	2.5 kg	$ 25.28
	10 kg	$ 92.82
Poultry Products		
Methionine	25 kg	$154.25
Tas Sel	25 kg	$ 33.44
Carophyll Orange	1 kg	$197.42
Yellow	1 kg	$155.22
Red	1 kg	$238.86
Tasmix Calf Supplement for Calves, Sheep, Goats, Dairy and Beef Cattle	2.5 kg	$ 22.25
	10 kg	$ 77.00

2.8.3 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-$3.00/head/week for cattle.

2.9 FREIGHT AND CARTAGE

2.9.1 Railway Transport Rates

Charges are now based on the greater of actual or dimensional weight. Dimensional weight is calculated by using the cubic conversion factors below:

Intra-island: 3 m^3 to 1 tonne or 333 kg to 1 m^2

Inter-island: 1.6 m^3 to 1 tonne or 625 kg to 1 m^3

Tables of freight prices are available from Railfreight offices. As an example part of the Christchurch table is as follows:

Prices to North Island	1-25 kg $/kg	251-500 kg $/kg	251-500 kg Then Add $ c	Over 1000 kg $/kg	Over 1000 kg Then Add $ c
Auckland	0.68	0.23	28.25	0.19	53.25
Gisborne	0.89	0.30	38.25	0.24	73.25
Masterton	0.58	0.20	23.25	0.16	48.25
New Plymouth	0.76	0.26	30.50	0.21	60.50
Tauranga	0.92	0.31	38.75	0.25	73.75
Wellington	0.41	0.14	16.25	0.11	36.25
Whangarei	0.93	0.32	37.50	0.25	82.50

Minimum Charge Per Consignment : $9.00

South Island					
Alexandra	0.69	0.17	23.50	0.13	48.50
Ashburton	0.30	0.05	8.25	0.04	13.25
Dunedin	0.48	0.11	17.75	0.09	32.75
Greymouth	0.45	0.11	14.75	0.08	34.75
Invercargill	0.65	0.15	24.25	0.12	44.25
Nelson	0.50	0.12	18.00	0.10	28.00
Timaru	0.30	0.06	8.00	0.04	23.00

Minumum Charge Per Consignment : $6.00

2.9.2 Road Transport Rates

Road Freight rates are normally dependent on both type of goods and distance to be carted.

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 1st February 1985.

ITEM	RATE	MINIMUM LOAD	SPECIAL PROVISIONS
BRICKS	A	3000 kg	Plus $2.18 per 1000 kg. (327 bricks to 1000 kg)
CEMENT			
- Bagged	A	3000 kg	
CHAFF	A	3000 kg	
COAL			
- Bagged	A	3000 kg	Bagging extra
- Losse, tipped off	D	4000 kg	Plus mechanical loader $2.69 per 1000 kg. Shovelled off at time rate.
FERTILIZER			
- Bagged	C	3000 kg	
- Bulk	D	4000 kg	Rate does not include mechanical loader - add $2.12 per 1000 kg.
FUEL - 200 litre drums	A	3000 kg	
GENERAL GOODS	A	3000 kg	If under 300 kg add $3.31 per consignment. Under 1000 kg use small goods rate.
GRAIN - Bulk	K	4000 kg	Bulk grain ex an acceptable silo. (See special condition No. 2). These rates are to be increased by 71 cents per 1000 kg where silos are not completely self emptying or where the farmer does not supply the labour to feed the auger inside the silo. Auger charges $1.10 per 1000 kg. Ex header up to $2.76 per 1000 kg by arrangement. Converting bags to bulk additional $2.76 per 1000 kg.

GRASS SEED - Bulk	Z		
- Boxes over 1000 kg	E	8 boxes	If farmer loads boxes efficiently deduct $4.13 per box.
- Boxes under 1000 kg	EA	16 boxes	For less than minimum load add $2.76 per box for first five boxes and $1.38 per box for remainder.
EMPTY BOXES	EB		
GRAIN - Bulk	K		
- Boxes over 1000 kg	E	8 boxes	If farmer loads boxes efficiently deduct $4.13 per box.
- Boxes under 1000 kg	EA	16 boxes	For less than minimum load add $2.76 per box for first five boxes and $1.38 per box for remainder.
GRAIN - Bagged (Including small seeds) (Under 16 sacks to 1000 kg)	I	39 bags	Ex Shed or Store. Includes use of bag loader and driver Ex Paddock. "I" plus $0.179 per sack, includes bag loader and all labour. Where farmer supplies labour over and above driver the rate is to be "I" plus $0.05 per sack. Ex Heap in Paddock. "I" plus $0.09 per sack. Where farmer supplies labour over and above driver the rate is to be "I".
GRASS SEED AND OTHER SMALL SEEDS BAGGED (16 sacks and over to 1000 kg)	J	48 bags	Ex Shed or Store. Includes use of bag loader and driver Ex Paddock. "J" plus $0.132 per sack. Where farmer supplies labour over and above driver the rate is to be "J" plus $0.05 per sack. Ex Heap in Paddock. "J" plus $0.085 per sack. Where farmer supplies labour over and above driver the rate is to be "J".
GRASS SEED - Bulk	Z		

HAY AND STRAW BALED	H	120 bales	40 Bales or more per 1000 kg less 5 cents per bale. Picking up unsledged bales or extra high stacking by arrangement. No charges included for extra labour which is to be by arrangement.
IMPLEMENTS AND MACHINERY			By Arrangement
LIME - Bagged	C	3000 kg	
- Bulk	B	4000 kg	Rate does not include mechanical loader - add $2.12 per 1000 kg.
LIVESTOCK			
- Lambs, store	L)		A lamb becomes a hogget on 1 September. A hogget becomes a sheep on 1st January. See also Special Condition No. 1
- Lambs, fat	M)		
- Hoggets	N)		
- Sheep store	O)		
- Sheep, fat	P)		
- Weaners	R		
- Yearlings	S		
- 18 mth Cattle	T		
- 2 yr Cattle	U		
- Fat Cattle	W		
- Bulls over 2 years	W		Plus $6.53 per head.
PEAS	See Grain		
METAL, SAND AND GRAVEL			By Arrangement.
POTATOES - Bagged	I	39 bags	Ex Shed or Store. Includes use of bag loader and driver only. Ex Paddock. "I" plus $0.179 per sack, includes bag loader and all labour. Where farmer supplies labour over and above driver the rate is to be "I" plus $0.05 per sack. Ex Heap in Paddock. "I" plus $0.09 per sack. Where farmer supplies labour over and above driver the rate is to be "I".

TIMBER	G	2.83 cubic metres	Ex Skids and tip-off. Manhandling or stacking at hourly rate.
WOOL	F	14 bales	Off landing truck high. Off ground level and $0.06 per bale.

Table of Rates

	A General Good	C Bag Fert and Lime	D Bulk Fertiliser	B Bulk Lime
	Per Tonne	Per Tonne	Per Tonne	Per Tonne
KM	$	$	$	$
10	13.91	12.54	9.13	8.33
20	17.56	16.06	12.21	11.10
30	20.97	19.29	15.22	13.44
40	24.05	22.12	17.69	15.76
50	26.82	24.87	19.81	17.90
60	29.48	27.52	21.88	20.09
70	31.68	29.74	23.93	21.78
80	33.76	31.81	26.01	23.51

	K Hulk Grain	E Boxes Over 1000 kg	EA Boxes Under 1000 kg	EB Empty Boxes
	Per Tonne	Per Tonne	Per Tonne	Per Tonne
KM	$	$	$	$
10	8.58	11.73	14.92	3.39
20	11.51	14.63	17.83	3.72
30	14.20	17.39	20.61	4.09
40	16.61	19.77	22.97	4.43
50	18.68	21.85	25.07	4.79
60	20.63	23.78	27.00	5.14
70	22.36	25.52	28.74	5.49
80	24.05	27.22	30.42	5.80

KM	I Bagged Grain Under 16 Per Tonne Per Bag C	J Bagged Grain Over 16 Per Tonne Per Bag C	H Hay Per Bale C	G Timber Per Cubic Metre $
10	79.3	70.0	55.8	8.69
20	104.5	89.1	72.8	11.79
30	123.8	105.1	88.4	14.81
40	138.3	117.5	100.8	17.69
50	152.0	130.0	112.8	20.63
60	165.9	142.1	123.2	23.48
70	179.6	153.9	132.4	25.51
80	193.5	165.9	140.9	27.20

KM	F Wool Per Bale $	L Store Lambs C	M Fat Lambs C	N Hoggets C
10	2.98	43.8	46.1	50.3
20	3.89	55.8	62.7	67.5
30	4.72	68.2	77.3	83.7
40	5.39	80.1	89.9	97.6
50	6.00	90.6	101.7	111.4
60	6.51	101.1	112.3	124.1
70	6.86	110.3	121.3	135.2
80	7.19	118.8	130.0	142.4
90	-	126.4	139.3	155.5
100	-	133.7	147.9	164.7
120	-	147.3	165.3	180.7
140	-	161.6	182.9	199.7
160	-	176.2	202.0	218.8

KM	T 18 Month Cattle $	U 2 Year Cattle $	W Fat Cattle $
10	3.83	4.54	4.95
20	5.41	6.34	6.92
30	6.70	7.95	8.90

40	7.86	9.41	10.65
50	9.45	10.73	12.40
60	10.52	12.06	14.10
70	11.43	13.42	15.65
80	12.25	14.61	16.79
90	13.05	15.75	18.07
100	13.85	16.93	19.45
120	15.11	18.60	21.39
140	16.17	19.83	22.75
160	17.13	21.03	23.97

KM	Q Store Sheep C	P Fat Sheep C	R Weaners $	S Yearlings $
10	54.5	56.4	2.47	2.93
20	72.8	77.1	2.43	4.14
30	89.9	97.3	4.35	5.27
40	105.1	116.0	5.17	6.33
50	120.7	134.6	5.92	7.31
60	135.5	150.8	6.72	8.26
70	148.4	168.1	7.42	9.10
80	160.4	183.9	8.09	9.96
90	171.4	200.0	8.70	10.65
100	181.4	215.4	9.36	11.37
120	196.0	243.0	10.35	12.48
140	216.4	268.5	11.10	13.47
160	234.9	290.9	11.84	14.19

2.9.3 Air Rates

External

(i) Foodstuffs: Fruit	45 kg	100 kg	250 kg	300 kg	500 kg	1000 kg
To Australia (Sydney Melbourne/Brisbane)	1.54	1.73	1.37	-	1.06	-
Australia (Perth)	-	4.57	1.93	-	1.65	-
Singapore	-	2.12	-	-	1.89	1.79
Hong Kong	-	1.92	1.83	-	-	1.68
Tokyo	-	2.66	-	-	2.30	2.15
Los Angeles	-	2.92	-	2.32	-	2.29
London	-	7.12	4.77	-	4.49	4.14
Frankfurt/Amsterdam	-	-	4.42	-	4.07	3.83

(ii) Floral, Nursery Stock, Bulbs, Seeds, Flowers and Tubers

	45 kg	100 kg	250 kg	1000 kg
To Australia (Sydney/ Melbourne/Brisbane)	1.54	1.37	-	-
Australia (Perth)	3.68	3.31	-	-
Singapore	-	2.53	-	-
Hong Kong	-	2.50	-	-
Los Angeles	3.68	-	3.24	-
London	-	5.74	-	5.10

(iii) Cut Flowers

	45 kg	100 kg
To Hong Kong	4.85	2.47
Tokyo	2.41	-
London/Frankfurt/ Amsterdam	4.28	3.97

Internal

Freightair Christchurch to Auckland $1.01 per kg.
Christchurch to Wellington 60c per kg.

Minimum charge $3.25
Christchurch-Wellington .85c
Christchurch-Auckland 1.44 kg
$4.30 minimum charge.

2.9.4 Transport of Cooltainers (New Zealand to Melbourne)

5 metre	1587 kg	$1,189
7 metre	2900 kg	$2,218
10 metres	4300 kg	$3,174

2.10 FERTILISERS

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

As at December 1984

N	P	K	S		Farmers Bulk Per tonne	Farmers Bags Per tonne
	RATING					
0	9	0	11	Super	136.25	152.25
0	7	0	8	Serpentine Reverted Super	-	140.20
0	9	0	11	Boron Super	152.70	168.70
0	9	0	11	Cobalt Super	150.50	166.50
0	9	0	11	Copper Super	157.40	173.40
0	9	0	11	Molybdate Super 500g	143.30	159.30
0	9	0	11	Molybdate Super 250g	140.30	156.30
0	8	0	10	Legume Establishment Fertiliser	139.35	155.35
0	7	7	8	15% Potash Super	149.00	165.00
0	6	15	7	30% Potash Super	160.80	176.80
0	6	15	7	30% Potash Boron Super	175.85	191.85
0	6	15	7	Potash Molybdate Super	166.90	182.90
12	5	14	3	Nitrophoska blue TE	-	511.50
0	7	0	27	Molybdate Sulphur Super Extra	170.70	186.70
0	8	0	19	Molybdate Sulphur Super	157.25	173.25
0	4	24	5	50% Potash Super	166.15	182.15
0	4	25	5	50% Potash Boron Super	191.65	207.65
0	8	0	19	Sulphur Super	150.70	166.70
0	7	0	27	Sulphur Super Extra	164.10	180.10
0	6	11	15	22% Potash Sulphur Super	164.95	180.95
0	5	15	15	30% Potash Sulphur Super	174.15	190.15
0	8	0	15	Westland Pakihi Starter	163.75	179.75
6	6	0	14	Nitrogen Super	178.10	194.10
6	6	0	14	Nitrogen Super with Double Boron	178.00	194.00
6	5	5	13	Multicrop	186.00	202.00
2	7	0	11	Turnip and Rape	150.85	166.85
8	4	8	14	Orchard Regular	202.40	218.40
6	5	5	13	Multicrop with Boron	190.40	206.40
6	4	12	12	Orchard High K	197.75	213.75
8	4	8	13			
18	20	0	0	Cropmaster DAP	574.70	595.70
20	10	0	12	Cropmaster 20	426.15	447.15
15	10	10	7	Cropmaster 15	414.75	435.75
13	14	14	0	Cropmaster 13	468.90	489.90
46	0	0	0	Urea	-	396.75
20	0	0	0	Liquid Nitrogen	209.50	-
21	0	0	24	Ammonium Sulphate	273.95 (Standard and Granular)	289.95
0	0	50	0	Potassium Chloride	214.80 (Standard 218.45 (Granular)	230.80 234.45

0	0	40	17	Potassium Sulphate	-	620.25
26	0	0	0	Nitrophoska Nitrogreen	-	413.90
12	10	10	1	Nitrophoska	422.80	443.80
12	5	14	6	Nitrophoska Blue Extra	-	543.90
15	7	5	0	Nitrophoska Yellow	-	467.95
0	9	0	11	Selenium Super	147.60	163.60

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.

2.10.2 Yates Fertilisers
31st January 1985.

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	$ 33.53
		C	38.06
Sporumix B Trace Element Mix	45 kg	A	$ 28.56
		C	33.09
Keiserite	50 kg bags	A	$ 31.42
		C	37.21
Sulphur Flowers	50 kg bags	A	$ 68.82
		C	72.03
Zinc Sulphate	loose/kg	A	$ .73
		C	.86
Urea 46% N	50 kg bags	A	$ 30.21
		C	37.65
J.B.D.U. 31%	25kg bags		$ 30.11
			34.35
Rustica 12-5-14 + 2 mgo	50 kg bags	A	$ 32.21
		C	34.70
Acid Gro Plus Fert.	50 kg bags	A	$ 18.13
		C	24.01
	Bulk tonne		$291.88
Bulb Gro Plus Fert.	50 kg bags	A	$288.03
		C	388.37
	Bulk tonne		$270.48
Crop & Grass Fert.	50 kg bags	A	$ 16.60
Crop & Grass Fert.	Bulk tonne		$237.14
Gro Plus Fert.	50 kg bags	A	$ 23.51
Grass Organic Fert.	50 kg bags	A	$ 16.05

Grass Organic Groplus	Bulk tonne		$256.37
Grass Potassic Fert.	50 kg bags	A	$ 16.69
Haypaddock Gro Plus	50 kg bags	A	$ 19.58
	Bulk tonne		$283.26
Lawntone Gro Plus	50 kg bags	A	$ 17.19
		C	25.24
	Bulk tonne		$236.76
Lucerne Estab. Fert.	50 kg bags	A	$ 20.06
Lucerne Main Fert.	50 kg bags	A	$ 21.59
		C	$ 27.64
Lucerne Main Fert.	Bulk tonne		$314.14
Rose Gro Plus Fert.	50 kg bags	A	$ 28.36
		C	34.89
	Bulk Tonne		$418.11
Strawberry Gro Plus	50 kg bags	A	$ 23.04
		C	P.O.A.
Strawberry Gro Plus	Bulk tonne		$336.44
Blood and bone	50 kg bags	A	$ 26.49
		C	$ 19.14
Dried blood	25 kg bags	A	$ 34.74
		C	$ 37.83
Magnesium Sulphate	50 kg bags	A	$ 34.38
		C	$ 38.02
Lime Dolomite	40 kg bags	A	$ 12.58
		C	P.O.A.
Potash Nitrate (Crystal)	50 kg bags	A	$ 57.23
		C	63.03

N	P Citric Sol.	P Total	K	S	Ca	Mg	Brand (Trace Element %)	FARMER Bulk $	FARMER Bags $
0	8.0	10	0	12	20	0	Superphosphate	135.15	149.15
0	8.0	10	0	12	20	0	Cobalt (0.5 kg) Super. (0.0105% Cobalt)	143.55	157.55
0	7.8	10	0	12	20	0	Copper (25 kg) Super. (0.637% Copper)	156.65	170.65
0	8.0	10	0	12	20	0	Moly. (0.25 kg) Super. (0.0098% Molybdenum)	139.25	153.25
0	8.0	10	0	12	20	0	Selenium (4 kg) Super. (.004% Se.)	144.65	158.65
0	7.2	9	0	21	18	0	Sulfos	149.90	163.90
0	5.6	8	0	9	15	5	Serpentine Super.	128.60	142.60
0	5.5	8	0	9	15	5	Boron (25 kg) Serp. (0.357% Boron)	181.20	195.20
0	5.6	7	15	8	14	0	30% Potash Super.	192.00	206.00
0	4.8	6	8	8	13	4	15% Potash Serp.	159.65	173.65
0	3.9	5	15	6	11	4	30% Potash Serp.	189.65	203.65
0	2.8	4	25	4	8	3	50% Potash Serp.	229.65	243.65
7	5.3	7	0	15	13	0	Ammoniated Super.	171.60	185.60
5	4.4	5	5	6	10	3	Hi-Gro	184.25	198.25
0	13.7	15	0	10	17	0	Super 15	257.90	271.90
0	13.1	14	0	13	16	0	Super 14	256.35	270.35

N	P Citric Sol.	P Total	K	S	Ca	Mg	Brand (Trace Element %)	FARMER Bulk $	FARMER Bags $
46	0	0	0	0	0	0	Urea	-	470.45
21	0	0	0	24	0	0	Hycrop Amsulf	276.85	294.45
18	20	20	0	2	0	0	Hycrop 18:20:0 (D.A.P.)	450.00	467.60
16	9	9	0	14	0	0	Ammo-Phos 16:9:0	436.30	453.90
15	7	7	5	13	0	0	Ammo-Phos 15:7:5	390.60	408.20
13	6	6	11	12	0	0	Ammo-Phos 13:6:11	380.00	397.60
12	10	10	10	8	0	0	Ammo-Phos 12:10:10	461.65	479.25
11	22	22	0	2	0	0	Ammo-Phos 11:22:0	493.15	510.75
10	18	18	7	2	0	0	Ammo-Phos 10:18:7	482.70	500.30
8	14	14	13	2	0	0	Ammo-Phos 8:14:13	478.30	495.90
8	10	10	20	3	0	0	Ammo-Phos 8:10:20	477.30	494.90
0	0	0	50	0	0	0	Hycrop Potash (Muriate)	364.35	381.95
20	0	0	0	0	0	0	Liquid Nitrogen '20'	cents per litre	
							ex Awatoto	22.0	
							ex Matawhero	22.0	
							ex Taratahi	22.0	

2.10.4 Bell-Booth

Maxicrop	5 litres	$ 15.94
Maxicrop (Agricultural packs) Multiple Concentrate	20 litres	$ 96.71
	200 litres	$872.65

2.10.5 New Zealand Farmers' Fertiliser Company Limited
As at 3 August 1984 - ex Auckland Works

N	P	K	S	PRODUCT	Bulk Per tonne $	Bagged Per tonne $
0	10	0	11	Superphosphate	146.20	163.70
0	8	0	8	Serpentine Super.	132.20	149.70
0	10	0	11	Cobalt Superphosphate	154.05	171.55
0	10	0	11	Copper Superphosphate	158.30	175.80
0	10	0	11	Superphosphate with Molybdenum	150.20	167.70
7	6	0	15	Ammoniated Super.	187.85	205.35
6	6	5	13	Crop Fertiliser	182.70	200.20
0	8	8	9	15% Potash Super.	164.60	182.10
0	8	8	9	15% Potash Cobalt Superphosphate	183.95	201.45
0	8	8	9	15% Potash Copper Superphosphate	187.80	205.30
0	6	8	7	15% Potash Serpentine Superphosphate	171.50	189.00
0	6	10	7	20% Potash Serpentine Superphosphate	159.10	176.60
0	7	15	7	30% Potash Super.	181.05	198.55
0	7	15	7	30% Potash Copper Superphosphate	204.05	221.55
0	5	15	6	30% Potash Serpentine Superphosphate	171.50	189.00
0	5	25	5	50% Potash Super.	203.20	220.70
0	0	50	0	Free Flow Muriate of Potash	252.45	269.95
21	0	0	24	Sulphate of Ammonia	231.70	249.20
0	0	40	18	Sulphate of Potash (in bags)		615.15
46	0	0	0	Urea (in bags)		396.75
20	0	0	0	Liquid Nitrogen		
16	9	0	15	Ammonium Phosphate Sulphate	436.80	454.30
18	20	0	2	Di-Ammonium Phosphate	497.45	514.95
12	10	10	2	Complesa 12.10.10	-	440.55

Special mixtures available - price on application.

2.10.6 Fertilisers for Horticultural Use

		$
Ammophos 13.6.11	Bulk Tonne	380.00
Blood and bone	50 kg	12.61
Dolomite	40 kg	14.17
Dried Blood	30 kg	35.37
Magnesium Sulphate	25 kg	28.27
Nitrophoska yellow	Bagged Tonne	467.95
Nitrophoska nitrogreen	Bagged Tonne	413.90
Nitrophoska blue extra	Bagged Tonne	543.90
Potassium Sulphate	Bagged Tonne	620.25
Potassium Chloride (Standard)	Bagged Tonne	230.80
Ammonium Sulphate	50 kg	P.O.A.
Borax	25 kg	31.15
Calcium nitrate	50 kg	44.62
IBDU	25 kg	61.92
Sodium Molybdate	1 kg	23.25
Sporumix	45 kg	33.37
Sulphur	50 kg	26.78
Maticrop	Bagged Tonne	202.00
Orchard Regular NPK 8-4-8	Bagged Tonne	202.40
	Bulk Tonne	218.40
Wuxal NPK 9.4.6 (plus trace elements)	5 litres	28.45
Iron sulphate	50 kg	13.76
Sulphated Potash	50 kg	59.30
Superphosphate	40 kg	12.67
Urea	40 kg	26.25
Zinc Sulphate	1 kg	0.78

2.10.7 Spreading Fertiliser and Seed

(i) Ground Spread Fertiliser (Contract)

Average Paddock Size	Cost per Hectare
Under 4 hectares - by arrangement	$5.00
4 hectares and under 8 hectares	$5.06
8 hectares and under 16 hectares	$4.56
Over 16 hectares	$4.31

Minimum cartage as for 3 tonnes.

Stoney, Swampy and hill country - extra by arrangement.

(ii) Aerial Spreading Fertiliser

This is usually charged for on a per tonne basis. One local company works out the average tonnes/hour for a specific job and then charges per tonne. Average rate for this company is $35 per tonne. (North Canterbury).

(iii) Aerial Sowing of Seeds and Prills

Rowley Aviation Oversowing $525 per flying hour

All the costs listed below are on a per 100 kg basis. The costs are varied 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.

2.11 LIME

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

Dry Lime	per tonne	$10.00
Blend Lime	per tonne	$8.00
Calcined Lime (Burnt Lime)	per tonne	$130.00

The cost is influenced considerably by the distance from source therefore the cost of lime also differs.

2.11.2 Spreading Cost per hectare.

	Flat Grassed	Flat Worked & Rolled
Under 2.5 t/ha	$6.24	$6.71
2.5 t/ha	$6.71	$7.64
Over 2.5 t/ha	$7.64	$8.67

Hill Country, worked paddocks not rolled, orchards, swampy and boulder country are all subject to additional rates by arrangement.

2.12 SEEDS

The prices quoted in this section are as at late December 1984. All prices are inclusive of seed treating, unless stated otherwise.

2.12.1 Wheat

Variety	Cost of Seed per tonne Certified 2nd Generation
Kopara, Aotea, Gamenya	
Raven, Cross 7-61, Takahe	$482.00
Hilgendorf	$482.00
Karamu	$432.00
Arawa	$468.00
Extra for 1st generation	$ 20.00

2.12.2 Barley

Cost of seed per tonne for Certified 2nd Generation.

Triumph	$450.00

2.12.3 Oats

Mapua, Amuri, Taiko	$360.00/tonne

2.12.4 Lupins

Uniwhite, Uniharvest (estimate)	$358.00/tonne
Bitter blue, Borre (estimate)	$ 36.30/tonne

4.12.5 Ryecorn

Rahu	$450.00/tonne U/D

4.12.6 Maize

Various hybrids (treated)	$600/tonne

2.12.7 Peas

(i) Field	
Maples	$330.00/tonne
Blue	$400.00/tonne
White	$480.00/tonne
(ii) Garden	
Various varieties	$405.00/tonne

2.12.8 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	$1.50
Swedes	$4.20
Turnips	$3.70
Kale Medium stemmed	$4.50
Lucerne (certified)	
Wairau	$6.30
Rere	$10.00
Ryegrasses	
Ruanui	$1.05
Nui	$1.10
Ariki	$1.80
Manawa	$1.70
Paroa	$1.70
Tama	$2.00
Apanui Cocksfoot	$3.00
Clovers	
Hamua	$3.80
Turoa	$3.80
Huia	$2.50

2.12.9 Seed Coating

	c/kg
Ryegrass	85
Dogstail, Timothy,	95
Lucerne	1.00
Red, White and Sub. Clover	1.05
Cocksfoot	1.05

2.12.10 Vegetable Seeds

Carrot:	
Egmont Gold	$30.00/500g
Manchester Table	$36.76/500g
Onion:	
Californian Red	$65.20/500g
Pukekohe Ultra	$20.90/500g
Pukekohe Long Keeper (M & R)	$28.92/500g
White Lisbon	$40.00/500g
Dwarf Bean:	
Tender green	$ 5.00/kg
Top crop	$ 5.00/kg
Green Beauty	$ 5.00/kg
Runner Bean:	
Mangere pole	$ 5.00/kg
Streamline Scarlet	$ 5.00/kg
Broad Bean:	
Exhibition Long Pod	$ 2.43/kg
Butter Bean:	
Golden Wax	$ 5.00/kg
Broccoli Hybrid:	
Fordhook Late	$354.24/500g
Fordhook Medium	$376.00/500g
Green Duke Hybrid	$260.00/500g
Premium Crop	$284.94/500g
Cabbage:	
Green Gold	$275.00/500g
Festival	$287.80/500g
Red Dutch	$ 23.73/500g
Wintercross	$275.00/500g
Country Green Hybrid	$227.20/500g
Lettuce:	
Triumph	$ 96.42/500g
Great Lakes Regular	$ 38.25/500g
Wintercut	$ 75.73/500g

Cauliflower:		
	Armedo	$ 92.10/100g
	Maryanta	$ 93.00/100g
	Avalanche	$ 65.28/500g
	Fiora Blanca	$284.77/500g
Parsnip:		
	Hollow Crown	$ 11.00/500g
	V.I.P.	$ 11.00/500g
	Yatesnip	$ 11.10/500g
Pea:	Green Feast	$ 2.00/1 kg
	Onward	$ 2.00/1 kg
	W.F. Massey	$ 2.00/1 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	$ 7.00/500g
	Com. Slobolt R & G	$ 13.34/500g
Tomato:		
	Moneymaker	$ 64.14/500g
	Potentate Gvt. App.	$148.00/500g
Potato:		
	Ilam Hardy	$0.47 full sack/1 kg
	Rua	$0.59 full sack/1 kg
Asparagus:		
	Mary Washington	$ 29.50/500g
	Rutgers Beacon F1 (Hybrid)	$690.00/500g
Beet:	Detroit Dark Red	$ 8.00/500g
	Bolthardy	$ 26.00/500g
Brussel Sprouts:		
	Peer Gynt (Hybrid)	$131.86/100g

Squash:	
Red Warren	$ 13.34/500g
Butternut Waltham	$ 20.60/500g
F1 Hyd Supermarket	$132.00/500g
Sweet Mana F1	$115.00/500g
Swede:	
Calder	$ 5.30/kg
Superlative	$372.00/500g
Turnip:	
Tokyo (Hybrid)	$ 96.62/500g
Whitestone - Snowball	$674.00/500g
Marrow:	
Black Zucchini	$ 19.00/500g
Long Green Bush	$ 17.39/500g
Blackjack Hybrid	$ 72.00/500g
Cucumber:	
Perfecto Verde Hybrid	$ 42.50/500g
Green Spear Hybrid	$ 46.00/500g
Triumph	$234.41/500g
Leek:	
Musselborough	$ 19.30/500g
Titan	$ 83.61/500g
Pumpkin:	
Whangaparoa Crown	$ 28.72/500g
Triamble	$ 13.17/500g
Tri Star	$ 34.73/500g
Radish:	
Red Devil	$ 16.93/500g
French Breakfast	$ 7.41/500g
Long Scarlet Market	$ 7.88/500g
Spinach:	
Medania Ld Orig.	$ 6.32/500g
New Zealand	$ 9.45/500g
Egg Plant:	
Black Beauty	$ 20.06/500g
Black Bell Hybrid	$432.50/500g
Endive:	
Salad King	$ 15.42/500g
Watermelon:	
Candy Red	$ 17.47/500g
Rodeo Hybrid	$222.34/500g

2.12.11 Flower Seeds

Carnations	$ 25.05/100g
Freesia	$129.50/100g
Aster	$107.00/100g
Chrysanthemum	$ 10.40/100g
Dahlia	$ 13.05/100g
Geranium (per 100 seeds)	$ 12.70/100g
Gerbera (per 100 seeds)	$100.60/100g
Lobelia	$104.95/100g
Marigold	$ 27.20/100g
Gypsophyla	$ 12.85/10g
Polyanthus	$ 69.75/10g
Sweetpea	$ 8.00/100g
Wallflower	$ 16.90/100g
Zinnia	$ 14.70/100g

2.12.12 Bulbs (per 100)

Daffodils	$ 18.05 to $ 20.00
Hyacinths	$ 73.91 to $119.00
Tulips	$ 20.81 to $ 57.00
Anenomes	$ 8.50 to $ 13.00
Crocuses	$ 14.34 to $ 16.00
Freesias	$ 12.54 to $ 18.00
Nerines	$ 55.20 (pink) to $223.06 (scarlet)

2.13 SHEARING SHED EXPENSES

2.13.1 Plant

(i) Gallagher P.T.O. drive shearing drive

with no flexible drive	$312.00
with 1 flexible drive	$442.00
with 2 flexible drives	$573.00

Hooper "Kiwi" shearing machinery

electric shearing machine - single or three phase	$718.00

Shearing Machines

Sunbeam Heavy Duty S.G.V.	$1,098.00
Multi-purpose Farm Model	$428.00
Lister Golden Electric	
Single phase	$732.00
Three phase	$732.00

(ii) Electric Grinders

Sunbeam Double-ended 37cm	$1,178.00

	Lister Double-ended	
	Single phase	$885.00
(iii)	Handpieces	
	Sunbeam 'Super-grip'	$395.00
	Lister 'Gun grip'	$270.00
(iv)	Woolpresses	
	Donalds	
	No Tramp Hydraulic	
	Standard Model 2 h.p. single phase motor	$4,292.00
	Maxi model 2 h.p. single phase motor	$4,829.00
	Maxi model 3 h.p. 3 phase motor - farmers model	$5,050.00
	Maxi model 3 h.p. 3 phase motor - woolstore model	$5,190.00
	Manual	
	Hoist brake - safety brake for top box	$ 72.95
	Sandow Vertical Hoist Model HSW steel with wooden top box	$1,545.00
	Woolpress Conversion Kits available	
	Hayes single phase	$4,950.00
	three phase	$5,100.00
	Woolpress conversion kits	
	Sandow model A (tipover) or B (swing top) to vertical hoist	$ 495.00
	Sandow model A5 (steel tipover without wheels) to vertical hoist	$ 495.00
	Sandow model A5 (steel tipover with wheels) to vertical hoist	$ 465.00
	Sandow tipover hoist conversion (steel or wood)	$ 278.00
(v)	Wool Tables	
	Hayes Fleece	
	Weigher Table	$ 760.00
	Wool table	$ 320.18
	Grigg Right-angled table	$ 480.00
	Cyclone wool table	$ 250.00
	Donalds circular wool table	$ 322.00
	Hydes Distributors L Shaped	$ 741.00
	Rectangular	$ 460.00
	Round	$ 567.00
(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
	Hydes Distributors Fadge Holder	$ 128.00

(vii) Dagging Plant

Sunbeam portable petrol	$ 615.00

(viii) Miscellaneous

Fleece weigher	$ 180.00
Dagging Shears	$ 15.13
Wool Bale Trolley	$ 194.54
Hook	$ 7.63
Hayes Fleece Weighing Tray 15 kg	$ 190.00
Tas Sheep Hand Shears	$ 16.95
Dagging Hand Shears	$ 14.13
Donalds Wool bin	$ 197.00
Ezy load farmers barrow with pneumatic tyres	$ 177.50

2.13.2 Shed Expenses

Wool packs (1 per 150 kg) Jute	$ 8.48
Synthetic	$ 6.80
Twine (per hank)	$ 3.28
Bale Needles	$ 0.83
'Stendye' Aerosol Markers (Black, red, green, blue) 400 gm	$ 3.90
Wool Bale Stencils - Circular Numerals 75 mm	$ 27.49
- Circular Letters 75 mm	$ 67.96
Grinder Papers (each)	$ 4.15

2.13.3 Wool Charges

Receiving on Sale by Sample	8.252c/kilo
Receiving, Warehousing, Weighing, Lotting etc.	9.127c/kilo
Reclassing and Binning Fleece	8.357c/kilo
Reclassing and Skirting	12.981c/kilo
Reclassing and Binning Oddments	12.981c/kilo
Blending All Wools	6.275c/kilo
Wool Board Levy) Wool Stabilisation Levy)	6% gross proceeds
Grouping	$6.31/bale
Lot Building	$4.56/bale
Re-Offering	$4.71/bale
Straight Repacking	$4.11/bale
Repacking Overweight Bales	$4.71/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	5.83c/kilo

CHARGES TO BUYERS		
Renumbering		17.0c/bale
If special colour requested		17.6c/bale
Gross Weight		17.0c/bale
Net Weight		17.0c/bale
Late Rebranding (after 8 days from sale)		46.0c/bale
Sheeting on Railed Wools		45.0c/bale
Stripes		17.0c/stripe
Delivery		$4.23/bale (W/B EC 3.34)
Reclassing or Blending		6.275c/kilo
Extra rebranding more than 6 characters other than Port Marks and Renumbers		46.0c/bale
7 to 9 extra		66.0c/bale
10 to 12 extra		80.0c/bale
13 to 15 extra		90.0c/bale
16 to 18 extra		99.0c/bale
19 to 21 extra		$1.12/bale
22 to 24 extra		$1.24/bale
25 to 27 extra		$1.36/bale
More than 1 Port Mark		46.0c/bale
To change a rebrand		46.0c/bale
Storage 29 cents per bale per week with minimum of		65.0c/bale
Samples up to 2 kilos		64.0c/sample
Samples up to 5 kilos		$1.27/sample
Samples up to 10 kilos		$2.02/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		$1.27/bale up to 8 days after sale
		$1.76/bale
If wool not to be weighed		.78c/bale

2.14 WATER CHARGES

2.14.1 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 1984/85 season for community irrigation schemes in Canterbury are as follows:

	Schemes	Rate/ha	Water Quota	Charge for Extra Water
	Ashburton-Lyndhurst	$11.50	300mm	Nil
	Mayfield-Hinds	$ 8.50	300mm	Nil
	Levels	$12.20	300mm	$1.63/1000 m^3
	Redcliffs	$12.20	300mm	$1.63/1000 m^3
	Valetta - Farm Settlement Scheme	$ 8.00	300mm	$0.50/1000 m^3
	Greenstreet	$ 3.00	100 mm every 21 days	
*	Morven-Glenavy	$ 4.45	600 mm	$0.73/1000 m^3
**	Waireka Downs	$ 9.00	100 mm every 21 days	

* Morven Glenavy (1960 policy) is still in a development phase. The first farms to receive water have now been irrigating for 11 years and are paying the full water charge of $4.45 per hectare for half the water quota plus $0.73 per 1000 m^3 for water in excess of half the quota. The last farms to receive water have now been irrigating for seven years and will be paying 70% of these charges (80% in 1985/86, 90% in 1986/87, and 100% in 1987/88. At this time, water charges will be reviewed to recover actual costs. The current estimate of this new charge is $25.20.

** Waiareka Downs (1975 policy) charges have reached their full charge of $28.00 per roster day or approximately $9.00 per hectare per year and are currently being reviewed in light of actual costs. Water charge is likely to be of the order of $40.00 per hectare per year.

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 for the first time in 1983/84.

Balmoral Irrigation Scheme

Construction commenced on this scheme in November 1981. First water is expected in 1985.

The water availability charge was zero for the first two seasons after first water and then rose 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.

Schedule of Water Right Application Fees
- Deposits Against Costs

Application for a right to:

replace a previous right which had been investigated before being granted or had been monitored for compliance and impact on the water resource immediately prior to expiry, ie. no field investigation is required.
$75.00

Application for a right to:

dam (3 metre high dam, stopbank)
divert (minor within property diversion)
take from surface water for irrigation, small community water supply, dairy shed washing, small industry supply
discharge to groundwater from a single domestic septic tank
discharge stormwater from 5 hectares urban land (rural land drainage water from 20 hectares)
use (usually associated with multiple rights)
$150.00

Application for a right to:

dam (3 metre high dam, major stopbank)
divert (whole stream or major proportion of flow, river training works etc.)
take from surface water (community irrigation schemes, community water supply)

take from groundwater (for irrigation, community water supply)
discharge of waste or water containing waste to water or water containing waste to land (cooling water, major stormwater, land drainage water, dairy, multiple rights eg. dam, divert, take, discharge eg. for irrigation scheme)

$300.00

Special Category:

industrial complex multiple rights, community sewage schemes, multiple rights for disposal of septic tank effluent within subdivision, major irrigation schemes

$500.00

This fee and deposit is lodged with the Board to enable an initial inspection and preliminary report upon which a further deposit against investigations will be based, such deposit being reached in discussion with and by resolution of the Board.

2.14.2 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.

STOCK WATER - AREA CHARGES

Area (ha)	Charges
Up to 0.5 ha	$ 27.42
0.5 ha - 8 ha	$ 27.52 plus 57.35c for any add -itional .5 ha
8 - 40	$ 30.65 plus 114.00c for any add -itional .5 ha
40 - 80	$ 91.76 plus 103.22c for any add -itional .5 ha
80 - 121	$174.34 plus 91.76c for any add -itional .5 ha

121 - 161	$249.82 plus	81.28c	for any add -itional .5 ha
161 - 202	$313.92 plus	68.82c	for any add -itional .5 ha
202 - 242	$370.70 plus	57.35c	for any add -itional .5 ha
242 - 283	$416.35 plus	45.87c	for any add -itional .5 ha
283 - 323	$454.42 plus	34.41c	for any add -itional .5 ha
323 - 364	$481.61 plus	22.94c	for any add -itional .5 ha
364 - 404	$500.99 plus	11.47c	for any add -itional .5 ha
Over 404 ha	$509.71 plus	9.56c	for any add -itional .5 ha

2.15 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.

2.15.1 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-New Zealand		P.O.A.	P.O.A.
	Avenge 200A	difenzoquat (20.0)	$20.44	$408.80
	Dicambone 75D	dicamba (7.5), 2,4-D amine salt (30.0)	$53.95 (5 litre)	$209.20 (18 kg)
	Dicambone 5G	dicamba (5.0)	$22.96 (4 kg)	$ 98.28 (18kg)
	Dicamba	dicamba (20.0)	$86.80 (5 litre)	$346.80 (20 litre)

Dinoseb	dinoseb (36.0)	$ 4.78	$ 95.60
Embark 2s	mefluidide (24.0)	$55.00	$110.00 (2 l)
Fusilade		$59.00	$283.00 (5 l)
Goal		$53.00	$242.00 (5 l)
Gramoxone	paraquat (20.0)	$59.15 (5 litre)	$232.20
Nortron	ethofumesate (20.0)	$106.25 (5 litre)	$408.00
Nortron SC		$42.88	$ 85.76 (2 l)
Preeglone	diquat (6.0) paraquat (12.0)	$66.00 (5 litre)	$259.00
Reglone	diquat (20.0)	$ 7.40 (5 litre)	$261.60
Trident	dicamba (1.87), dichlorprop (60.0) M.C.P.A. (15.0)	$11.41	$228.20 $2252.00 (200 l)
Velpar L		$117.30 (5 litre)	$673.60
Forestry Gun		$86.87	

(ii) Ivon Watkins-Dow

		per l/kg	per pack
Actazine 5A	5 litre	8.54	42.70
	20 litre	8.29	165.80
Banvine	1 litre	13.01	13.01
	5 litre	11.91	59.55
	20 litre	11.65	233.00
AM II	5 litre	25.25	126.25
Dowpon 740-SP	25 kg	6.03	150.75
Eliminex 5A	5 litre	8.92	44.60
	20 litre	8.66	173.20
Fodderkleen	5 litre	10.02	50.10
	20 litre	9.54	190.80
Garlon 520	5 litre	29.45	147.25
	20 litre	28.05	561.00
IWD Hi-Ester	5 litre	7.97	39.85
	20 litre	7.70	154.00
	200 litre	7.37	1474.00
Hi-Foam	5 litre	4.08	20.40
Concentrate	20 litre	3.98	79.60
Pasture	5 litre	16.21	81.05
	20 litre	15.43	308.60
IWD Paraquat	5 litre	12.13	60.65
	20 litre	11.78	235.60
Permazol SDA	500 grams	14.58	7.29
	2 kg	12.56	25.12
	15 kg	12.23	183.45
Phytazol A	4 kg	10.08	40.32
	15 kg	9.63	144.46

Selecta			
4-CPA	5 litre	9.34	46.70
	20 litre	8.90	178.00
Simazol 5A	5 litre	8.76	43.80
	20 litre	8.51	170.20
Sinox P.E.	20 litre	6.57	131.40
Teedal	4 kg	6.73	26.92
	20 kg	5.81	116.20
Tordon 2G	5 kg	6.82	34.10
	25 kg	6.24	156.00
Tordon 50D	5 litre	15.04	75.20
	20 litre	14.74	294.80
	200 litre	14.38	2876.00
Tordon			
Brushkiller DS	2 litre	37.60	75.20
	5 litre	35.92	179.60
	20 litre	34.98	699.60
	200 litre	54.06	6812.00
Turfmaster	1 litre	6.63	6.63
	5 litre	6.06	30.30
Weedazol 4-L	1 litre	14.84	14.84
	5 litre	12.15	60.75
	20 litre	11.63	232.60

(iii)May and Baker

Asulox	asulam (40.0)	$15.77	$3154.00(2001)
Axall	bromoxynil (7.5) ioxynil (7.3) mecoprop (37.5)	$15.40	$3080.00(2001)
Buctril M	bromoxynil (20.0) M.C.P.A. (20.0)	$16.32	$ 326.40(201)
Carbetamex 70	carbetamide (70.0)	$21.65	$108.25 (5 kg)
Combine		$32.55	$ 651.00

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

Redene - Rural/Ispray Rural Activated			
Amitrole Rural		$ 6.34	$126.80
Cornox CWK Rural	benazolin (30.0)	$36.64	$183.20 (5 l)
	2.4-D Sodium Salt 80	$ 5.50	$137.50
Rural Flowable Atrazine Flowable	atrazine (50.0)	$ 8.84	$176.80
Rural Simazine	simazine (50.0)	($11.56	$224.80
SDA Longterm		($ 9.06	$181.20
Rural Sodakem	sodium chlorate (59.0)	$ 2.61	$ 65.25
Tri-Cornox Special		$ 7.19	$143.80
Ester 80	(72.0)	$ 7.25	$154.40(2001)

Rural 2,4-D Sodium Salt 80	2,4-D (sodium salt) (80.0)	$ 5.50	$137.50
Rural MCPA	M.C.P.A. (potassium salt) (37.5)	$ 5.11 $ 4.77	$102.20 $954.00(2001)
Rural MCPB	M.C.P.B. (sodium salt) (40.0)	$ 5.28 $ 4.94	$105.60 $988.00(2001)
Rural 2,4,5-T Ester 80	2,4,5-T butyl ester (72.0)	$17.10 $16.46	$342.00 $3292.00(2001)
Hoechst Linuron 50 WP	linuron (49.1)	$21.33	$533.25 (25kg)
Hoegrass 36 EC	methyl 2[4-(2,4-dichlorophenoxy) phenoxy] propionate (37.5)	$35.33	$706.60
Caldon 50 EC	dinoseb 55%	$19.50	$390.00

(v) Shell

		Trade	Retail
Atrazine 50 SC (50.0)	atrazine		
	5 litre	9.59	11.28
	20 litre	9.22	10.84
Cearex 4	dicamba (94.0), M.C.P.A. (7.5), mecoprop (30.0)		
	5 litre	8.16	9.60
	20 litre	8.02	9.44
	209 litre	7.48	8.80
DNBP (Amine)	dinoseb (36.0)		
	5 litre	5.49	6.46
	20 litre	5.82	6.85
Mosskiller	pentachlorophenol (12.0)		
	5 litre	5.29	6.23
	20 litre	4.79	5.63
Prefix granules	chlorthiamid (7.5)		
	5.5 kg	8.27	10.02
	25 kg	7.61	9.22
Residex LT	amitrole (12.5), 2,2-dichloropropionic acid (sodium salt) (26.0), simazine (40.0) 2.5 kg	11.75	13.82
	5 litre	9.79	11.52
	20 litre	9.47	11.14
Simazine 50 SC	simazine (50.0)	$11.56	$224.80
2,4-DB	2,4-Db (40%)		
	5 litre	7.58	8.92
	20 litre	7.24	8.51
MCPA	MCPA (37.5%)		
	5 litre	5.55	6.53
	20 litre	5.18	6.09
	209 litre	4.83	5.68

MCPB	MCPB (40%)			
	5 litre		5.73	6.74
	20 litre		5.28	6.21
	209 litre		4.96	5.84
Paraquat	paraquat (20%)			
	5 litre		11.76	13.83
	20 litre		11.65	13.71

(vi) Yates

Dalapon	2,2-dichloro-propionic acid (74.0)	2.5 kg 25 kg	$ 18.50 $124.50
Alachlor 50	50% alachlor	20 litre	$221.80
Amitrole TL	20% amitrole, 18.3% ammonium thyocyanote	20 litre	$123.88
Asulox	40% asulam	20 litre	$331.00
Atrazine 50F	50% atrazine	10 litre	P.O.A.
Chloro-IPC	40% chloro IPC	20 litre	$200.60
Dacthal W7S	75% chlorthal-dimethyl	10 kg	$282.00
Enide 50W	50% diphenamid	25 kg	$534.75
Faneron	50% bromofenoxim	2.5 kg	$ 80.80
Kerb 50W	50% propyzamide	25 kg	P.O.A.
Krenite	48% fosamine	20 litre	$517.00
Linuron 50	50% linuron	25 kg	$472.75
Paraquat (Yates)	20% paraquat dichloride	20 litre	$232.20
Simazine	50% simazine	10 litre	$ 98.80
Vindex S.D.A.	25.7% 2,2-dich-loropropionic acid 12.5% amitrole 40% simazine	10 kg	$163.60

(vii) Bayer

	Active Ingredient(s) (%)	Pack Size Per Carton	Price $ kg/l	Price $ Pack
Amatin 24 DP		3 kg	23.25/kg	$69.75
		6 kg	23.25/kg	$139.50
Goltix 70 WP	metamitron 70%	1.5 kg		
		4 x 1.5 kg	48.25/kg	$72.35
		25 kg	46.20/kg	$1155.00
Linuron 50 WP	linuron (50.0)	2 kg		
		4 x 2 kg	21.64/lg	$43.28
		20 x 25 kg		$507.25

Sencor 70 DF		2 kg		
		4 x 2 kg	85.75/kg	$171.50
Sencor 70 WP	metrabuzin (70.0)	1.5 kg		
		4 x 1.5 kg	85.75/kg	$128.63
Tribunil 70 WP	metabenz-	1.5 kg		
		4 x 1.5 kg	34.00/kg	$51.00
	thiazuron (70.0)	25 kg	32.10/kg	$802.50
Tribunil Combi		3 kg	17.40/kg	$52.50
Ustilan 70 WP	ethidimuron	1.5 kg		
		4 x 1.5 kg	51.50	77.25
	(70.0)	18 kg	50.45	908.10
Roundup	glyphosate			

(viii) Fruit Growers Federation
(Horticultural Herbicides)

Actazinesa	5 litre	$42.30
Alicep	2 kg	$77.20
Alloxol	2 kg	$111.20
Pirimor	1 kg	$32.64
Basagran	1 litre	$29.90
Brasoran	2 kg	$70.12
Caldon 50 EC	5 litre	$79.50
Caragard 500 FW	5 litre	$68.85
DNBP Amine	5 litre	$31.15
Gesagard	2 kg	$42.24
Gesatop 500W	5 litre	$42.50
Gesatop 50 WP	2 kg	$31.16
Hoegrass 36 EC	5 litre	$153.40
	2.5 litre	$111.25
Kerb 50 W	1 kg	$63.00
Krenite	2 litre	$40.62
Lasso	5 litre	$65.20
MH 30	25 litre	$199.25
Network	1 litre	$14.72
Nortron	5 litre	$106.25
Pyramin	2 kg	$70.04
Sencor 70 WP	1.5 kg	$110.92
Simadex WP	1 kg	$123.00
Sinbar	1 kg	$63.00
Simazol 80	2 kg	$28.67
Simaflo	5 litre	$59.20
Surflan	2 kg	$72.62
Tenoran	2 kg	$59.04
Triflue	5 litre	$66.30
Tribunil 70 WP	1.5 kg	$56.10
Weedazol	1 litre	$13.36
Chloro IPC	5 litre	$49.50
Natcatrol	1 kg	$ 9.82

2.15.2 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-New Zealand			
Actellic Dust		$25.00 (5 kg)	$88.75
Actellic EC		$26.00	$112.00 (5 lt)
Actellic SG 90 gm No. 20	pirimiphos-methyl (20.0)	$ 8.50 each	
Ambush 50 EC	permethrin (50.0)	$85.00	$340.00 (2 lt)
		500 ml	Bucket pack
Attack	pirimiphos-methyl (47.5), permethrin (2.5)	$31.20	$141.50 (5 lt)
Pirimor 50	pirimicarb (50.0)	$32.64	
Cymbush 10 EC		$51.00	
(ii) N.Z. Farmers Fertiliser Co. Ltd.			
Ispray			
Azinphos Methyl	azinphos methyl (50.0)	$18.55	$278.25 (15 kg)
Carbaryl 80 W	carbaryl (80.0)	$15.43	$231.45 (15 kg)
Dibrom 8 E		$24.18	$ 24.18 (1 l)
Furadan	carbofuran (75.0)	$26.51	$ 26.51 (500g)
Lindane 50 W	lindane (50.0)	$15.71	$ 31.42 (2 kg)
Exatin 250 EC		$13.81	$ 69.05 (5 l)
Orthene 75	acephate (25.0)	$42.50	$425.00 (10 kg)
Phorate 20 G	phorate (20.0)	P.O.A.	
Thiodan 35 EC	endosulfan (35.0)	$13.45	$269.00
(iii) Ivon Watkins-Dow			
	20 kg	Per l/kg	Per Pack
Bikartol	5 litre	$ 2.70	$ 54.00
Dyzol 80 EC	20 litre	$19.50	$ 97.75

Dyzol 20 G	15 kg	$19.05	$381.00
	20 kg	$ 5.95	$ 89.25
Lorbsan 40 EC	2 litre	$ 5.95	$119.00
	5 litre	$30.59	$61.18
	20 litre	$29.84	$149.20
Lorsban 50 W	2 kg	$28.41	$568.20
Nexion 40 EC	5 litre	$38.05	$ 76.10
	20 litre	$16.65	$ 83.25
Plictran 600F	2 litre	$16.15	$323.00
Thimet 20 G	15 kg	$81.05	$162.10
		$5.57	$83.55
Entoban 40	5 litre	$14.67	$ 73.35
	20 litre	$14.27	$285.40

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

Caterkil		$13.00	-
Decis 2.5 EC		$50.50	$50.50
Malathion 50	maldison (50.0)	$ 6.36	-
Dichlopos 100 EC	dichlorvos		
(100.0) 500 ml		$16.37	-
Ficamz		$81.90	500g Jar

(v) Shell

		Trade	Retail
Bidrin			
concentrate	dicrotophos 2.5 l (1030 g/l)	$28.85	$34.98
DDT concentrate	DDT (20.0)		
	5 litre	$ 5.95	$ 7.21
	20 litre	$ 5.75	$ 6.97
	209 litre	$ 5.60	$ 6.79
Dieldrite 25	20 litre	$10.77	$13.05
	209 litre	$10.56	$12.80
Lindane			
pellets	lindane (20.0) 25 kg	$ 5.87	$ 7.11
Phosdrin 400	mevinphos 2.5 litre	$23.25	$28.19
Sumicidin			
20 WP	fenvalerate (20.0) 2 kg	$52.10	$63.17
Sumicidin 10	fenvalerate (10.0)	$24.68	$469.60
	1 litre	$34.18	$41.44
	2.5 litre	$32.26	$39.11
	20 litre	$30.86	$37.41
Sunspray	5 litre	$ 3.64	$ 4.40
	20 litre	$ 3.14	$ 3.80
	205 litre	$ 3.02	$ 3.66
Vapona			
concentrate	dichlorvos 1 litre	$21.10	$25.58
	(1080 g/l) 2.5 litre	$19.32	$23.42

Verthion EC	fenitrothion (60.0)		
	5 litre	$12.49	$15.14
	20 litre	$12.26	$14.86
	209 litre	$12.16	$14.74
Verthion pellets	fenitrothion (10.0)		
	25 kg	$ 3.86	$ 4.68

(vi) Yates

Lannate L	20% methomyl	20 litre	$350.00
Maldison 50 EC	maldison (50.0)	5 litre	$ 37.45
		20 litre	$132.20
Malix	35.5% endosulfan	5 litre	$ 69.25
		20 litre	$255.60
Rogor E	dimethoate (40.0)	5 litre	$ 63.55
		20 litre	$231.40
Rogor W20	dimethoate (20.0)	2.5 kg	$ 25.00
Vydate L	25% oxamyl	3.78 lit	$ 96.76

(vii) Bayer

	Active Ingredient(s) (%)	Pack Size	Per Carton	Price $ kg/L	Price $ Pack
Baythroid 5EC		1 litre		$38.86/l	$38.86
		5 litre		$38.28/l	$191.40
Dasanit 5G	fensulfothion	25 kg		$ 4.00/k	$100.00
Disyston Ten G	disolfoton (10.0)	15 kg		$ 4.30/kg	$64.00
Folidol M 50	parathion-methyl (60.0)	1 litre	20 x 1 l	$22.62/l	$22.62
		25 litres		$17.70/l	$442.50
Folimat 50 LC	omethoate (58.0)	1 litre	20 x 1 l	$33.40/l	$33.40
Gusathion M 50 WP	azinphos-methyl (50.0)	2 kg	6 x 2 kg	P.O.A.	P.O.A.
		15 kg	15 x 1 kg	P.O.A.	P.O.A.
		15 kg	10 x 1.5kg	P.O.A.	P.O.A.
		15 kg		P.O.A.	P.O.A.
Mesurol 75 WP	methiocarb (75.0)	1.5 kg	4 x 1.5 kg	$62.31/kg	$93.46
		25 kg		$60.71/kg	$1517.75
Mesurol Snail Baits	methiocarb (2.0)	5 kg	4 x 5 kg	$ 8.95 kg	$44.75
		10 kg		$ 7.75/kg	$77.50
Metasystox (I) 25 EC	demeton-s-methyl (25.0)	5 litres		$17.40/l	$87.00
		20 litres		$14.76/l	$369.00
Nemacur 400 EC	fenamiphos (40.0)	1 litre	20 x 1 l	$33.85/l	$33.85
		10 litres		$33.05/l	$330.50
		25 litres		$31.60/l	$790.00
Peropal 25 WP	azocyclotin (25.0)	2 kg	6 x 2 kg	$34.45/l	$68.90

2.15.3 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)	$43.47	$ 43.47
Copper Oxychloride	copper oxychloride (50.0)	$ 2.85	-
(ii) Ispray			
Difolatan 5 F	captafol (50.0)	$20.30	$ 18.90
Difolatan 80W		$30.00	$ 28.50
Copper Oxychloride		P.O.A.	P.O.A.
Ispray Dinocap 25W		$ 9.75	$190.50 (2 kg)
Fungaflor 75 WSP		$51.50	$ 51.50 (100g)
Mancozeb 80 W	mancozeb (80.0)	P.O.A.	P.O.A.
Orthocide 10 Dust	captan (10.0)	P.O.A.	P.O.A.
Orthocide 80 W	captan (80.0)	$12.36	$298.75
Phaltan 50 W	folpet (50.0)	$15.63	$390.75
Plantvax 75 W	oxycarboxin (75.0)	$55.71	$ 55.71
Saprol 20 EC	triforine (19.0)	$22.13	$442.60
(iii) ICI New Zealand			
Milcurb	dimethirimol (12.5)	$ 65.00/5 l	
Nimrod	bupirimate (25.0) procymidone (50.0)	$118.00/5x1 kg	
Sumisclex 25		$ 31.65/1 $153.00/5 l $577.00/20 l	

Tamaron 600 LC	methamidophos (60.0)	1 litre	20 x 1 l	$28.70/1	$28.70
		25 litres		$25.65/1	$641.25
		200 litres		$22.75/1	$4550.00
Thiofor 350 EC	endosulfan (35.0)	5 litres	3 x 5 l	$16.70/1	$83.50
		20 litres		$14.95/1	$299.00
Tokuthion 500 EC		5 litres		$55.20/1	$276.00
		1 litre	20 x 1 l	$56.35/1	$56.35

(viii) Oil Sprays

Shell Sunspray	5 litre	$ 4.40
	20 litre	$ 3.34
Premium late winter	1 litre	$ 1.33
Simicidin 10 EC	1 litre	$ 41.44

(iv) Bayer

	Active Ingredient(s)	Pack Size	Per Carton	Price $ kg/l	Price $ kg/l
Antracol 70 WP	propineb (70.0)	2 kg	6 x 2 kg	$10.75/kg	$21.50
		25 kg		$ 9.50/kg	$237.50
Baycor 50 WP		2 kg	6 x 2 kg	$61.58/kg	$123.16
Bayleton 5 WP (5.0)		2 kg	6 x 2 kg	$28.63/kg	$57.26
Bayleton 100 EC		1 l	20 x 1 l	$59.28/l	$59.28
		5 l		$58.43/l	$292.15
Bayleton 125 EC		1 l	20 x 1 l	$34.90/l	$34.90
		5 l		$33.60/l	$168.00
		25 l		$32.60/l	$815.00
Bayleton BM		2 kg	6 x 2 kg	$61.50/kg	$123.00
Baytan Fl7	1-(4-chloro-phenoxy)-1-(1,2,4-triazol-1-yl) butan-2-ol (15.0), fuberidazole (2.0)	10 kg		P.O.A.	
Baytan IM		10 kg		P.O.A.	
Cupravit OB 21	copper oxychloride (50.0)	25 kg		P.O.A.	
Euparen 50 WP	dichlorofluanid (50.0)	1.5 kg	4 x 1.5 kg	$40.78	$61.17
		25 kg		$39.13	$978.25

(v) Yates

Allison 50 WP	50% dicloran	2.5 kg	$ 60.25
Benlate Dupont	benomyl (50.0)	1 kg	$44.06
Bravo 500 f	chlorothalonil (50.0)	5 litre	$111.50
		20 litre	$436.80
Captan 80	captan (80.0)	2.5 kg	$35.75
		25 kg	$218.60
Copper oxychloride 50	copper oxychloride (50.0)	4 kg	$21.60
		25 kg	$ 86.50

(vi) Shell

Fungicides			Trade	Retail
Kocide 101	cupric hydroxide 50%	1.8 kg	$ 9.97	$12.08
		10 kg	$ 8.78	$10.64
Syllit 40	dodine (40.0)	5 l	$11.00	$13.33
		20 l	$10.51	$12.74

2-90

(vii) Ivon Watkins-Dow

Topsin M-4A	thiophanate-methyl	$20.71	$103.55 (5 l)

(viii) May and Baker

Rovral WP	50% idiodione		$ 71.40 (1 kg)
Rovral Flo 250		$36.98	$184.90 (5 l)

(ix) Fruit Growers Federation

Agrimycin	600 g	$ 24.12
Basudin 50	2 kg	$ 32.90
Bluestone	1 kg	$ 61.12
Dithane M22 Maneb	2.5 kg	$ 14.00
Dithane M45 Mancozab	2.5 kg	$ 18.00
Dithane Z78	2 kg	$ 14.90
Dodine	5 ml	$ 64.22
Karathane	2.5 kg	$ 23.75
Hydrated Lime	25 kg	$ 6.80
Lime Sulphur	5 litre	$ 6.70
Microsul 80	2 kg	$ 7.11
Polygram 2000	25 kg	
Thirospray	2 kg	$ 14.52
Pallinal	25 kg	$256.25
Ronilan Flow	5 litre	$274.29
Ronilan	1 kg	$ 71.50

2.15.4 Miticides

Omite 30 W (Ispray)	$41.88 per 2 kg
Pridran (Ivan Watkins-Dow)	$81.05

2.15.5 Soil Fumigants

Shell DD (1,2-dichloropropane 1,3 dichloropropene) 100%	$88.93 per 23 l
Methyl Bromide	$ 3.40 per 454 g
Terrazole	$75.38 per kg

Basamid Granules	$11.88 per kg
	$157.60 per 20 kg
Formalin	$16.70 per 5 l
	$41.50 per 20 l

2.15.6 Growth Regulants

Alar 85 (Ispray)	$78.56 per 500 g
	$295.82 per 2 kg
Caldon 50 EC (Ispray)	
Bramble de-suckering agent	$104.95 per 5 l
	$390.00 per 20 l
Fatal Super (Ispray)	$158.80 per 20 l
ANA	$14.20 per litre
Berrysize	$17.08 per 2 l
Fulset	$10.31 per 25 ml
Seradix	$22.65 per 600 g
Stop Drop	$ 4.30 per 50 ml
Ethrel	$82.67 per litre

2.15.7 Wetting, Spreading and Marking Agents

Ortho Spray Slicker (Ispray)	
sticking agent	$148.00 per 20 l
Yates Sprayfix	$ 6.72 per 2 l
	$ 13.82 per 5 l
	$ 52.22 per 20 l
Spraymarka	$ 15.80 per 250 g
Triton B 1956	$ 24.00 per 2 l
Supernet	$ 4.50 per litre

2.15.8 Miscellaneous Chemicals

Product	Pack Size	Per Carton	Price $ kg/l	Price $ Pack
Bayfolan	5 l	4 x 5 l	$ 4.40/l	$22.90
	20 l		$ 3.95/l	$79.00
Baygon 20 EC	5 l			P.O.A.
	25 l			P.O.A.
Baygon 50 WP	25 kg			P.O.A.
Baythion 500EC	1 l	20 x 1 l		P.O.A.
Dedevap 1000	5 l			P.O.A.
Dimanin A	1.5 kg	4x1.5 kg	$32.45/kg	$48.68
Racumin 57	500 g	12x500 g	$17.40/kg	$ 8.70
	10 kg		$ 9.45/kg	$94.50
Agral LN				$42.40 per 20 l
Casoron 7.59			$172.80 per 25 kg	

Ispray Saprene	$ 34.38 per litre
Temik 10 g	$ 13.83 per kg
Syvel Disinfectant	$ 2.89 pr litre
Talon WB (Rat poisen)	$ 28.00 per 2.5 kg

2.15.9 Aerial Spraying

(i) Rowley Aviation Ltd

(Based on 50 litres per ha application rate)

Insecticides/Fungicides 112 l/ha $17.00/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
55	$ 26.64
110	$ 31.83
220	$ 63.44
330	$ 90.55
400	$112.19

AS 350 B Squirrel) Spray/topdress on hourly rate
SA 315 B Lama) of $900/hour

AS 350 Squirrel) Positioning for spray/topdress
SA 315 B Lama) $750/hour

(iv) Whirl-Wide Helicopters Ltd

	Hourly rates $
AS 350 Squirrel	$750
Bell Jet Ranger	$660
Hughes 300C	$480
Hughes 500D	$690

Spraying prices 1982/83 Season

	Per Ha
*Bush Weeds up to 9 ha	$144.75
9 - 18 ha	$133.17
over 18 ha	$121.59
*Pre burn and release - single pass	$ 57.90
- double pass	$ 72.38
*Defoliation and blight	$ 41.69
*Crop and thistles	$ 24.32
*Thistles - low volume	$ 18.76
*Insecticides	$ 31.96

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

2.15.10 Ground Application
(materials extra)

(i) Gun Spraying

One man plus fully equipped truck $25.00 plus 35.00 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 $16.00 per hectare.

2.16 SELLING CHARGES

2.16.1 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	.20
Ewes and Lambs	.20
Wethers	.20
Cows	$1.20
Calves	$1.20

Culverden:

Sheep	.37	Heifer Calves	$2.14
Ewes and Lambs	.37	Dairy Calves	$2.14
Wether Lambs	.37	Dairy Cows	$2.57
Cattle	$2.14		
Steers	$2.14		

Hawarden:
All sheep 12c

Little River:
All sheep 25c.

Sheffield:

Sheep	.25	Flock Rams	$1.00
Lambs	.25	Heifers	.80
Cattle	.80		

Cheviot:

Calves	$1.50
Adult cattle	$2.00

Oxford:

Sheep	20 c
Rams	35 c

Fat cattle	) 1.25
Store cattle	) plus loading/unloading fee of 10c per head
Dairy cattle	) 1.25
Bulls	1.25

2.16.2 Commissions on Stock sold through a Stock and Station Agent

Sale Yards		Clearing Sales	
Sheep	4.75%	Sheep	5.50%
Fat Cattle	4.75%	Store Cattle	5.50%
Store Cattle	4.75%	Pigs	6.50%
Vealers	4.75%	Dairy Cows	7.5%
Bulls Stud	7.5%	Implements & Sundry	10.0%
Dairy Cattle	7.5%	Furniture	15.0%
Pigs	5.75%		
Horses	8.0%	Special Sales	
Deer	4.75%	Stud Cattle	7.5%
Grazing	10.0%	Stud Sheep	5.75%

2.17 PLANTS

2.17.1 Trees and Shrubs

The prices shown below are the approximate cost per 100 for trees commonly grown on the farm. The price does not include planting.

Pinus Radiata	$10.00 per 100 or $80.00 per 1,000 (18 month old trees)
Thuya	$50.00 (3 year trees)
Pinus Muricata	$20.00 (2 year trees)
Arizonica	$37.50 (2 year trees
Macrocarpa	$37.50 (2 year trees)
Lombardy Poplar	$45.00 (small)
Douglas Fir/Oregon	$40.00 (3 year trees)
Cedrus deodara	$55.00 (3 year trees)
Eucalyptus	$66.00 (small in tubes)
Willows - S.matsudana	$50.00 (1 year trees)
	$ 6.50 per 10 (cuttings)

- S.1002	$50.00 (1 year trees) $ 6.50 per 10 (cuttings)
- S.1040	$50.00 (1 year trees) $ 6.50 per 10 (cuttings)
- S.1184	$50.00 (cuttings)
Acer Negundo (Box Elder)	$30.00 per 10
Alnus Glutinosa (Black Elder)	$27.00 per 10
Betula Pendula (Silver Birch)	$25-$38 per 10
Cortaderia Selloana (Pampas Grass)	$55.00 per 100
Phorium Tonax (N.Z. Native Flax)	$ 8.50 per 10
Poplars Flevo	$45.00 per 100
Robusta (Black Poplar)	$45.00 per 100
Pussy Willow	$ 6.50 per 10
Dononea Viscosa	$ 7.00 per 10
Ligustrum (Golden Privet)	$52.00 per 100

2.17.2 Fruit and Nut Trees

(i) Fruit Trees

	Commercial	Retail
Fig	-	$15.95
Apple	$4.00	$ 7.95
Pear	$4.50	$ 9.95
Plum	$3.60	$ 7.95
Peach	$3.80	$ 7.95
Apricot	$4.50	$ 7.95 - $15.00
Cherry	$4.80	$10.95
Feijoa (grafted)		$10.95

(ii) Nut Trees

Sweet Chestnut	$ 8.95 each
Japanese Walnut	$ 7.50 each
Hazelnut	$ 7.95 each

(iii) Citrus Fruits

Lemons (from N.I.)	$14.95 each
Tangelos	$14.95 each
Mandarins	$14.95 each
Grapefruit	$14.95 each
Oranges	$14.95 each

(iv) Subtropicals

Tamarillo (yellow)	$ 3.65 each
Kiwifruit	$ 6.96 each
Grapefruit (1 year)	$ 5.00 each

Lemon (1 year)	$ 5.00 each
Feijoas	$10.75 each
Black passionfruit	$ 3.50 each

2.17.3 Fruit Plants

Berryfruit: (Commercial unless noted)

Strawberry Runners	$75.00 per 1000
Raspberry (plants)	
Avon)	
Marcy)	$30.00 per 100
Fairview)	
Heritage)	
Haida)	$35.00 per 100
Blueberry	
tissue cultured (soft tubes)	$ 4.95 each
tissue cultured (hard tubes)	$ 4.95 each
plants	$ 3.00 each
bushes (retail)	$ 5.40 each
Brambles	
Black satin (thornless)	$ 2.00 each
Thorn free	$ 0.85 each
Boysenberry	$ 3.00 per 10
Blackcurrant - plants (retail)	$ 3.50 each
- cuttings -Hatton Black	$ 8.00 per 100
Millist	$ 6.00 per 100
Daniels late September	$ 6.00 per 100
Magnus	$ 5.00 per 100
Redcurrants (cuttings)	
Jonkheer van Tefs	$8.00 per 100
Cranberries (bushes) retail	$6.40 each
Gooseberries (small bushes)	$2.50 each

2.18 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%	

2.19 VEHICLE EXPENSES

2.19.1 Vehicle Registration

Every motor vehicle must be registered and licenced before it may be used on the road. A vehicle is registered once in its life, but must be licensed annually.

Registration Fees	$
Vehicles with E, Class A or Trade plates	Nil
Vehicles manufactured at least 40 years before registration	39
Motor cars having a cylinder capacity	
(a) up to 1300 cm^3	62
(b) between 1300 cm^3 and 2600 cm^3	93
(c) between 2600 cm^3 and 4000 cm^3	116
(d) exceeding 4000 cm^3	193
Goods Service vehicles	
(a) Unladen weight 2000 kg or less	116
(b) Unladen weight over 2000 kg	193
Motor cycles	
(a) Mopeds and motor cycles up to 50 cm^3	23
(b) Motor cycles over 60 cm^3	39
Traction engine	39
Trailer	39
Tractor or self-propelled agricultural machine	8
Any other motor vehicle	77
Cost of registration plates	
- General purpose plates (pair)	4
- Single plates	2
- Trade plates (pair)	3
- Trade plates (single)	2

2.19.2 Licencing Fees

As a general rule, every vehicle must be licensed annually. The licensing fees for the year ended 30 June 1985 for the more common types of vehicle are tabulated below:

	12 mths	9 mths	6 mths	3 mths
Motor cycles up to 60 cm^3 and mopeds	$22.80	$17.15	$11.50	$ 5.85
Motor cycles over 60 cm^3	44.75	33.61	22.48	11.34
Tractors	38.80	29.15	19.50	9.85
Cars	60.75	45.61	30.48	15.34
Trucks not requiring a Certificate of Fitness	60.75	45.61	30.48	15.34
Trucks subject to a Certificate of Fitness				
- 2 axles	99.75	74.86	49.98	25.09
- 3 axles	108.75	81.61	54.48	27.34
- 4+ axles	117.75	88.36	58.98	29.59
Light trailer (gross laden weight 2000 kg or less)	23.20	17.45	11.70	5.95
Heavy trailer (gross laden weight over 2000 kg)	39.20	29.45	19.70	9.95
Heavy semi-trailer (st C of F)	78.20	58.70	39.20	19.70
Heavy full-trailer (st C of F)	87.20	65.45	43.70	21.95

2.19.3 Road User Charges

The Road User Charges system is a "user pays" approach to transport which is intended to levy the heavy transport operators with road user licence fees. The vehicles which must pay Road User Charges are described below, and are required to display either time licences (for off road vehicles) or distance licences (for heavy vehicles used on the roads).

Vehicles required to pay road user charges are:

(i) All vehicles, including trailers, whose gross laden weight exceeds 3.5 tonnes.
(ii) All vehicles which are powered other than by petrol, CNG or LPG.

Exemptions include:

(a) Vehicles licensed as E Class A.
- mobile machinery never used on roads except for servicing at a garage or driver testing.

(b) Vehicles licensed as E Class B.
- farm machinery with restricted road usage.

(c) Unregistered motor vehicles.
(d) Vehicles exempt from registration and annual licence fees.

(e) Two-wheeled vehicles whose gross laden weight is less than 1 tonne.

Time Licences

Time licences are for a yearly period (1 April to March) or quarterly periods (eg. April to June, etc.). The amount payable for three months is one quarter of the annual charge.

Time licences apply to off-road vehicles and are grouped into three broad categories, as follows:

Group 1:
- includes trailer scrapers, road rollers, tractors other than those exempted, saving or shearing apparatus for tree cutting, bulldozers and angle dozers (rubber tyred), and tractor mounted mobile cranes.

Group 2:
- includes front end loaders, mobile pile drivers, self-propelled trench diggers and excavators.

Group 3:
- includes cranes (but not mobile vehicle recovery units), motor graders.

Charge Rates for Time Licences

Max Gross Weight specified in licence	Group 1	2	3
1 Tonne(s)	10	35	70
2	11	44	89
3	17	59	119
4	24	77	155
5	30	92	185
6	37	111	222
7	46	134	267
8	57	160	319
9	69	189	379
10	82	223	446
11	97	260	520
12	113	299	598
etc.			

Distance Licences

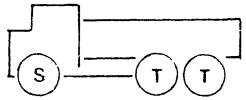
Distance licences are classified according to whether the vehicle is powered or unpowered, the number of tyres per axle and the axle spacing. A selection of classifications is listed below:

Powered Vehicles

Type 1: 2 spaced axles, both single tyred

Type 2: 2 spaced axles, one single tyred and one twin tyred

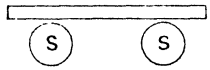
Type 6: 1 spaced single tyred axle and two close axles both twin tyred



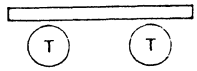
Unpowered Vehicles

Type 24: 1 axle, any configuration

Type 27: 2 spaced axles, both single tyred



Type 30: 2 spaced axles, both twin tyred



Charge Rates for Distance Licences
($ per 1000 km specified in the licence).

Max gross Weight Specified	Vehicle Type 1	2	6	24	27	30
1 Tonne(s)	10.25	10.24	10.24	3.31	3.29	3.29
2	12.31	12.28	12.23	5.61	5.35	5.30
3	15.34	15.17	14.91	9.69	8.39	8.11
4	19.06	18.51	17.70	16.22	12.11	11.22
5	24.00	22.65	20.68	27.07	17.04	14.88
6	30.82	28.02	23.94	44.67	23.87	18.37
7	40.36	35.17	27.61	71.94	33.41	25.08
8	53.59	44.73	31.83	112.37	46.64	32.43
9	71.64	57.44	36.78	169.98	64.68	41.93
10	95.78	74.14	42.65	249.82	88.82	54.15
11	127.44	95.76	49.65	355.46	120.48	69.71
12	168.19	123.33	58.03	494.04	161.23	89.33

etc.

When the distance licence is exhausted, a new licence must be obtained. The nominated maximum weight may be increased by either obtaining a new licence or obtaining a supplementary licence.

Refunds may be obtained when:
- an unexpired licence is replaced
- a vehicle is permanently destroyed
- off-road travel has occurred

All vehicles requiring distance licences must be fitted with an approved distance recorder in working order. Hubodometers are required where the gross laden weight exceeds 3.5 tonnes.

2.19.4 Refunds of Taxes on Fuels

Refunds of Petrol Tax

Motor Spirits Duty (ie. Petrol Tax) may be refunded if the petrol was used:

(1) in vehicles licensed as E Class A or E Class B.
(2) in vehicles subject to Road User Charges.
(3) in unlicensed commercial vehicles such as forklifts or tractors.
(4) in goods service vehicles (3.5 tonnes or under) used exclusively under a goods service licence.
(5) in commercial vessels or boats.
(6) in stationery engines eg. chainsaw, or used commercially for heating, lighting, cleaning etc.

Rate of refund is 8.9 cents per litre of petrol used, except for goods or passenger service vehicles, when the rate of refund is 2.5 cents per litre.

Refunds of Sales Tax on CNG and LPG

Sales tax on CNG and LPG is included in the purchase prices of the fuel. This sales tax may be refunded when the fuel is used:

(1) in vehicles over 3.5 tonnes which are subject to road user charges.
(2) in vehicles licensed as E Class A or E Class B.
(3) in unlicensed motor vehicles used commercially.
(4) for commercial purposes - not vehicles.

Rates of refund:

CNG - $1.74 per gigajoule of CNG
LPG - 4.93 cents per litre of LPG

2.19.5 Fuel, Oil and Grease

Petrol - Regular (91 octane) 96.0 cents per litre.
- Super (96 octane) 99.0 cents per litre.

Diesel - 78.3 cents per litre.

Multi-purpose lubricating oil = $2.04 per litre in 60 or 209 litre drums.

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

Transmission oil - $1.98 per litre in 209 litre drum. In a 20 litre container it costs $2.40 per litre.

Deposit on 209 litre drum is $28.80. Deposit on a 60 litre drum is $14.70.

Antifreeze - $2.05 per litre in a 20 litre drum. $2.18 per litre in a 2 litre container.

2.19.6 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

2.19.7 Tractor Running Costs

(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 @ 67.5c per litre	$13,668.75
Fuel Filters change every 600 hours = 5 @ $4.91	$ 24.55
Engine Oil change every 150 hours 10.4 litres per change, plus top up, 208 litres at $2.60/litre	$ 540.80
Oil Filters change at 300 hours = 10 @ $14.00	$ 140.00
Transmission Oils change every 1500 hours, capacity 40.5 litres 2 changes	$ 290.00
Injector Servicing say 3 cyl. engines @ 1500 hours 2 services, plus labour	$ 320.00
Top Overhaul including parts, one @	$ 750.00
Air Cleaner oil bath or dry elements	$ 260.00
Tyre Maintenance wear and tear 3000 hours	$ 200.00
Grease (lubricating) 20 kg @ $5.25/kg	$ 52.00
Anti-Freeze radiator 12 l @ $2.18/l	$ 26.00
General Renewal Repairs fan belts, radiator hoses, general servicing etc.	$ 900.00
Battery	$ 252.00
TOTAL DIRECT COSTS	$17,424.00
TOTAL DIRECT PER YEAR	$ 3,484.80
TOTAL DIRECT PER HOUR (assuming 600 hours per year)	$ 5.80
TOTAL DIRECT PER HA (assuming .607 ha per hour)	$ 9.56

FIXED COSTS

Registration agricultural use, $46.56 per year	$ 232.80
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	$18,579.60
TOTAL COSTS	
TOTAL COSTS FOR 5 YEARS	$36,003.60
TOTAL COSTS FOR 1 YEAR	$ 7,200.72
TOTAL COSTS FOR 1 HOUR (assuming 600 hours per year)	$ 12.00
TOTAL COSTS FOR 1 ha worked (assuming .607 ha/hour)	$ 30.48
TOTAL COSTS INCLUDING LABOUR AT SAY $6.00 PER HOUR	
TOTAL COSTS PER HOUR	$ 18.00
TOTAL COST PER HA WORKED (assuming .607 ha per hour)	$ 29.65

(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 @ 67.5 cents/litre	$35,100.00
Engine Oil sump capacity 10-12 litre. Change every 150 hours at average $2.60 per litre	$ 652.52
Engine Oil Filters change every 300 hours, 14 @ $14.00 each	$ 196.00
Transmission Oil change at 2000 hours, capacity G.B. & B.A. 58.5 litre at $2.60 per litre	$ 152.10
Transmission Oil Filters change every 600 hours, say 7 @ $21.50	$ 150.50
Fuel Filters change ever 600 hours 7 @ $4.91	$ 34.37
Air Cleaner oil bath or dry element	$ 260.00
Injector Servicing every 1500 hours	$ 400.00
Top Overhaul including parts	$ 850.00
Battery one replacement heavy duty	$ 313.00
Tyres 14 x 30 or 15 x 30, say one	$ 700.00
Anti-Freeze radiator, 12 litre @ $3.92 ie 6 litre plus top up, (2 changes of 3 litres) say	$ 27.87
Grease small drum for 4000 hours	$ 52.00
Power Assisted Steering oil and filters over 4000 hours	$ 75.00

General Renewals and Running Repairs fan belts, radiator hoses, brake adjustments, etc.	$ 850.00
TOTAL DIRECT COSTS	$39,813.36
TOTAL DIRECT COSTS PER YEAR	$ 7,962.67
TOTAL DIRECT COSTS PER HOUR (800 hours per year)	$ 9.95
TOTAL DIRECT COSTS PER HA WORKED say .81 ha per hour	$ 12.28
FIXED COSTS	
Registration $46.56 per year. This is for Class B	$ 232.80
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	$29,589.45
TOTAL COSTS	
TOTAL COSTS FOR 5 YEARS	$69,402.81
TOTAL COSTS FOR 1 YEAR	$13,880.56
TOTAL COSTS FOR 1 HOUR (800 hours per year)	$ 17.35
TOTAL COSTS FOR each ha worked say .81 ha per hour	$ 21.42
TOTAL COSTS INCLUDING LABOUR AT $6.00 per hour	
DIRECT COSTS PER HOUR	$ 15.95
DIRECT COSTS PER HA WORKED	$ 19.69
TOTAL COST PER HOUR	$ 22.04
TOTAL COST PER HA WORKED	$ 25.80

(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, @ 67.5 cents per litre	$38,475.00	$64,800.00

Engine Oil sump capacities 11.25-13.5 litre oil change every 150 hrs, 20 changes	$ 585.00	$ 707.00
Engine Oil Filters - change every 300 hrs - 10 changes @ $20.40	$ 204.00	$ 204.00
Transmission Oil - change every 1500 hrs capacities 70 litre @ $2.60 per litre	$ 364.00	$ 364.00
Transmission Oil Filters change every 400 hrs, say 8 filters @ $21.50	$ 172.00	$ 172.00
Fuel Filters, duals, change every 600 hrs 10 filters @ $4.90	$ 49.00	$ 49.00
Air Cleaner dry type Cyclopac cartridge, $59.12 each, say three replacements over 3000 hrs	$ 177.36	$ 177.36
Injector Servicing every 1200/1500 hrs 4 and 6 cylinder, 2 services	$ 255.00	$ 275.00
Top Overhaul including parts	$ 875.00	$ 1,000.00
Battery one replacement in 5 years, heavy duty	$ 313.00	$ 313.00
Tyres 15 x 30 to 18.4 x 38, say one replacement or relug	$ 702.00	$ 850.00
Anti-Freeze radiator 4-6 litre, plus top up	$ 31.36	$ 47.04
Grease small drum	$ 52.00	$ 52.00
Power Assisted Steering oil and filters	$ 55.00	$ 65.00
General Renewals and Running Repairs, fan belts, radiator hoses, brake adjustment, etc.	$ 850.00	$ 1,000.00
TOTAL DIRECT COSTS	$43,159.72	$69,225.40
TOTAL DIRECT COSTS PER YEAR	$ 8,631.94	$13,845.08
TOTAL DIRECT COSTS PER HOUR (600 hrs/year worked)	$ 14.39	$ 23.08
TOTAL DIRECT COSTS PER ha worked (say 1.2 ha per hour)	$ 11.99	$ 19.23

FIXED COSTS		
Registration $46.56 per year (Class B)	$ 232.80	$ 232.80
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	$89,404.30	$132,401.78
TOTAL COSTS FOR 1 YEAR	$17,880.86	$26,480.36
TOTAL COSTS PER HOUR	$ 29.80	$ 44.13
TOTAL COSTS PER ha worked (say 1.2 ha per hour)	$ 24.83	$ 36.78
TOTAL COSTS INCLUDING LABOUR AT $6.00 PER HOUR		
DIRECT COST PER HOUR	$ 20.39	$ 29.08
DIRECT COST PER HA WORKED	$ 16.99	$ 24.23
TOTAL COST PER HOUR	$ 35.80	$ 50.13
TOTAL COST PER HA WORKED	$ 29.83	$ 41.78

2.19.8 Costs of Cultivation

(Adapted from a paper given by Dr 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 from savings 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 $6 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 $15.00 per hour. Repairs and maintenance add a further $3.00. If 12% is added for machinery costs, this gives a total variable cost of up to $30 per hour if labour is employed. Given that cultivation times will vary according to soil type from 2 to 15 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 $36.00 (3 hours x $30 less 60% tax) per hectare fromm one extreme to $450 (15 hours x $30/hour) at the other. By contrast the variable cost of machinery per hectare for a single spray application will vary according to tax rate from $2.40 to $6.00 for a smaller tractor covering 4 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 $30,000 will last five years at 800 hours per year, and with 4,000 hours on the clock would sell for $12,000 today.

Our initial investment is $3,000 for the tractor which has an alternative investment opportunity of 15% at current rates of interest. We therefore lose $4,500 potential interest per year or $1,800 after tax at the highest rate. Unfortunately, when we go to replace it at a presumed

inflation rate of 17% it will cost us $65,780 in five years time but its secondhand counterpart will now be worth $26,300. Therefore to replace the tractor we will need to find $39,480 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 $5,854 if you can set this aside without paying tax or $14,640 if your tax is hurting. We are not yet finished our fixed costs. Depreciation is allowed as a tax deduction at 20% of the falling book value in each year. For a farmer paying the highest tax rate these deductions represent as cash in his pocket 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	-30,000					(65,780)
Secondhand Value						+26,300 - 9,882*
Tax Recovered by Depreciation	0	+3,600	+1,920	+1,536	+1,228	+ 982
Cash to set aside for tractor replacement (before tax)	-14,640	-14,640	-14,640	-14,640	-14,640	
Annual Cash Cost (Start of each Year)	-44,640	-11,040	-12,720	-13,104	-13,412	-17,400

* Tax on difference between depreciated value and secondhand price.
(Note: cash cost based on saved money not borrowed, 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 is $63,332. 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	-30,000					(65,780)
Secondhand Value						+26,300
Cash to set aside for tractor replacement	-5,854	-5,854	-5,854	-5,854	-5,854	
Annual Cash Cost (Start of each Year)	-35,854	-5,854	-5,854	-5,854	-5,854	+26,300

For this non tax paying farmer the investment required to replace the tractor is $35,287 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 $15.83 per hour at the high marginal tax rate and $8.82 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	17.73	17.73	9.88	9.88
Running Costs/hour				
with labour	12.00		30.00	
without labour		9.60		24.00
	29.73	27.33	39.88	33.88
Costs per hectare				
(a) Lowest cost x 2 hrs/ha		54.66		67.76
(b) Highest cost x 15 hrs/ha			598.2	

The range of costs for cultivation therefore will lie between $54.66 and $598.2/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 $13.22 to $27.00, and at a spraying rate of 4/ha/hr will amount to $3.30 to $6.75 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 $29.50 per litre there is room to consider spraying for minimum tillage as a cost saving measure alone on many properties.

2.19.9 Combine Harvester Running Costs

The following calculations of combine harvester running costs for 1984/85 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 67.5c per litre	$14,850.00
Fuel filters: duals, change every 600 hours, say 4 @ $9.31 each	$ 37.24
Engine oil: 12 litres: change every 150 hours, say 7 changes @ $4.40 per litre	$ 369.60
Engine oil filters: change every 300 nours, say 3 @ $16.40 each	$ 49.30
Air cleaner: dry type, one every 1000 hours	$ 79.57
Injector Servicing: once every 5 years	$ 400.00
Battery: one heavy duty	$ 265.00
Grease: small drum for 1000 hours	$ 47.14
Power steering oil and filters	$ 50.00
General renewals and running repairs: fanbelts, radiator hoses, cutter blades, reel tines, conveyor chains, concave fittings etc.	$ 6,750.00
TOTAL DIRECT COSTS	$22,632.93
TOTAL DIRECT COSTS PER YEAR	$ 4,526.59
TOTAL DIRECT COSTS PER HOUR	$ 22.63
TOTAL DIRECT COSTS PER HECTARE HARVESTED, say 1.25 ha/hour	$ 18.11

FIXED COSTS

Registration: $46.56	$ 232.80
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	$97,829.30
TOTAL COST FOR 5 YEARS	$120,525.23
TOTAL COST FOR 1 YEAR	$24,105.05
TOTAL COST FOR 1 HOUR	$ 120.53
TOTAL COSTS FOR EACH HECTARE HARVESTED 1.25 ha per hour	$ 96.42
TOTAL COST INCLUDING LABOUR @ $7.50 per hour	
DIRECT COSTS PER HOUR	$ 30.13
DIRECT COSTS PER HECTARE HARVESTED	$ 25.61
TOTAL COST PER HOUR	$ 128.03
TOTAL COST PER HECTARE HARVESTED	$ 103.92

2.20 ADMINISTRATION EXPENSES

2.20.1 Telephone and Toll Charges

(i) Rental (2 monthly basis)

	Business Rate			Residential
Class*	B1	B2	B3	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 (20001-80000 subscribers).
Class 7 - 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]

2.20.2 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	$2.10	$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.

2.20.3 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" - $28.00 per year (fortnightly).
"New Zealand Journal of Agriculture" - $16.50 per year (monthly).
"Apiarist" - $5.00 per year (6 copies).

2.20.4 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.

2.20.5 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.

2.21 STANDING CHARGES

2.21.1 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.

(i) Buildings: per $100 value.
Fire Cover:
Dwellings - Brick $0.210.
- Wood $0.300.
Outbuildings - Brick - concrete or earth floor $0.300.

- Wood - concrete or earth floor $0.300.
- Double brick or concrete $0.300.

Dwelling contents - $0.300 regardless of construction.

(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.
Livestock on farm (fire only) $0.900.

Comprehensive:
Harvesting: self propelled $12.00 for first $1,000 plus $0.50/$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: $14.00 for first $1,000 plus $5.00/$1,000.

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 $0.700 per $100 Earthquake and War Risk.

(iii) Tractor Tyre Insurance

100% of Premium of	S.I. up to $3,000
75%	between $3,000 - $ 5,000
50%	$5,000 - $10,000
40%	over $10,000

Minimum Premium $20.00.

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

All Risks: per $100 value - $27.50 per $1,000 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 - 2.50%.

Hay - $0.300.

(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 $167.50 per annum.

(x) Public Liability - to cover legal liability arising from negligence caused by employees, stock, farm venicles or fire and explosion but excludes motor venicles which should be registered under the Transport Act.

Cover	Premiums
$100,000	$30.00
$250,000	$40.00

Forest and Rural Fires Act included.
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.
Deer 5.5% for 12 months (excess of 3% of total sum insured)
Goats 5.5% for 12 months (excess of 3% of total sum insured)

2.21.2 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.

2.21.3 Interest

(i) Building Societies

May lend to build a dwelling on a farm - policies and interest rates vary with the institution. In general the interest rate ranges between 18 and 20% for a term of 10

years (first mortgage). There is a 50% lending margin and shares in the company must have been held for some time (usually at least 3 years).

(ii) 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 15 to 18%.

(iii) 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.

Interest rates are the same as for the Rural Banking and Finance Corporation - see below.

(iv) Life Insurance Companies

Policies vary from company to company.

One example is as follows:

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.

Interest rates will vary between companies and are likely to be negotiated on a personal basis in many cases.

(v) Rural Banking and Finance Corporation

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

Specific Policies:

(a) Farm Settlement

Policy - Preference is given to applicants purchasing their first farm with major consideration being given to the applicants experience, cash contribution and the units long term viability.

The emphasis is on quality settlements and the viability of the proposition must be undoubted.

Terms - Up to 25 year table first mortgage (and first I.W.S. over stock where necessary). Interest 12.5% which will be progressively adjusted (1% p.a.) until the bank's market indicator rate is reached. (The present market indicator rate of 15% will operate until 31 March 1986).

Amounts - the bank does not specify any loan limits.

(b) Stock Loans

Policy - Lessees, sharemilkers and other farmers who do not own the land they farm may obtain loans to purchase stock and plant.

Terms - 5-7 year table loan secured by I.W.S. over stock (and plant where necessary) up to 60% security margin.

Interest rates as above.

Amount - Loan limits are flexible except for first time sharemilkers the limit is $55,000.

(c) Development

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

Terms - Interest 12.5% plus 1% p.a. interest adjustment until market indicator rate reached (reviewable on 30 days notice).

(d) Irrigation

Policy - 10 to 15 years for approved irrigation schemes.

Terms - For the first 3 years interest only is charged at 12.5% plus market indicator rate adjustment, but this is deferred and capitalised. The total loan is then repayable over a further 10 year term (flexible).

(e) Restructuring

Policy - Hard core debt, related to development work and estate duty.

Terms - Table mortgage at 12.5% with market indicator rate adjustment usually medium term.

(f) Commercial Lending

Policy - Term loans are available for a wide range of propositions relating to the primary sector including assistance to servicing and processing industries. These cover the stronger and more commercially orientated projects which normally cannot be assisted under the banks traditional lending activities. Enterprises will need to be financially viable, propositions soundly based and capable of meeting obligations on commercial lending terms.

Terms - 2-10 year term. 20% (Reviewable on 30 days notice).

(g) 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 12.5% with market indicator rate adjustment (reviewable annually). Applicant must hold a current controlled fishing licence or permit.

(h) Other

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

(iv) 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%.

(vii) 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.

(viii) 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 16%-18%.
- Livestock, plant, land purchase.

Overdraft:
- Seasonal farm working expenditure.
- Fully fluctuating working capital expenditure.
- Renewed annually or as required.
- Current minimum rates 15.5% to 16.75% (usually negotiable).

Savings Bank Loan:
- No specific ceiling
  (But dependent on funds)
- Rates 14% to 16%
- Term 15 to 20 years
- Land purchase.

Personal Loans:
- Maximum Term 5 years, minimum 6 months.
- Amounts: Minimum $1,000
  Maximum $10,000.
- Rates 19% to 22%.
- Home improvement, personal expenditure, garages, pools, driveways etc.

Lease Finance:
- Term - 5 years.
- Rates 16% to 19%.
- 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 16% to 18%.
- 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% to 20% on first mortgage.
  Generally used for in-between farm sale-purchase deals.

Security:
Generally in all avenues of finance security will be sought by bank. Examples are: Landed mortgage (1st, 2nd, 3rd freehold or leasehold), livestock/chattels mortgage, mortgage, 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.

(ix) 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 18%.

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.

2.21.4 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 which are reviewed every 11 years. 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.

Pastoral Leases - 2.25% of Land Exclusive by Improvements (L.E.I.) except for renewals which are 1.5% for the first 11 years.

2.22 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	$10,000-13,000
Factory Supply Dairy	$ 9,000-13,000
Sheep and Mixed Cropping	$ 9,000-12,000

Generally within the range $13,000-$17,000 depending on experience.

2.23 PROFESSIONAL FEES

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.

2.23.1 Accountancy Fees

Accountants base their fees 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.

2.23.2 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.

2.23.3 Consultancy Charges
(January 1985)

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

Farm Advisory Services		Per Hour
(i)	Unregistered Consultants - minimum	$25.00
(ii)	Registered Consultants with 5-8 years experience - minimum	$35.00
(iii)	Registered Consultants with 8-12 years experience - minimum	$40.00
(iv)	Senior members of the profession	$50.00
(v)	Maximum Rate	$60.00

Farm Supervision, Special Consultations and Negotiations

(i)	Unregistered Consultants - minimum	$30.00
(ii)	Registered Consultants with 5-8 years experience - minimum	$40.00
(iii)	Registered Consultants with 8-12 years experience - minimum	$50.00
(iv)	Senior members of the profession	$60.00

Consultancy Work of a Specialist Nature

Specialist work for Registered Consultants involving a high degree of expertise, experience and accountability (eg. Local Body work, etc) - rates of up to 25% higher than those for category (b) (ii), (iii) and (iv) above are recommended.

Court Appearances

(i)	Registered Consultants with 5-8 years experience		$50.00
(ii)	Registered Consultants with 8-12 years experience		$65.00
(iii)	Senior members of the profession		$70.00
(iv)	Maximum rates by negotiation as it is recognised that Court work can be of a very specialised nature		
(v)	Minimum charge for attendance	Per Day	$300.00

Travelling Expenses

The top Public Service rate per kilometre for each engine capacity class is recommended.
Consultants may find it necessary to charge for travelling time in addition to car expenses where this represents a high proportion of the time involved in any particular job.

Administration Expenses

For secretarial services each employee's time is to be charged on the basis of twice the salary paid divided by 1500 hours per year. The recovery of direct expenses such as toll calls, photocopying, stamps and stationery is strongly recommended.

Computer Time

Charges of $10-$20 per hour in addition to normal hourly rates are recommended, depending on equipment capability and the type of work involved.

Lincoln College Farm Advisory Service

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

A group of full-time farm management consultants, a horticultural management consultant and a registered valuer are available for consultancy work, property supervision, feasibility studies and valuations. Agricultural study tours are designed and conducted both in New Zealand and overseas.

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 two 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.

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	$800.00

The Agreement Fee is subject to variation according to the complexity of the agreement and additional work involved over the standard contract.

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

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

2.23.4 Legal Fees

The former system of a New Zealand wide scale of minimum and maximum charges has been abolished. Fees are now worked out on a more appropriate basis (in general based on an hourly rate) taking into account the nature of the job and expenses incurred by the solicitor or law firm. Lawyers are now encourages to give written estimated for the cost of a job. Anyone seeking a solicitor's help or advice should ask for an estimate (in writing) and both parties should have a clear understanding of what work that estimate is to cover.

Stamp Duty

50,000 - 100,000	1.5%	500 + 1.5% of excess over 50,000.
Over 100,000	2.0%	1,250 + 2% of excess over 100,000.

No duty is payable on the first $50,000 in the value of land or buildings to be used primarily and as a residence. Stamp duty payable on farm properties is reduced where one or more of the purchasers does not hold or has not held interest in farm land exceeding $150,000.

If all purchasers are exempt no duty is payable.

2.23.5 Real Estate Charges

(i) Sales:

On the sale of all property, freehold or leasehold, and business (excluding licensed hotels and licensed motels) whether by auction or private treaty.

Firstly, a basic fee	$100
Secondly, on the first 125,000 of consideration	3%
Thirdly, on the balance of the consideration	1.5%

Licensed hotels and licensed motels, freehold or leasehold.

Firstly, up to the first $3,000 of consideration 5%
Thereafter, on the balance of the consideration 2.5%

20,000	700	90,000	2,800
30,000	1,000	100,000	3,000
40,000	1,300	125,000	3,700
50,000	1,600	150,000	4,225
60,000	1,900	175,000	4,600
70,000	2,200	200,000	4,975
80,000	2,500	2500,000	5,725

Additional Charges and Notes

(A) Assignment of Business Leases - where as part of the consideration in the sale of a business (other than a licensed hotel or licensed motel) there is to be assignment of a lease, or a new lease is to be arranged, an additional fee of 5% of the average annual rental shall be charged.

(B) Assignments of Ground Leases - In the sale of a leasehold interest in land held under a ground lease, whether with or without improvements, an additional charge shall be made equivalent to one half of the annual ground rental.

(C) Auction Sales (Sales other than mortgagee sales) -

(a) Where a property is sold either at auction, or before, or after auction, and during the term of sole agency attributed to such auction, the fee shall be in accordance with the scale as in section 1.

(b) The auctioneer, in addition, shall charge the cost of auction advertising, flagging and authorised disbursements as agreed between vendor and auctioneer.

(c) Auction offering fee: It is competent for an agent to charge an offering fee for auctions which are not sold at the auction or during the period of sole agency, but such fee must be agreed upon by the vendor and the sole agency, but such fee must be agreed upon by the vendor and the agent at the time the auction authority is completed by the vendor.

Note: It is proper for the auctioneer to require sole selling rights from the date auction instruc-

tions are given until one calendar month after the date of auction.

Mortgagee, sheriff sales, etc. -

(a) Where a property is offered under instructions from the mortgagee and is bought in by the mortgagee, or where a mortgagee holds a sale and does not 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%
Minimum Charge $35

(b) (i) The fee where the mortgagee withdraws the property within seven days before the sale shall be on the mortgagee's estimate of value, or on the reserve price as the case may be 1%

(ii) Where the mortgagee withdraws the property prior to seven days before the auction, then the above fee shall be 0.5% with a minimum of $35.

(c) All expenses including advertising, flagging and disbursements shall be paid by the instructing mortgagee.

(d) When the sale is not proceeded with, an inspection fee of $35 shall be paid, where the auctioneer provided a description of the property for advertising purposes.

(e) Where the property is sold to the mortgagee at his estimate of value or reserve or less, the offering fee of 1% shall be charged. For all sales above the estimate of value or at or above the reserve or to other than above the estimate of value or at or above the reserve or to other than the mortgagee, as the case may be, the fee shall be charged as detailed in the basic scale.

(f) In the case of sheriff sales, the fee is calculated on the cash value of the consideration passing to the vendor plus the amount of the liability transferred from the vendor to the purchaser.

(g) Where any land or interest in land is sold or withdrawn on the basis that the purchaser or mortgagor assumes liability for any amount

owing in respect thereof by the vendor, whether secured on mortgage or charge upon the land, or payable under an agreement for sale and purchase, or deferred payment licence, the amount for which liability is so assumed shall be included as part of the consideration for the purpose of assessing this fee, or the withdrawal fee.

(D) Building Contracts - the basic scale of fees under the scale as in Section 1.

(E) Businesses - the value of all goodwill, plant, fittings, fixtures, chattels and stock-in-trade included in the sale shall be treated as part of the consideration.

(G) Company Shares - where a sale of shares in a company effectively does what sale, lease or assignment would otherwise have done, then fees will be payable and calculated in accordance with this scale or charges as if such a sale, lease or assignment had actually taken place.

(H) Consideration - fees are calculated on the cash value of the consideration passing to the vendor plus the value of any liability transferred from the vendor to the purchaser or benefit transferred from the purchaser to the vendor.

(I) Licensed hotels and licensed motels - the fee shall be calculated on the aggregate of the value of freehold, goodwill of the business (including the goodwill of any leasehold interest) chattels and stock-in-trade.

(a) In the case of leasehold premises where a new lease is to be arranged or the unexpired portion of the lease is for up to and including 5 years, an additional fee of 5% of the average annual rental shall be charged.

(b) Where the new term of lease or the unexpired portion of the unexpired lease is for more than five years, the additional fee shall be 10% of the average annual rental.

(J) Livestock, implements and farm chattels -

(a) 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 the fee shall be:

On the purchase price 2.75%

(b) On live and dead stock and chattels sold by themselves the fee shall be:

On the purchase price 5%

(K) Multiple sales and exchanges - where there are multiple sales, exchanges or other similar arrangements negotiated together, the fees charged are to be made on each sale, exchange or arrangement as a separate transaction.

(L) Purchasing clauses in leases - a compulsory purchasing clause shall be treated as sales of freehold or leasehold upon which fees in accordance with the basic scale hereof shall be payable - one half of the scale fee on signing contract, balance on completion of sale.

For optional purchasing clause a fee accordance with the basic scale hereof, shall be payable if and when the option is exercised.

(2) Leasing, Letting, Assignments

All properties excluding farm properties:

Less than 1 year term:
Residential . . . . . 1 weeks rental
Other . . . . . 2 weeks rental

One year term:
All properties . . . . . 5% of annual rental

Over 1 year and up to 5 years inclusive:
All properties . . . 7.5% of average annual rental

In excess of 5 years:
All properties . . . 7.5% of average annual rental plus 1% for each full year in excess of 5 years.

Total fees cannot exceed 15%/

Farm properties:

10% on annual average rental.

(A) Holiday rentals - where the rental period is speci-

fically for a holiday period the fee shall be 10% of the aggregate rental up to a maximum of one week's rental or such other amount as shall be agreed upon in writing by the parties.

(B) **Key money** - where any sum is paid by the incoming tenant for key money, or premium, or for the purchase of chattels, furniture, partitions etc. (as distinct from the sale of business, hotel or motel) a fee in addition to the basic scale (2) shall be charged as follows:

Firstly	$100
Secondly, on the first $125,000	3%
Thereafter	1.5%

(C) **Rental** - means the rent reserved by the letting or lease, plus any payment levy or service charge for which the tenant is responsible to the landlord, or any other person under the letting or lease, and which is to be paid by the tenant to the landlord, irrespective of the purpose to which the payment is to be subsequently applied.

(3) **Property Management**

(A) On receiving of rent and/or interest requiring receipting and accounting for such monies through the trust account - on all monies received . . . 5%

OR

(B) Where the agent supervises the property concerned, including the receiving of rent/interest requiring the receipting and account for such monies through the trust account - on all monies received . . 7.5%

AND

(C) Where the agent arranges and supervises repairs and renovations on a property - on the cost of such repairs and renovations 7.5%

AND

(D) Disbursements being monies actually paid on such items as toll calls, extra copies of statements, advertising and the like shall be charged in addition to the above fees.

(4) **Miscellaneous**

(A) **Advertising** - advertising expenses may be charged in accordance with written instructions obtained before such advertising.

(B) **Consultations and appraisals** - fees on an hourly basis will be by arrangement between the principal

and the agent. Fees for appraisals must be based on written reports signed by the licensee, principal officer or person competent to accept such an assignment.

(C) Conjunctional sales between members - by arrangement.

(D) Sharemilking agreements - where sharemilking contracts arranged by members a charge of $2.00 per cow will be made with the cost being debited in equal shares to the farm owner and the sharemilker. These charges will apply in both the 39% and 50/50 types of agreement. Provided however that portion of this charge may be deleted where a stock transaction arises directly from the arrangement of a sharemilking contract:

e.g. If the farm owner sells a herd through the arranging member in order to take on a sharemilker, a charge of $1.00 per cow will be made to the sharemilker only.

OR

If a sharemilker buys a herd through the arranging member in order to take on a sharemilker, a charge of $1.00 per cow will be made to the sharemilker only.

OR

If a sharemilker buys a herd through the arranging member the charge of $1.00 per cow to him may be deleted, but the property owner will be charged $1.00 a head.

OR

If the owner sells his herd and the sharemilker buys another herd, both transactions being made through the arranging member, it will be permissible for neither party to be charged.

(E) Subdivisions - where the agent advises the vendor on planning for subdivision the management fee shall be by written agreement.

2.23.6 Surveyors Charges

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

All general work including cadastral surveys (but excluding engineering work) is charged for on a time basis.

Principal's rate - $28 to $60 per chargeable hour having regard to the nature of the work undertaken, the circumstances of the surveyor's practice and the degree of professional skill involved.

Staff rates - employees' time shall be charged at a rate within 1.8 to 2.2 times the salary paid based on a range of 1,320 - 1,520 hours per working year. These hourly rates may be increased where advice on matters of exceptional importance is required or where the work calls for a special degree of skill, knowledge or responsibilities or where the work is of short duration or entails broken time.

Engineering works will generally be charged for as a percentage of the cost of the works except where the cost of the works is less than $15,000 in which case it is by negotiation or on a time basis.

Cost of Works	Fee Percentage
Below $15,000	on time basis or by negotiation
15,000	8.65
20,000	8.48
50,000	7.94
100,000	7.54
200,000	7.13
300,000	6.89
500,000	6.66
1,000,000	6.36
2,000,000	6.05
3,000,000	5.87
5,000,000	5.68
10,000,000	5.42
20,000,000	5.15
30,000,000	5.00

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.

Valuation charges are no longer subject to the minimum scale of charges as set by the New Zealand Institute of Valuers. Valuers may now set their own charges which may be based on an hourly rate and vary depending on the degree of skill or responsibility required, expenses incurred and other factors. Travelling allowance (mileage) is normally charged at the maximum State Service rate.

2.23.7 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 is $20 per document unless unusual or complex in which case this fee may be increased.

2.24 FORESTRY

2.24.1 Labour Costs

Over a period of years the Forest Service Work Study Units have compiled a set of Labour Value Charts giving the labour content of a range of forest operations.

In 1980 an attempt was made to update the labour values and also include, where possible, a range of values for varying conditions likely to be met in the field. The range was of necessity "broad-brush" and was divided into five categories:

1. Easy - This represents the best and lowest work content conditions likely to be met on average. Includes those isolated "very easy" situations which are really not typical of a low average.

2. Straight Forward - Slightly more difficult than easy.

3. Moderate - About average conditions but bearing in mind the range of conditions that can be encountered throughout New Zealand.

4. Difficult - Somewhere between "moderate" and "very difficult".

5. Very Difficult - This is an average of high work content situations, being a high average it is implied that there are isolated areas that are more difficult.

The Labour Value Charts were compiled from Forest Service Work Study standards where applicable, and were stated at 80% of target using those standards, ie., the rate expected of a steady, deliberate, unhurried performance of a worker not on incentive but under proper supervision who has been on the job long enough to have obtained reasonable skills.

As an extension of the basic Labour Value Chart the Advisory Services Division of the Forest Service has compiled an Operation Value Chart.

OPERATION VALUE CHART
October 1983

		CONDITION				
Operation		Easy	Straight Forward	Moderate	Difficult	Very Difficult
Felling for land clearing	($/ha)	202.76	346.37	488.78	632.40	774.81
Hand felling regeneration	($/ha)	117.90	245.63	373.35	501.08	628.80
Hand line cutting	($/ha)	127.73	186.68	245.63	304.58	363.53
Spot spray before planting	($/ha)	47.00	80.29	113.58	146.87	180.16
Hand fertilising	($/ha)	41.40	65.05	88.71	112.36	136.02

Operation		CONDITION				
		Easy	Straight Forward	Moderate	Difficult	Very Difficult
Hand Planting (exotics)						
800 sph	($/ha)	44.35	72.94	101.52	130.10	158.69
1000 sph	($/ha)	53.22	84.76	116.30	146.86	178.40
1200 sph	($/ha)	62.09	98.56	135.03	171.50	207.97
1400 sph	($/ha)	70.97	107.43	143.90	180.37	216.84
1600 sph	($/ha)	80.82	120.25	158.69	198.11	236.55
Hand Planting (Indigenous)						
400 sph	($/ha)	50.27	97.58	144.89	191.21	238.52
600 sph	($/ha)	68.99	122.22	174.46	227.68	279.92
800 sph	($/ha)	88.71	145.87	202.05	259.22	315.40
1000 sph	($/ha)	106.45	169.53	231.62	294.70	356.80
Marram digging	($/tonne)			93.63		
Marram hand planting	($/ha)			197.13		
Blanking						
200 sph	($/ha)			19.17		
400 sph	($/ha)			34.50		
600 sph	($/ha)			49.28		
800 sph	($/ha)			64.07		
Pruning (First lift)						
500 sph	($/ha)	181.71	203.50	225.24	246.97	268.70
600 sph	($/ha)	218.01	244.01	270.68	296.36	322.05
700 sph	($/ha)	253.88	284.51	315.13	345.76	376.38
Pruning (Second lift)						
200 sph	($/ha)	73.57	92.71	111.86	130.00	149.15
300 sph	($/ha)	110.85	139.07	167.29	195.50	223.72
400 sph	($/ha)	148.14	185.43	223.72	261.01	298.29
Pruning (Third lift)						
200 sph	($/ha)	94.35	118.70	143.04	166.38	190.73
300 sph	($/ha)	141.02	177.54	214.06	249.57	296.09

Operation		CONDITION Easy Forward	Straight	Moderate	Difficult Difficult	Very
Thin to waste 400 sph removed (1st thin)	($/ha)	52.94	68.24	82.36	96.47	111.77
600 sph removed	($/ha)	72.94	90.59	108.24	125.89	143.53
800 sph removed	($/ha)	92.94	115.30	137.65	161.18	183.53
1000 sph removed	($/ha)	112.94	138.83	167.06	194.12	221.18
1200 sph removed	($/ha)	132.94	164.71	195.30	227.06	258.83
Thin to waste 200 sph removed (2nd thin)	($/ha)	40.00	48.24	55.30	63.53	71.77
400 sph removed	($/ha)	68.24	78.83	89.41	110.00	110.59
600 sph removed	($/ha)	95.30	108.24	120.00	134.12	145.89

The Operation Value Chart has been compiled from values obtained by amalgamating the Work Study Chart with a contract cost structure.

The contract cost structure is based on the New Zealand (except Westland) Forestry Workers Award. The cost structure allows the 209 work days, 10 washout days, 5 days spent looking for work, 10 days when no work is available, 11 days statutory holiday, and 16 days annual leave. Boots, overalls, wet weather allowance, tea money, and an insurance cover against sick, first two-week accident insurance, and bereavement leave is also included.

All Forest Service extension staff were consulted and a range of conditions considered. Travel time and distance, gang size, vehicle hire, accident compensation levy, public liability insurance, equipment allowance and

overheads are all recognised within the cost structure.

2.24.2 Other Costs

The costs given in the Operation Value Chart include all the above costs. Additional items such as fertilisers, spray, tree stocks are not included.

Refer to the appropriate sections in this manual for details.

2.25 FENCING

2.25.1 Wire

	Gauge of Wire	Length of 25kg coil	$ per coil
(i)	Plain Wire		
	4mm (No. 8)	253m	$31.95
	3.55mm		$34.25
	3.15mm	408m	$35.22
	2.5mm H.T.	648m	$36.61
	2.5mm 12.5 gauge		$35.65
(ii)	Barbed Wire		
	2.5mm (barbs 75mm)	240m	$47.21
	1.6mm High Tensile Reversed Twist	500m	$56.22
(iii)	Lacing Wire		
	2mm galvanised	5kg coils	$9.29
		10kg coils	$18.57
	1.6mm galvanised	5kg coils	$10.07
		10kg coils	$20.14

2.25.2 Standards

(i) Waratahs P.O.A.

2.25.3 Posts

(i) Paling Fence Posts

2.7 m paling posts	8.70
2.4 m paling posts	8.40
1.8 m paling posts	6.80
1.8 m pipe posts	6.90
Butts	5.60

Paling Gate Posts		
125 mm x 125 mm x	2.4 m	14.45
125 mm x 125 mm x	2.7 m	15.60
Corner Posts		
2.7 m		10.60
2.4 m		10.00
1.8 m		7.40

(ii) Concrete
Wigram Posts Ltd:

Strainers	2.4m x 200mm x 200 mm	$26.10
	2.1m x 175mm x 175mm	$19.80
	2.1m x 150mm x 150mm	$16.10
	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	$ 5.50
	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	$ 7.50
Cattle Posts	1.98m	P.O.A.
Sheep Yard Posts	1.67m	P.O.A.
Post Butts	1.37m	$ 7.50
Paling Posts	1.83m	$ 8.50
	2.77m	$ 9.50
Gate Posts	1.83m x 15cm x 15cm	$15.00

(iii) Tanalised Round Intermediates

1.8m x 75mm SED	$ 3.50
1.8m x 100mm SED	$ 4.75
1.8m x 125mm SED	$ 6.50

(iv) Tanalised Half Rounds

1.8m x 150mm	$ 4.00
2.4m x 150mm	$ 6.00

(v) Tanalised Strainers

2.1m x 175mm SED	$12.50
2.1m x 200mm SED	$16.00
2.4m x 175mm SED	$15.00
2.4m x 200mm SED	$19.00
2.7m x 200mm	$21.00

(vi) Tanalised Stock Yard Posts

2.7m x 150mm SED	$13.50
2.7m x 175mm SED	$17.00
2.7m x 200mm SED	$21.00

(vii) Tanalised Stays

2.7m x 75mm SED	$ 4.25

(viii) Deer Post 2.7m $ 8.25

SED = Small End Diameters.

2.25.4 Stay Blocks

200 x 75 x 0.5m	$3.59
200 x 50 x 0.5m	$2.39
150 x 50 x 0.5m	$1.78

2.25.5 Staples

(i) Sliced Point Staples

	Per 25kg Case
30mm x 4.00m	47.82
27mm x 2.80mm	51.41
25mm x 2.50mm	52.62
19mm or 15mm x 2.00mm	56.58

(ii) Barbed Staples (Cyclone) per 25 kg case

Galvanised	
50mm x 4.00mm	$50.33
40mm x 4.00mm	$50.33
30mm x 4.00mm	$50.33
30mm x 3.15mm	$53.12

Hot Dipped	4 mm		$65.78
	3.15mm		$68.37

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

25 kg bags	$47.22

2.25.6 Battens (Tanalised)

1.05m x 50mm	$65.00 per 100
1.2m x 50mm	$60.00 per 100

Cyclone Lightning Fence Droppers

914 mm (per 100)	$61.81
940 mm (per 100)	$62.42
965 mm (per 100)	$67.35
1003mm (per 100)	$68.22

2.25.7 Gates

(i) McVicars (Wooden)

Hurdles	1.8 m	$22.83
	2.1 m	$24.46
Gates	3.6 m	$63.47
	4.2 m	$66.78

(ii) McAlpines (Wooden)

Hurdles	1.8 m	$16.50
	2.1 m	$17.50
	2.4 m	$18.00
Gates Cattle	3.0 m	$46.00
	3.6 m	$49.00
	4.2 m	$53.00
Sheep Yard	1.8 m	$38.50
	2.1 m	$40.00
	2.4 m	$41.00

(iii) Cyclone (galvanised steel)

	Length (metres)				
	3.05	3.35	3.66	4.27	4.88
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)
1 metre high

	3.0	3.5	3.75	4.00	4.25	4.75
Standard (medium)			$82.74			
With Cross Corner Bracing (med)	$84.03	$88.09	$91.53	$95.95	$99.07	$104.49

	3.75m long	4.25m long
Economy 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	$66.70	$70.50	$73.50	$78.60	$83.70	$88.80
38S	$79.90	$83.50	$86.50	$91.70	$96.70	$101.90
38HD	$103.00	$109.50	$115.90	$122.40	$123.90	-

(vi) Aabaas Bros.

Angle Iron Gates	Standard	Heavy
1.8	$87	
2.4	$92	$136
3.0	$102	$148
3.6	$105	$189
4.2	$112	$195
4.8	$141	$222

Sheep Yard

1.8	$82
2.4	$85
3.0	$87
3.6	$92
4.2	$97
4.8	$98

Economy Gates

3.6	$77
4.2	$82

Stressed Gates

3.6	$155
4.2	$165

2.25.8 Gate Fittings

(i) Gudgeons
Canadian Screw 12.5mm-20mm - 1.89 - $2.82 each
Std. Through Post 250mm-400mm
$5.34 - $6.63 each
"Lock" Through Post 250mm-400mm
$7.05 - $8.45 each.

(ii) Hinge Straps
Standard Canadian 150mm-300mm
$3.08 - $6.75 per pair.
Heavy duty 300mm-600mm
$8.09-$13.76 per pair.

(iii) Clamp hinges

Single way - concrete post	
125mm-200mm	$16.75 per set
Two way - concrete post	
125mm-200mm	$17.99 per set

(iv) Gate Fastenings

Hayes Fork Chain fastener for	
for double gates	$ 8.05
for single gates	$ 7.00
Hayes adjustable fastener	
150-200mm	$11.23
Cattle gate chain	$16.98
Hook and eye Gate Fastener	$ 4.79

Hayes Hitch Pin

19mm	$ 5.90
22mm	$ 6.20
25mm	$ 6.50

(v) Gate lugs

Galvanised 16 and 20 mm	$ 2.96-$ 3.00
Hinges - Wooden Gates	
180mm	$3.04
Hayes Lift Over Gate	$115.65
Lift Over Gate (hinge only)	$55.85
Swing Aroung Gate	$83.64
Vertical Gate	$118.34

2.25.9 Wire Netting

(i) Cyclone

Twinlock Hinge - Joint Boundary

Type High Tensile	Height	Stay Spacing	Price/100m
8 line	900 mm	150 mm	$157.75
8 line	900 mm	300 mm	$120.75
8 line	800 mm	150 mm	$152.77
8 line	800 mm	300 mm	$117.62
7 line	900 mm	150 mm	$145.34
7 line	900 mm	300 mm	$109.57
7 line	800 mm	150 mm	$140.40
7 line	800 mm	300 mm	$107.70
7 line	725 mm	150 mm	$136.00
7 line	725 mm	300 mm	$105.34
6 line	700 mm	150 mm	$123.10
6 line	700 mm	300 mm	$ 94.14

Tightlock Stiff Stay Boundary

7 line	900 mm	300 mm	$119.67
8 line	900 mm	300 mm	$128.11
9 line	900 mm	300 mm	$143.92
8 line	800 mm	300 mm	$125.52
8 line	750 mm	300 mm	$125.93
7 line	600 mm	300 mm	$110.83

Medium Tensile

7 line	900 mm	300 mm	$138.68
8 line	750 mm	150 mm	$182.20
8 line	750 mm	300 mm	$162.64

9 line	900 mm	150 mm	$206.52
9 line	900 mm	300 mm	$183.77

Medium Lightweight

7 line	900 mm	300 mm	$112.59
8 line	800 mm	300 mm	$120.36

Deer Fence

13 line	1900 mm	150 mm	$323.14
13 line	1900 mm	300 mm	$229.70
11 line	1550 mm	150 mm	$259.28
11 line	1550 mm	300 mm	$188.94

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	$4.47			-
50 mm	$3.56	$4.62	$6.83	-
75 mm	-	$3.34	$4.93	-

Plastic Coated

Mesh Size	Wire Diameter	
	2.6 mm	3.2 mm
50 mm	$4.35	$5.83

Farm Mesh

75mm x 150mm x 4 mm diameter galvanised wire.
Roll Size:

30m long x 840mm wide	$129.85 per roll
30m long x 1150mm wide	$177.04 per roll

75m x 150mm x 3.15mm galvanised wire

Roll Size:

30m long x 840mm wide	$105.00 per roll
30m long x 1150mm wide	$143.15 per roll

(ii) Hurricane

Type	Height	Stay Spacing	Price/100m
High Tensile			
9 line	1000 mm	600mm	$113.05
8 line	900 mm	150 mm	$157.75

8 line	900 mm	300 mm	$120.75
8 line	800 mm	150 mm	$152.77
8 line	800 mm	300 mm	$117.62
7 line	900 mm	150 mm	$145.34
7 line	900 mm	300 mm	$109.57
7 line	800 mm	150 mm	$140.40
7 line	800 mm	300 mm	$107.07
7 line	725 mm	150 mm	$136.00
7 line	725 mm	300 mm	$105.34
6 line	700 mm	150 mm	$123.10
6 line	700 mm	300 mm	$ 94.14

High Tensile Deer Fence

12 line	1800 mm	150 mm	$269.56
12 line	1800 mm	300 mm	$199.45

2.25.10 **Chicken Netting** $1.50 per m^2

2.25.11 **Fencing Aids**

(i) Straining Equipment

Tension Handle (for permanent wire strainers)	$52.50
Straining Tension Indicator	$34.40
'Triplex' Permanent Strainers	
- not insulated	$ 1.58
- insulated	$ 2.35
'Rotatense' tensioning system (steelpost, baseplate, 4 anchors)	$50.54
Boundary Fence Clamps	$42.23
Boundary Fence Wooden Clamps	$41.76
General Purpose Strainer	$76.16
General Purpose Strainer heavy duty	$96.48
Boundary Fence Strainer	$74.40
Cyclone Hardwood Strainer Boards	
Field Fence	$50.06
Deer Fence	$80.61
Ranchman Circular Wire Strainer	$ 1.57
Handles (pair)	$22.68
Donalds Wirestrainers	
Chain Wirestrainer	
- c/w tension indicator	$66.60
- c/w tension indicator & buddy clamp	$70.60
Tension Indicator	
- for use with chain wrestrainer	$16.80
- complete with Wirestrainer grip and drain	$34.80

Chains in Cartons of 10	$48.80
Multigrip in Cartons of 10	$44.00
Permanent - plain in carton of 100	$ 1.97
- insulated in carton of 100	$ 2.24

(ii) Post and Standard Drivers

Hayes Tubular Standard Drivers	$30.60
Stake Driver	$98.11

Donalds Post Driver and Accessories

Tractor operated Post Driver Mark IV	
14' 180kg weight 2 belt drive	$1740.00
14' 230kg weight 3 belt drive	$1890.00
16' 180kg weight 2 belt drive	$1830.00
16' 230kg weight 3 belt drive	$1970.00
Mark IV 14' top	$41.80
" bottom	$29.70
Mark IV 16' top	$43.45
" bottom	$32.45
Tractor operated Post Driver - Hydraulic complete	$548.50
Ram 610mm centres - 300mm stroke	$325.60
Value 3 positions, self centering - half" B.S.P. parts	$147.50
Connecting pipes (2) & fittings for above	$75.40
Top Link - Heavy Duty Screw	$ 105.50
Wire Rope Std Length 8.38 m	$ 36.30
Wire Rope - Length 9.6 m	$ 46.20
Pilot Hole Driver 40 mm round x 1.6 m long	$ 58.50
Post guide clamp	$ 68.40

Manual Post Driver 80mm 9 kg	$53.50
160mm 15 kg	$84.90
160mm 20 kg	$95.80
160mm 25 kg	$113.20
Manual Standard Driver	$41.00

Hydes Distributors

Hydradrive 600 (Basic)	$3485.00
Hydraulic Top Link Assembly	$ 794.00
Hydraulic Angle Correction	$ 764.00
Hydraulic Side Shift	$ 840.00
Complete Hydradrive 600	$5883.00
W400 Winch Driver	$2338.00
W600 Winch Driver	$2780.00

(iii) Post and Standard Removers

Donalds 'Muscle Mate" post puller	$62.80
Hayes Standard Lifter	$54.45
Stafix Standard Lifter	$56.50

(iv) Wire Reels

Donald Wire Dispenser	$68.00
Hayes Combination Wire Coiler and Reel	$150.40
Wire Reel Standard	$43.50
Deluxe	$88.16
Bell Booth Spinning Jenny	$48.38

(v) Post Hole Diggers

Gallagher Post Hole Digger gear box, drive shaft and frame only, A8201 $1,233.00

Gallagher Auger complete with Plain Stony or Screw Tip

	Stony Tip Code	$	Plain Tip Code	$	Screen Tip Code	$
100 mm	A8274	176	A8283	176	-	-
150 mm	A8275	182	A8284	182	A8292	182
200 mm	A8276	189	A8285	189	A8293	189
250 mm	A8277	195	A8286	195	A8294	195
300 mm	A8278	195	A8287	195	A8295	195
350 mm	A8279	293	A8288	293	A8296	293
400 mm	A8280	308	A8289	308	A8297	308
500 mm	A8281	394	A8290	394	A8298	394
600 mm	A8282	469	A8291	469	A8299	469

Mate Post Hole Diggers (Gallagher)

Model 85 fully motorised, 85cc 3 h.p. powerhead $675.00

Model 100 fully motorised, 100cc 3.5 h.p. powerhead 745.00

Gallagher Mate Augers

Size	Single Blade 1500 Series 78 cm long Replaceable Cutter and Breaker Tip	Double Blade 1700 Series 78 cm long Standard Cutterhead	
50.8mm,	-	G546/2	$60.98
78.2mm,	-	G546/3	$71.98
101.8mm,	G545/4	G546/4	$80.35
127.0mm,	G545/5	G546/5	$84.09
152.4mm,	G545/6	G546/6	$86.76
177.8mm,	G545/7	G546/7	$92.42
203.2mm,	G545/8	G546/8	$95.43
228.6mm,	G545/9	G546/9	$100.05
254.0mm,	G545/10	G546/10	$105.09

Accessories

2701	38cm Extension	$28.31
1301-3	2-man handle assembly	$48.58

Mate Auger
Cutterheads 1700 Series R/H and L/H
Hooper tractor mounted hydraulic control post hole borer c/w 12" Auger $1066.00

(vi) Tools

Hayes Standard Hammer and Setter	$34.50
Tubular Stake Driver	$52.31
Staple Pick	$11.40
Post Rammer - wooden handle	$14.80
- steel handle	$20.28
Fencing Pliers	$36.68
UTICA American Double Hammer Fencing Pliers	$15.43
Staple Bag	$28.68
Fencing Apron	$29.62
Lumberjack Stain Concentrate 1 x 500 ml can	$ 6.50

2.25.12 Shade and Windbreak Cloth

Donagnys Windbreak Cloth

Width	Length	1-100 Rolls	100 Rolls - 1 Container	1 Container +
3ft	50m	$59.96ea	$49.50ea	$39.04ea
3ft	100m	$119.92ea	$99.00ea	$78.08ea
6ft	50m	$103.83ea	$85.73ea	$67.62ea
6ft	100m	$207.65ea	$171.46ea	$135.24ea
9ft	50m	$153.37ea	$126.63ea	$99.90ea
9ft	100m	$306.74ea	$253.26ea	$199.80ea

Shade Cloth

Shading	Roll Size	1-20 Rolls	20-100 Rolls	100+ Rolls
30%	6ftx50m	$167.30ea	$150.16ea	$133.02ea
50%	6ftx50m	$168.59ea	$151.45ea	$134.31ea
70%	6ftx50m	$203.96ea	$182.91ea	$161.24ea

Tree Shelters

Size	No. per Bale	$ per Shelter 1 - 500	$ per Shelter 500+
4.5ft x 12ft	50	$4.76	$4.12
4.5ft x 14ft	50	$5.51	$4.80
4.5ft x 16ft	50	$6.30	$5.29

2.25.13 Electrical Fencing Components

(i) Electric Fence Energisers

Mains: 230-240 V A.C.

G305 Gallagher BEV 3	$220.00
G310 Mains/Battery	$209.00
G316 Gallagher Super 60	$315.80
G320 Power 260 Mains	$525.00
G326 Gallagher M.P.E. 2	$132.00
G341 Gallagher E12 Battery (12V)	$119.60
G361 Gallagher KM 2	$ 99.00
G355 Gallagher E8 Strip Grazer	$117.00
Pel P200 Mains Super High Power Energiser	$379.50
P100 Mains Super Power Energiser	$275.00
P9 Battery	$ 89.65
Stafix 240V	$195.00-$430.00

Cyclone Pulser Energizers -	
M60 main operated	265.00
M30 main operated	170.00
MB4 stripgrazer - battery operated	95.00

(ii) Energiser Replacement Modules and Parts

Module prices are less 50% if old modules returned.

G401 Gallagher Module BEV II	$ 51.60
G410 Module Mains Battery	$ 99.50
G415 Gallagher Module Super 60	$103.94
G420 Module Power 260	$185.00
G425 Gallagher Module MPE	$ 44.25
G441 Gallagher Module E12 MK III	$ 54.44
G461 Gallagher Module KM2	$ 49.44
G473 Gallagher Battery Plate KM2	$ 7.39
G431 Gallagher Module Super battery	$121.84
G445 Gallagher Module SP50	$118.00
G455 Gallagher Module E8 Strip Grazer	49.76
G465 Gallagher Module SP5	$ 93.00
G475 Gallagher SP50 Solar Panel 32 Watt	$1080.00
Stafix Replacement Modules	$42.10-$89.00
Cyclone Replacement Modules -	
Pulser M60	$81.75
Pulser M30	$68.99

(iii) Earth Stakes

Cyclone 1.83m x 25mm Galvanised pipe drilled complete with bolts, nuts & washers (sets of 3)	$29.73

(iv) Electric Fence Accessories
There is a wide range of products and parts available, not all of them are included here.

Testers Batteries and Tools

G503 Gallagher Digital Voltmeter	$ 89.00
Cyclone Digital Voltmeter	$ 79.95
G518 Battery SP50 Low Lose 12 Volt	$168.57
G534 Driver for Insultimber Deer Post	$ 72.80
Gallagher Automatic Remote Monitor	
G550 Systems (ARMS) 4 channel	$788.00
G556 1 channel	$490.00
Extra Channel 8 Responders (Nummate Colour)	$ 98.75
G604 Gallagher Flood Gate Controller/ Energy Limiter	$ 11.57
STC Transformer 1.0 KVA	$102.50
1.5 KVA	$145.00
2.0 KVA	$160.00
G613 Wire joint Sealing Compound (per tube)	$ 3.48
30 Amp Cutout fuses	$ 8.32
G605 Flexible connector (with leads and bolt)	$ 1.05
G608 Cut-out switch	$ 5.90
G525 Gallagher Tool Kit	$ 61.10
G501 Neon Fence Tester	$ 15.04
G523 Wire twisting tool	$ 4.25
Cyclone Insulfibre Outriggers (Packets 100 plus 100 clips)	
300mm x 9mm Pointed one end	$ 70.00
300mm x 9mm Plain both ends	$ 55.00

(v) Insulators

G651 Bobbin Type B	$0.21
G672 Wooden Post WP	$0.38
G673 Wooden Post	$0.19
G677 Strain Type S	$0.36
Waikato Fence Breaker (spring loaded)	$3.30
Wang-on Permanent PK300	$0.50
Pel Strain Insulators	$0.34-$0.64
Insultube Insulators	$0.04-$0.08
Stand Off Insulators	$0.76-$0.81
Steel Y-Post Insulators	$0.23
Wooden Post Insulator	$0.15-$0.25

(vi) Electric Fence Wire, Cable and Netting

'Livestrand' 200 m	$10.35
Stafix 'Livestrand' 350 m reel	$18.12
500 m	$25.54
Hottape 200 m reel	$17.57
'Spark' 200 m	$ 6.75
500 m	$16.85
Waikato Poliwire 200 m	$10.76
Watchdog 500 m	$25.62
Watchdog 6 strand 500 m	P.O.A.
Watchdog 5 undergate cable 1.6 mm double insulated 50m	$16.40
100m	$32.65
Watchdog 5 undergate cable 2.5 mm single insulated 50m	$23.54
Stafix Heavy Duty Underground cable 100 m	$37.00
G609 Gallagher Galvanised Undergate Cable double Insulated 100 m	$37.00
Cyclone Undergate Cable double insulated 100m	$32.00
'Flexinet' 50 yard (45.7 m)	$85.90
G612 Gallagher Aluminium lead-out wire 3.15 mm (1100 mm)	$335.00
G625 Fence Tensioner	$ 10.35
G620 Polywire (6 strand) 500 m	$ 32.63
G621 Polywire (6 strand) 200 m	$ 13.10
G628 Gallagher Flood Gate Chain 12 g (100 m)	$123.00
G629 Flood gate chain 9 g (100 m)	$209.50
G640 Spring Gate with Handle and Insulator	$ 8.80

Cyclone Twinlock Hinge, Joint Field Fence, Electric			
5 line	525 mm	300 mm	$73.94/100m

(vii) Electric Fence Standards

Cyclone Insulfibre Y Posts 1.2m - 50 with 200 clips	$199.00
Intermediate Posts 1.2m - 100 with 400 clips	$195.00
Dropper Posts 850mm - 100 with 400 clips	$135.00

Extra Clips (packets of 100)	
Y Post Clips	$ 9.00
Intermediate Post	$ 8.00
Dropper Post	$ 10.00

'Stafix' 10 mm Rod	$ 1.78
12 mm Rod	$ 2.25
Yates Type Pigtail	P.O.A.
Standard H Hi-Tensile	$ 2.23
Pel Pigtail (Hurricane)	$ 1.96

(viii) Electric Fence Reels

'Stafix' Self Insulated Reel	$ 16.10
'Stafix' Fence-Mounted Mini Reel	$ 13.17
Reel Assembly including Bracket and Insulator	$ 12.58

'Insultimber' - Gallagher	
G729 Semi-permanent post	$ 3.70
G749 Droppers	$ 2.18
G734 Permanent posts	$ 4.80
G742 Deer posts	$ 8.76
G756 Cyclone Tie Downs	$ 1.42
G744 Cyclone Rabbit Fence Post	$ 1.42

2.25.14 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. 10% variation.

(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. $24-$25 per 20 m.

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

(iii) Contract Post Driving

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

2.25.15 Guide to Fencing Costs (1985)

(i) Standard Sheep/Cattle Fence for Flat to Rolling Country

Spacings: Posts, 4m apart
Droppers, 4 between each post
Strainer every 400 metres

A. Fence design with 8 2.5mm + 1.7 wires

Materials Required for 400 metres

Posts 100-125mm x 1.8m	
100 at $ 4.72	$472.00
Droppers 50 x 50mm x 1.0m	
400 at $ 0.75	$300.00
Strainers 200mm x 2.1m	
2 at $13.65	$ 27.30
Stays 75 x 100 x 2.7m	
2 at $ 6.81	$ 13.62
2.5mm H.T. wire	
3200m at $0.06/m	$192.00
Gate 3.6m	$ 63.47
	$1068.39 per 400 metres

Cost per metre = $2.67

B. Fence design with 7.25mm wires and 15mm barb.

Materials Required for 400 metres

Posts	$472.00
Droppers	$300.00
Strainers	$ 27.00
Stays	$ 13.62
2.5m H.T. wire 2800 at 0.06/m	$168.00
15mm Barb 400 m $0.20/m	$ 78.00
Gate 3.6m	$ 63.47
	$1122.09 per 400 metres

Cost per metre = $2.81

(ii) Deer Fence - boundary fence for flat to rolling country

Spacings: Posts, every 5 metres
Strainers, every 200 metres

A) Materials Required for 400 metres

Stockman Posts 2.7m	
80 at $6.42	$ 513.60
Stockman strainers 2.7m	
3 at $17.50	$ 52.50

Stockman stays 2.7m	
3 at $9.70	$ 20.10
2.5mm H.T. wire	
1200m at $0.06/m	$ 72.00
150m x 1900m netting	
400m at $323.14	$1292.56
Gate 3.66 x 1900mm	$ 129.16
Staples	
400m at $0.20/m	$ 80.00
	$2168.92 per 400 metres

B) Internal Deer Fencing

Fence Design 1.
Six wire electric, no netting

Spacings: Flat country, posts up to 30 metres
droppers up to 8 metres

Tie downs: where necessary, tie downs should be constructed using droppers rather than posts. This will reduce costs and maintain a degree of flexibility in the fence.

Materials Required for 1000 metres

Stockman posts	
33 at $6.42	$211.86
Stockman droppers	
100 at $3.16	$316.00
Procelain stain insulators	
18 at $0.91	$ 16.38
Joint Clamps	
6 at $0.44	$ 2.64
Cut-out switch	
1 at $7.76	$ 7.76
Strainers	
3 at $17.50	$ 52.50
Stays	
3 at $9.70	$ 29.10
2.5mm H.T. wire	
9.4 coils at $35.81	$336.61
	$972.85

Cost per metre = $0.97

Fence Design 2.
Consists of 3 live wires above a cyclone 600m 7 line netting.

The netting provides an excellent physical barrier for young stock and yet the fence is still inexpensive and quick to erect.

Spacings: same as for the above fence.

Materials required for 1000 metres

Stockman posts	
33 at $6.42	$211.86
Stockman droppers	
100 at $3.16	$316.00
Procelain strain insulators	
9 at $1.19	$ 8.19
Joint clamps	
3 at $0.44	$ 1.32
Cut-out switch	
1 at $7.76	$ 7.76
Strainer posts	
3 at $17.50	$ 52.50
Stays	
3 at $9.70	$ 29.10
2.5mm H.T. wire	
47 coils at $35.81	$168.31
Cyclone netting (600mm 7 line T/L)	
10 coils at $110.83	$1,108.30
	$1,903.34

Cost per metre = $1.90

2.26 WATER SUPPLY

2.26.1 Polythene Piping

New World Products

Size	Standard/100m Low Density		High Density/ 100 m	
15mm	PSI 125	$42.00	PSI 173	$41.00
20mm	115	$81.00	173	$89.00
25mm	90	$105.00	130	$111.00
32mm	75	$129.00	130	$156.00
40mm	70	$152.00	130	$213.00
50mm	55	$208.00	130	$396.00

2.26.2 P.V.C. Pressure Pipe

AHI Garnite.
Gold Ribbon High Density Polythene (HDPE) Pipe
NZS 7602. Price per 100 metres.

Pressure Classes and Colour Code

	Class B 60m head	Class C 90m head	Class D 120m head	Class E 150m head
	87 psi 600 kPa Red	130 psi 900 kPa Blue	174 psi 1200 kPa Green	217 psi 1500 kPa
Nominal Diameter				
80 mm	$405.82	$493.28		
100 mm	$626.02	$783.28		
125 mm	$854.76	$1221.04		
150 mm	$1246.70	$1756.64		
200 mm	$1858.98	$1756.64		
		$2710.14		

32 mm	$147.18	15 mm	$ 56.63
40 mm	$188.36	20 mm	$ 79.85
50 mm	$290.19	25 mm	$114.09
65 mm	$458.50	32 mm	$173.90
80 mm	$1065.52	40 mm	$221.51
100 mm	$1581.03	50 mm	$361.18
150 mm	$2305.82		

Garnite S'Lon PVC Pipe Fitting

Cat. No.	Description	Size mm	Trade Price
	Faucet Adaptor (Spigot to Female BSP thread)	15 x 15	0.90
		20 x 15	0.95
		20 x 20	1.00
		25 x 20	1.05
		25 x 25	1.09
		through to	
		100 x 80	10.64
P.G. 905	Tee	15	$ 0.75
		20	$ 1.12
		25	$ 2.13
		32	$ 3.00
		40	$ 3.92
		50	$ 6.77
	Elbow 1.14m	15	$ 0.64
		20	$ 0.80
		25	$ 1.06
		32	$ 1.96
		40	$ 2.27
		50	$ 3.64
		65	$ 8.56
		80	$ 9.77
		100	$15.96

90^{o} Elbow	15	$ 0.57
	20	$ 0.94
	25	$ 1.37
	32	$ 2.21
	40	$ 2.96
	50	$ 4.15
Reducing Socket	20 x 15	$ 0.78
	25 x 20	$ 0.96
	32 x 25	$ 1.53
	40 x 20	$ 1.69
	40 x 32	$ 1.97
	50 x 40	$ 2.90
Reducing Bush	20 x 15	$ 0.38
	25 x 20	$ 0.63
	32 X 25	$ 0.80
	40 X 25	$ 1.17
	40 x 32	$ 1.25
	50 x 25	$ 1.80
	50 x 40	$ 1.89

2.26.3 Concrete Water Troughs

McKendry's

1137 litres	round	$97.60
910 litres	round	$90.00
546 litres	long	$90.00
455 litres	round	$68.00
318 litres	long	$70.00
273 litres	long	$60.00
182 litres	round	$57.00
182 litres	long	$57.00

Humes

320 litres	circular	$68.98
500 litres	circular	$74.74
300 litres	rectangular	$73.76
410 litres	rectangular	$87.80

2.26.4 Concrete Tanks

McKendry's

Capacity	Diameter	Height	Weight	Price
25025 litres	3.50 m	3.20 m	8.13 tonnes	$1,395.00
13650 litres	2.82 m	2.89 m	4.06 tonnes	$ 925.00
9100 litres	2.54 m	2.58 m	3.05 tonnes	$ 775.00
4450 litres	1.8 m	2.1 m	1.27 tonnes	$ 540.00
2960 litres	1.8 m	1.4 m	1.12 tonnes	$ 460.00
1820 litres	1.42 m	1.3 m	0.81 tonne	$ 330.00

Humes

Capacity	Dimensions	Plain	Painted
11250 litres	2.7 x 2.76	$660.00	$726.00
9000 litres	2.7 x 2.31	$625.00	$685.00
6750 litres	2.13 x 2.75	$570.00	$620.00
4500 litres	2.13 x 2.31	$537.00	$577.00
3375 litres	2.13 x 1.53	$425.00	$465.00
2250 litres	1.80 x 1.53	$335.00	$375.00

2.26.5 Valves and Floats

Fullflow 69	19 mm standard valve	$ 16.88
Jobe	19 mm trough valve	$ 16.88
	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	$ 16.88
	- top intake	$ 16.88
Hi Low	15 mm x 220 mm trough valve	$ 10.36
	15 mm x 225 mm	$ 11.30
Humes	Ball float and value	
	- straight arm	$ 13.50
	Ball float and value - bent arm	$ 14.00
	Jobe value	$ 14.64
	Ball-O-Fix valve	$ 10.50

2.26.6 Pumps

(i) Piston Pumps (Davies B Series and RO 75)

B1 standard 23 litres per minute	$485.00
B1LP Low 30 litres per minute	$496.00
B1HP High 15 litres per minute	$505.00
B1 HPBF Boiler feed 15 litres per minute	$568.00
B2 B1 less vee drive	$429.00
B3 B2 less motor bracket	$406.00
B4 B3 less base	$390.00

Pressure systems for the above vary in cost from $914.00 to $2124.00 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	$ 998.00

	C1 HP High Pressure 23 litres per minute	$1019.00
	C1HPBF Boiler feed 23 litres per minute	$1070.00
	C12 Low pressure 57 litres per minute	$ 998.00
	C2 C1 less Vee Drive and Motor Bracket	$ 908.00
	C3 C1 less Vee Drive	$ 939.00
	Pressure systems for the above vary in cost from $1480.00 to $2261.00 depending on tank size (246 to 492 litres) and pressure (690 to 1380 k Pa).	
(iii)	Deep Well Gearing (Davies D. Series)	
	D1 8" stroke with 2" gland assay	$1352.00
	D2 D1 less motor bracket and vee drive	$1237.00
	D3 D1 less vee drive	$1270.00
	DE1 6" stroke with 2" assay	$1070.00
	Pressure systems for the above vary from $1584 to $2083 depending on tank size (164 to 492 litres). Pressure is 690 k Pa.	
(iv)	Hand Pumps (Davies L. Series)	
	L1.25 Double acting 1.25" bore	$314.00
(v)	Hydraulic Water Rams (Davies)	
	Ram 3	$415.00
	Ram 5	$569.00
(vi)	Centrifugal Pumps (Davies K Series)	
	Motorised	
	K .16 BSP .12 kW 2 pole single phase 230 volt	$311.00
	K .33 B .25 kW 2 pole three phase 400 volt	$381.00
	K .75 BSPGM .68 Kw 2 pole single phase 230 volt	$510.00
	K .75 BGM .55 kW 2 pole three phase 400 volt	$510.00
	K1 .25 BSP GM .93 kW 2 pole single phase 230 volt	$527.00
	K2 B DV 1.50 kW 2 pole single phase 230/460 DV	$731.00
	K3B GM 2.20 kW 2 pole three phase 400 volt	$739.00
	K3B DV 2.20 kW 2 pole single phase 230/460 DV	$1166.00
	K5B 3.70 kW 4 pole three phase 400 volt	$1795.00
	K75B 5.50 kW 4 pole three phase 400 volt	$1863.00
	KH5B 3.70 kW 2 pole three phase 400 volt	$1170.00

K10B 7.3 kW 4 pole three phase 400 volt	$2883.00
KH75B 5.50 kW 2 pole three phase 400 volt	$1782.00
K15B 11 kW 4 pole three phase 400 volt	$3777.00
KH15B 11kW 2 pole 400 volt three phase	$3198.00
KH20B 15.00 kW 2 pole three phase 400 volt	$3471.00

D. McL. Wallace

Gnome	
.50" Gnome with .16 h.p. 1 phase motor	$345.00
Uni	
.75 h.p. with .75" delivery 1" suction 1 phase motor	$423.00
.75 h.p. 1 phase motor and 33 gallon pressure unit	$937.00
.75 h.p. Mini Kush-on pressure unit	$608.00
2 h.p. with 1" delivery and 1.25" suction 3 phase motor	$595.00
3 h.p. with 1.25" delivery and 1.50" suction 3 phase motor	$625.00
5.5 h.p. with 2" delivery and 2.50" suction 3 phase motor	$1095.00
7.5 h.p. with 2.50" delivery and 3" suction 3 phase motor	$1383.00

(vii) Self-Priming Centrifugal Pumps (Davies SP Series) Engine Driven

SPE2/40 (AL) BS Aluminium (2.98 kW 4 stroke Briggs and Stratton petrol engine)	$752.00
SPE2/40 (CI) B5 cast iron (4 stroke Briggs and Stratton petrol engine)	$685.00
SPE2/50 (AL) BS Aluminium (3.37 kW 4 stroke Briggs and Stratton petrol engine)	$798.00
SPE2/50 (CI) BS Cast Iron (3.73 kW 4 stroke Briggs and Stratton petrol engine)	$731.00
SPEPT Portable Trolley with cushion tyres for above models	$185.00
Motorised	
SKP .75 BSP .68 kW 2 pole 230 volt single phase	$523.00
SPK .75 B .55 kW 2 pole 400 volt three phase	$523.00
SPK 1.25 BSP .93 kW 2 pole 230 volt single phase	$598.00

SPK 1.25 B .93 kW pole 400 volt three phase	$594.00
SPK .75 BSPGM .68 kW 2 pole single phase gunmetal	$640.00
SPK .75 BGM .55 kW 2 pole 400 volt three phase gunmetal	$640.00
SPK 1.25 BGM .93 kW 2 pole 400 volt three phase gunmetal	$739.00
SPK .75 BSP .68 kW 230 pole 230 volt single phase	$523.00
SPK 1.25 BSPGM .93 kW 2 pole 230 volt single phase gunmetal	$743.00

2.27 FARM MACHINERY

2.27.1 Tractors

(i) Ford:

1210 4 W.D.	$10,210.00
1910 2 W.D.	$12,732.00
1910 4 W.D.	$14,838.00
2110 4 W.D.	$18,397.00
3910 2 W.D.	$20,620.00
3910 4 W.D.	$26,550.00
4110 2 W.D.	$22,500.00
4110 4 W.D.	$28,289.00
4110 Narrow Orchard 2 W.D.	$23,500.00
4610 2 W.D.	$24,679.00
4610 4 W.D.	$31,142.00
5610 2 W.D.	$28,500.00
5610 4 W.D.	$34,550.00
5610 4 W.D. Ford Q Cab	$38,689.00
6610 2 W.D.	$30,822.00
6610 4 W.D.	$37,183.00
7610 2 W.D.	$33,130.00
7710 2 W.D.	$49,775.00
7710 4 W.D. Ford Q Cab	$55,434.00
TW25 Built Up 2 W.D.	$80,350.00
TW25 Built Up 4 W.D.	$88,100.00

(ii) International Harvester

Model			2 WD	4 WD
383	30.0 kW	(40 h.p.)	$17,336	$20,359
483	34.5 kW	(46 h.p.)	$19,662	$22,247
485 Std	40.5 kW	(54 h.p.)	$19,846	-
485 TA	40.5 kW	(54 h.p.)	$20,562	$26,500
485 TAXL	40.5 kW	(54 h.p.)	$27,675	-
585 TA	46.5 kW	(62 h.p.)	$23,021	$29,411

585 TAXL	46.5 kW	(62 h.p.)	$30,069	$36,506
685 TA	54.0 kW	(72 h.p.)	$25,769	$32,134
685 TAXL	54.0 kW	(72 h.p.)	$32,658	$39,333
785 TA	60.0 kW	(80 h.p.)	$28,440	$35,027
785 TAXL	60.0 kW	(80 h.p.)	$35,300	$42,086
TURBO 85		(71 PTO h.p.)	$27,812	$34,230
TURBO 85 XL		(71 PTO h.p.)	$34,859	$41,370
956 XL	71.25 kW	(95 h.p.)	$50,335	$57,392
856 XL	63.75 kW	(85 h.p.)	$41,581	$48,428
1255 XL	93.75 kW	(125 h.p.)	$65,133	$72,547
1455 XL	108.75 kW	(145 h.p.)	-	$82,405

NOTE: XL = Factory Fitted Cab

5088 TA	(160 h.p.)	$105,122	-
5288	(162.60 PTO hp)	$108,978	$124,212

(iii) Massey Ferguson

MF 240 8 sp P/S	36 kW (48 h.p.)	$19,075.00
240 Orchard		$18,879.00
240 Vineyard		$19,446.00
MF 254/4 Hyd. P/S		$26,554.00
MF 265 8 speed	46.5 kW (62 h.p.)	$21,841.00
MF 265 12 Speed Synchro P/S	44 kW (63 h.p.)	$24,879.00
MF 265 2 W.D.		$21,901.00
MF 265 4 W.D.		$25,089.00
MF 290 12 speed	57.3 kW (80 h.p.)	$30,072.00
MF 275/4		$30,632.00
MF 290/4		$35,627.00
MF 290 2 W.D.		$29,612.00
MF 675/2 MPT		$36,293.00
MF 675 4 W.D.		$40,646.00
MF 690/2 MPT		$42,956.00
MF 690 4 W.D.		$45,412.00
MF 698/2		$43,421.00
MF 698/2 Turbo		$45,019.00
MF 698/4 W.D.		$52,132.00
MF 699/4 W.D.		$66,329.00
MF 2640/2		TBA
MF 2640/4		$64,950.00
MF 2680 2 W.D. cab	93.5 kW (126 h.p.)	$62,595.00
MF 2680 4 W.D. cab	93.5 kW (126 h.p.)	$69,818.00
MF 2720 4 W.D. cab		$78,278.00

Safety frames on non cab tractors = $422.00

(iv) Zetor

Model	kW	H.p.	WD	Price
6011	44.1	60	2	$15,327.00
6045	44.1	60	4	$18,415.00
7011	51.4	70	2	$17,018.00
7045	51.4	70	4	$20,015.00
8011Q	58.8	80	2	$23,851.00
8045Q	58.8	80	4	$28,989.00
10011Q	73.5	100	2	$23,077.00
12011Q	88.2	120	2	$30,781.00
12045Q	88.2	120	4	$37,964.00

(viii) Kubota
Prices do not include weight

B7100 DP	$ 6,838.00
B7100 DPT	$ 6,838.00
B7100 HST DP	$ 7,993.00
B7100 Std HST DP	$ 8,102.00
B8200 DP	$ 8,825.00
B8200 DPT	$ 9,214.00
B8200 HST DP	$10,426.00
B8200 HST DPT	$10,567.00
B405 FP OC	TBA
B405 DT OC	TBA
L305-DT	$11,941.00
L405-FP	$14,833.00
L405-DT	$15,910.00
M4050-FP	$18,400.00
M4050-DT	$21,007.00
M4950-FP	$20,982.00
M4950-DT	$25,987.00
M5950-FP	$24,010.00
M5950-DT	$29,170.00
M6950-FP	$27,841.00
M6950-DT	$32,153.00
M7950-FP	$30,213.00
M7950-DT	$34,192.00
'B' Series Front Weights	$ 169.00
'L' Series Front Weights	$ 282.00
'M' Series Front Weights	$ 452.00
'M' Series Agric. Radio	$ 209.00
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
Rollamasta Safety Frame (B7100)	$ 310.00

(vi) Belarus

611	52.2 kW 2 WD	$16,500.00
720	52.2 kW 4 WD	$25,500.00
902	67.1 kW 2 WD	$25,500.00
920	67.1 kW 4 WD	$29,500.00

Safety frames are extra on the above models.

(vii) Hinomoto Vinemaster

BT E384F	Vinemaster 40 H.P. 4 WD Orchard Tractor - lowered and re-geared to maintain standard road speed	$18,790.00	$21,655.00
BT E384S	Vinemaster - Standard 40 H.P. 2 WD Orchard Tractor Safety Frame for E382/4 models	$ 372.25	$ 385.00

(viii) John Deere

JD 1040	50 h.p.		$20,911
JD 1040	50 h.p.	MFWD	$26,172
JD 1140	59 h.p.		$22,669
JD 1140	59 h.p.	MFWD	$28,536
JD 1640	54 h.p.		$24,962
JD 1640	54 h.p.	MFWD	$32,134
JD 1640	54 h.p.	Factory Cab	$33,154
JD 1640	54 h.p.	Factory Cab MFWD	$38,491
JD 2040S	79 h.p.		$29,624
JD 2040S	79 h.p.	MFWD	$34,991
JD 2040S	79 h.p.	Factory Cab	$36,373
JD 2040S	79 h.p.	Factory Cab MFWD	$41,713
JD 2140	90 h.p.		$32,052
JD 2140	90 h.p.	MFWD	$38,062
JD 2140	90 h.p.	Factory Cab	$37,558
JD 2140	90 h.p.	Factory Cab MFWD	$43,346
JD 3140	106 h.p.	Factory Cab	$49,541
JD 3140	106 h.p.	Factory Cab MFWD	$56,728
JD 950	33 h.p.		$12,120
JD 950	33 h.p.	MFWD	$14,030
JD 1050	39 h.p.		$14,025
JD 1050	39 h.p.	MFWD	$15,980

(ix) Fiat

Model	HP	P/S	Price
45-66DT	45	STD	$23,500
55-66	55	STD	$23,251
55-66DT	55	STD	$26,543
60-66	60	STD	$25,095
60-66DT	60	STD	$28,352
70-66	70	STD	$26,822
70-66DT	70	STD	$30,495
	90 Series HP Cab	STD	
55-90DT	55		$38,625
60-90DT	60		$40,117
70-90DT	70		$44,387
80-90DT	80		$45,481
90-90DT	90		$51,023
100-90DT	100		$55,555
115-90DT	115		NA
130-90DT	130		NA
140-90DT	140		$82,000
		Factory Duals	$90,000
160-90DT	160		$92,800
		Factory Duals	$99,000
180-90DT	180	Duals Std.	$108,000

(x) Mitsubishi

New Series

MT 180 D	18 h.p. 4 WD	$ 9,640.00
MT 180 HD	18 h.p. 4 WD Hydro static drive	$10,495.00
MT 300	30 h.p. 2 WD live PTO power steering	$12,145.00
MT 300 D	30 h.p. 4 WD live PTO power steering	$12,695.00
MT 300	30 h.p. 2 WD Orchardised	$12,950.00
MT 450 L	45 h.p. 2 WD Orchardised	$17,995.00
MT 450 ID	45 h.p. 2 WD Orchardised	$19,995.00
MT 450 ID		$18,450.00

Andrews and Beaven

Safety Frames	$ 350.00
Suitcase Weight (20 kg)	$ 49,50
Turf Tyre Option	$ 200.00

(xi) Holder

A50 H Tractor Standard	$26,608.00
A50 H Tractor and Wheel Option 10.5/80 x 18 Tyres and Rims	$ 1,350.00
A60 Forestry Skidder Complete	$46,137.00
A60 Tractor Turb charged	$36,285.00
Custom cab	$ 1,500.00
C500 Municipal Tractor	$38,720.00
Power Brush Attachment	$ 5,707.00

(xii) Moller

Power pony

PP 16T	11.9 kW c/w Lift Lever Turf Tyres	$ 4,882.00

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

(xiii) Universal

Model	Tyre Sizes Front	Rear	Price
U530	600 x 16	13 x 28	$12,250.00
U530 DTC	750 x 20	13 x 28	$15,200.00
U550 2 WD			$12,750.00
U550 V	500 x 15	10 x 28	$14,400.00
U550 LC		400-15.5 L15 x 12.5	$14,900.00
U640	600 x 16	13 x 28	$13,600.00
U640 DTC	750 x 20	13 x 28	$15,750.00
	14 x 28	9.5 x 20	$16,980.00
Type U Safety Frame Included in price except Vineyard			$ 250.00

(xiv) Yanmar

YM 14 2 WD		Turf Tyres	$ 5,950
YM 186D 4 WD	7.6 kW	AG Tyres	$10,150
YM 226 2 WD	16.5 kW	AG Tyres	$ 8,750
YM 336D 4 WD	24.2 kW	AG Tyres	$12,250

YM 186/226 Front PTO Kit	$ 386.00
Yanmar Suitcase Weight (20 kg)	$ 49.50
Yanmar Turf Tyre Option	$ 200.00
Mower YM14, 1.016 m Cut	$2,275.00

336	Safety Frame	$ 350

2.27.2 Crawlers

Universal

445 S	Less blade	$20,689.00
445 S	With Pearson blade	$25,889.00
640 SM	Less blade	$22,412.00
640 SM	With Pearson blade	$27,612.00

Fiat

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

2.27.3 Trucks

(i) Nissan/Datsun

Datsun Utility		
	1 tonne, cab and chassis - petrol	$14,213
	- diesel	$15,335
	Half tonne well side deck	$ 9,810
	dropside deck (extra)	$ 980
	wellside deck (extra)	$ 1,400
Nissan Petrol		
	4 WD, cab and chassis	$17,195
	Nissan Patrol Petrol, Cab & chassis	$21,900
	Diesel, Cab & chassis	$24,200

(ii) Mazda

B1600 LWB	1 tonne, cab and chassis	$13,695
	pickup	$15,094
B2000 Limited	Petrol, LWB, cab and chassis	$15,295
	pickup	$16,795
B2200 Diesel	1 tonne, cab and chassis (5 speed)	$16,595
	pickup	$17,995

(iii) Land Rover

SWB	Pick-up Petrol	$19,166
SWB	Hard Top (petrol)	$20,364
LWB	Cab & chassis, petrol	$21,819
	Chassis & cab, V8, Petrol	$22,776
110	4 Cylinder Cab and Chassis	$25,493

(iv) Toyota

Land cruiser	Hard top - petrol	$27,000
	- diesel	$29,750

Land cruiser	L.W.B., cab & chassis - petrol	$25,000
	- diesel	$27,750
Dyna	2 tonne - petrol	$14,750
	3 tonne - diesel	$17,300
Hi-Lux	2.4 litre diesel cab & chassis	$17,175
	Light ace van 1.3	$18,995
	2.0 litre cab & chassis	$15,395
	2.0 litre 4 WD - petrol, cab & chassis	$20,500
	4 WD diesel cab & chassis	$22,450
Hi-Ace	1 tonne van, 2.0 litre, Petrol	$21,995

Note: Ute and Flat deck Trucks Available on enquiry only

(v) Mitsubishi

Model		
GV3M48	Express Van - 1600cc	$17,298
GV7M48	Express Van - 2000cc	$18,217
L026PNSR5	2000cc Petrol w/side	$16,041
L026PNSR5	2000cc Petrol c/cab	$14,466
L026GFSR5	2000cc Petrol 4 WD w/side	$21,364
L026GFSR5	2000cc Petrol 4 WD c/cab	$19,789
L026GNSR5	2300cc Diesel 4 WD w/cab	$23,797
L026GNSR5	2300cc Diesel 4 WD c/cab	$22,222
L026PNUR5	2000cc Sport	$17,789
L032PYR4	1600cc c/cab	$14,222
L032VNR4	1600cc Van	$17,833
L065VQNR4	1800cc H/top van	$19,786
L032WHNR4	1600cc Starwagon	$21,326
L037GNFR4	2000cc 4 x 4 Van	$26,287

Note: Additional Cost

L026PN54	F21 Trim	$ 90.00
L065VQNR4	1800cc H/top Van (10 seats)	$1,290.00

(vi) Daihatsu Diesel

1.5-2 tonne	$17,995
1.5 tonne double cab	$21,895
2 tonne low loader	$18,395
3-4 tonne wide cab	$22,995
2 tonne high roof van	$29,995
2 tonne low roof van	$27,995
680 kg HiJet van (petrol)	$11,795
680 kg HiJet Van High Roof	$12,295

(vii) Suzuki

SJ 4 x 4 chassis	$12,500
SJ 4 x 4 Rag Top	$12,800
SJ 4 x 4 Van	$13,100
SS80C (Commercial)	$ 9,200
SS80G (2 door hatchback)	$10,950
SS80F (4 door hatchwindow)	$11,550
SS80F Automatic	$10,480
ST90V	$11,970
ST90VT (hi-top van)	$12,070
ST90K	$ 9,950

(viii) Holden

Rodeo utility petrol	$13,420
Rodeo Utility petrol 4 x 2	$14,414
Rodeo Utility petrol 4 x 4	$18,925
Jackaroo	$26,206

(ix) Isuzu

NKR 552 diesel	$18,700
NKR 575 3 tonne	$20,920
NPR 575 3.5-4 tonne	$23,245

2.27.4 Farm Bikes
Minimum of one-third deposit on all new bikes

(i) Yamaha

	Retail
AG100N	$2,498
AG175N	$2,925
AG200N Three Wheeler	$3,489
YTM200ER Four Wheeler	$4,399
YFM200N	$5,330

(ii) Kawasaki

KV250A3	$3550
KLF185 Four Wheeler	P.O.A.
KLF300 Four Wheeler	P.O.A.

(iii) Suzuki

LT125 4 wheeler 4 stroke 5FWD gears, 1 reverse	$3,590
LT185TC	$4,490
LT230GEFF	$5,590

LT250EFF	$5,490
TS185 ER 2 stroke	$2,195
DF125D 4 stroke	$4,298

(iv) Honda

CT110A	$2,399
CT200	$3,289
CT185	$3,132
ATC125ME	$3,149
ATC200C	$4,967
ATC250ESF	$5,370

(v) Donalds

Deluxe farm bike trailer 6.5" wide wheels	$ 591
Deluxe farm bike trailer 9.5" wide wheels	$ 661
Deluxe farm bike trailer crate	$ 148

2.27.5 Ploughs

(i) Duncan

535 mounted	3 furrow c/w landwheel	$2,819
	4 furrow c/w landwheel	$3,275
560 semi-trailed	5 furrow c/w hydraulic ram	$6,550
	6 furrow c/w D/A ram & hoses	$7,469
	7 furrow c/w D/A ram & hoses & front furrow wheel	$8,663

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

Optional extras:
Extra furrow assembly $744

(ii) Clough

	Number of furrows 2	3	4	5	6
840 standard 30 or 35cm Furrows Landwheel - deduct $115 if not required	$1783	$2399	$2996		
841 Series Heavy Duty 30, 35 or 40 cm Furrows landwheel - deduct $115 if not required	$1939	$2637	$3252		

842 Series Shear Leg				
33 or 38 cm Furrows	$1966	$2746	$3362	
Landwheel - deduct $115 if not required				
850 Semi-mounted				
30, 32 or 35 cm Furrows		$3537	$4166	$5123 $6278
30, 32.5, 35, 40 cm Furrows (Heavy Duty Framed)		$3804	$4500	$5581 $6795
860 tunnel plough	$1121			

2.27.6 Mole Drain Ploughs

Belgrave Trailing	$454.00
Three point linkage	$543.00
Combination	$616.00
Alkathene sowing attachment 25 mm diameter	$ 42.50
Alkathene sowing blade, 3 pt linkage model	$1,024.00
with adjustable spool holder	$1,178.00
Alkathene sowing plough, trailing model	$1,605.00
with adjustable spool holder	$1,756.00
Roller, slicer for mole plough	$131.00

2.27.7 Chisel Ploughs and Subsoilers

(i) Clough

950 Goliath Chisel plough/cultivator	
7 tine	$2,962
9 tine	$3,350
11 tine	$3,895
13 tine	$4,262
15 tine	$4,955
(Standard) 600 x 13 pneumatic wheels per pair	$ 965
(Heavy Duty) 750 x 16 pnematic wheels per pair	$1,389

(ii) Aitchison

Chisel Ploughs and Subsoilers

		No. Tines	No. Tool Bars		
Frame Size	1.17 m 'Single Subsoiler'	1	2	$1,168	$1,268
	1.98 m Low Draft	4	2	$1,960	$2,060
	1.98 m Cushion	3	2	$1,685	$1,785
	1.98 m Cushion	4	2	$2,028	$2,128
	1.98 m 'Double Subsoiler	2	-	$1,996	$2,096
	2.44 m Low Draft	4	2	$1,973	$2,073
	2.44 m Low Draft	5		$2,293	$2,399
	2.44 m Cushion	4		$2,041	$2,141
	2.44 m Cushion	5		$2,384	$2,484

Superlow Chisel Plough

Frame size	1.98 m, 2 tool bars		
	3 Low Draft Tines	$1,634	$1,734
	4 Low Draft Tines	$1,960	$2,060
	3 Cushion Tines	$1,685	$1,785
	4 Cushion Tines	$2,085	$2,128
Frame size	2.44 m, 2 tool bars		
	4 Low Draft Tines	$1,973	$2,073
	5 Low Draft Tines	$2,299	$2,399
	4 Cushion Tines	$2,041	$2,141
	5 Cushion Tines	$2,384	$2,484
Frame size	1.98 m, 3 tool bars		
	5 Low Draft Tines	$2,152	$2,302
	7 Low Draft Tines	$2,478	$2,628
	5 Cushion Tines	$2,563	$2,713
	7 Cushion Tines	$3,249	$3,399
Frame size	2.44 m, 3 tool bars		
	7 Low Draft Tines	$3,203	$3,353
	9 Low Draft Tines	$3,855	$4,005
	7 Cushion Tines	$3,322	$3,472
	9 Cushion Tines	$4,008	$4,158
Frame size	3.05 m, 3 tool bars		
	9 Low Draft Tines	$3,990	$3,140
	11 Low Draft Tines	$4,316	$4,466
	9 Cushion Tines	$4,143	$4,293
	11 Cushion Tines	$4,829	$4,979

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

2.27.8 Discs

(i) Reid and Grey

2.7 m Tandem	$3,495.00
3.0 m Tandem	$3,685.00

(ii) Duncan

Standard Century Disc

2.4 m 28 blades plain	T.B.A.
28 blades front scalloped	T.B.A.
all scalloped 28 blades	T.B.A.
2.7 m 32 blades plain	$2,771
32 blades front scalloped	$2,833
all scalloped 32 blades	$2,902
3.0 m ft 36 blades plain	T.B.A.
36 blades front scalloped	T.B.A.
all scalloped 36 blades	T.B.A.

800 Mounted Disc Series

2.1 m 24 blades plain	$2,966
24 blades front scalloped	$3,008
all scalloped 24 blades	$3,049
2.4 m 28 blades plain	$3,061
28 blades front scalloped	$3,112
all scalloped 28 blades	$3,163
2.7 m 32 blades plain	$3,255
32 blades front scalloped	$3,312
all scalloped 32 blades	$3,372

Mitachi Electric Disk Grinders

Model MG180AD 7 inch	$ 285
Model MG100AD 4 inch	$ 117

(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.				

2.27.9 Power Discs

(i) Gallagher

	Width	Recommended Tractor kW (hp)	
A1601 F400 (4 discs)	.99m	15-22 (20-30)	$5,623
A1602 F500 (5 discs)	1.24m	19-26 (25-35)	$5,963
A1603 F700 (7 discs) c/w Weights	1.75m	22-44 (30-60)	$7,015
A1604 F800 (8 discs) c/w Weights	2.01m	37-60 (50-80)	$7,360

Accessories

A1698 F700 Seedbed Attachment	$3,047
A1699 F800 Seedbed Attachment	$3,239
A1696 F700/F800 Spring Rake	$1,401
A1695 15 kg Weights for F700 and F800	$ 45

2.27.10 Cultivators

(i) Duncan

630 Single Bar Cultivator

Factory Number A	Factory Number B		$
207	248	11 Tine, 3.0m (10') frame	$1,654
217	260	13 Tine, 3.0m (10') frame	$1,735
237	284	15 Tine, 3.6m (12') frame	$1,894
262	314	17 Tine, 4.1m (13'6") frame	$2,092

(All models fitted with steel depth wheels as standard)

A	B		
135	162	11 Tine, 3.0m (10') less wheels	$1,080
145	174	13 Tine, 3.0m (10') less wheels	$1,161
165	198	15 Tine, 3.6m (12') less wheels	$1,320
190	228	17 Tine, 4.1m (13'6') less wheels	$1,518

630 2 Bar Cultivator

366	432	17 Tine, 3.5m (11.6') frame	$2,443
484	568	25 Tine, 5.0m (16') frame	$3,228

(All models fitted with pneumatic depth wheels as standard)

Angle Crumbler

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

634 Rotacrumbler

239	318	2.4m (8') 23 Tines c/w crumbler	$1,589
263	351	3.0m (10') 29 Tines c/w crumbler	$1,753
305	407	3.6m (12') 35 Tines c/w crumbler	$2,034
521	694	4.3m (14') 41 Tines c/w folding wings and crumblers	$3,470
576	768	4.9m (16') 47 Tines c/w folding wings and crumblers	$3,839
189	252	2.4m (8') 23 Tines less crumbler	$1,260
205	273	3.0m (10') 29 Tines less crumbler	$1,364
238	317	3.6m (12') 35 Tines less crumbler	$1,585
260	347	4.2m (13.9') 39 Tines less crumbler	$1,735
389	518	4.3m (14') 41 Tines less crumbler	$2,591
417	556	4.9m (16') 47 Tines less crumbler	$2,780

660 Vibroflex Cultivator

304	364	9 Tine - 2.25m	$2,429
451	541	13 Tine - 3.25m heavy duty	$3,609
567	681	17 Tine - 4.25m heavy duty	$4,539
116	140	Wing Assemblies (4 tines) per pair	$ 930

(All models fitted with pneumatic wheels)

(ii) Clough

Standard Frame 925 Mini-Till Models.

		With Crumbler	Less Crumbler
1.6m	13 tine	$1,099	$697
2.1m	17 tine	$1,189	$757
2.6m	19 tine	$1,275	$810

Helper Tines $8.65 extra

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

Folding Wing 920 Maxi-Till	
4.3 m - Tine with crumbler	$3,485
4.9 m - Tine with crumbler	$3,688
5.5 m - Tine with crumbler	$3,833

Helper Tines $8.65 extra
100 mm sweeps $1.15 extra

Fully Trailing Folding Wing 923 Maxi-Till

6.4m	57 tine	) Can be custom built on request
7.6m	69 tine	) if time allows. Price will be
8.8m	81 tine	) quoted at time of enquiry.

Fully Trailing Standard Frame 923 Maxi-Till

		With Crumbler	Less Crumbler
5.5m	54 tine	$ 8,953	$7,318
6.5m	60 tine	$ 9,433	$7,744
7.1m	64 tine	$ 9,613	$7,906
7.7m	70 tine	$ 9,990	$8,234
8.8m	82 tine	$10,490	$8,640

Helper Tines $8.65
100 mm sweeps $1.15

Maxitill Cultivators
Standard Frame 920

		With Crumbler	Less Crumbler
2.53m	22 tine	$1,530	$ 949
3.13m	30 tine	$1,685	$1,057
3.63m	34 tine	$1,932	$1,270
4.13m	38 tine	$2,102	$1,405

Helper Tines $8.65 extra
100 mm sweeps $1.15 extra

Agritiller Double Bar Cultivators
Series 940

2.06m	9 tine	$1,923	$1,325
2.5 m	11 tine	$2,157	$1,521
2.96m	13 tine	$2,407	$1,738
3.4 m	15 tine	$2,639	$1,935
3.86m	17 tine	$2,881	$2,136
3.86m	19 tine	$3,041	$2,296

Add $200 for pair of steel wheels.

Uni-Tiller. Series 930

3 tine standard	$ 520
5 tine standard	$ 701
7 tine standard	$ 889

9 tine with tortion bar	$1,265	
11 tine with tortion bar	$1,430	
13 tine with tortion bar	$1,616	

(iii) Aitchison

Easyflow Cultivators		
1.83m, 4 tool bars, 17 tines	$1,030	$1,075
with crumbler roller, 171 kg	$1,476	$1,521
Roller kitset	$ 511	$ 531
2.44m, 4 tool bars, 23 tines	$1,322	$1,382
with crumbler roller	$1,884	$1,944
Roller kitset	$ 643	$ 665
3.05m, 4 tool bars, 29 tines	$1,467	$1,567
with crumbler roller	$2,080	$2,180
Roller kitset	$ 706	$ 726
3.66m, 4 tool bars, 35 tines	$1,658	$1,808
with crumbler roller	$2,400	$2,600
Roller kitset	$ 853	$ 873
4.26m, 4 tool bars, 43 tines	$3,996	$4,196
three crumbler rollers (fitted)		
Trailed Easyflow with Gooseneck Rau Tines		
5.6m, 4 tool bars, 56 tines		
with Raker Tines	$9,125	$9,425
with crumbler roller	$9,125	$9,425
Raker tine kitset	$1,788	$1,838
Roller kitset	$1,788	$1,838
7.0m, 4 tool bars, 69 tines		
with Raker Tines	$9,885	$10,185
with crumbler roller	$9,885	$10,185
Raker Tine Kitset	$1,877	$1,887
Roller kitset	$1,877	$1,887

(iv) Gallagher Ripper with Shakaerator

A1502 Frame complete with 3 pt linkage mountings	$1,190
A1504 Frame complete with 3 pt linkage mountings	$1,772
A1592 11" Skieth complete for short shank	$ 142
A1593 11" Skieth complete for long shank	$ 142
A1594 Shakaerator unit with Driveshaft and clutch	$1,503
A1595 21" Long Shank with Wide Tip	$ 530
A1596 21" Long Shank with Narrow Tip	$ 485
A1597 15" Short Shank with Wide Tip	$ 356
A1598 15" Short Shank with Narrow Tip	$ 312
A1599 Wheel Assemblies (pair)	$ 972

2.27.11 Rotary Cultivators

(i) Gallagher Rototiller

30 complete with skids, A1101, .76m $2,112
40 complete with skids, A1102 1.02m $2,257

(ii) Howard

HR8 Rotavator

	HR8 (0.08m)	HR8 (1.05m)
540 p.t.o. Transmission rating 26 kW		
Basic machine Complete with: depth control skids front D.C.W.	$2,631	$2,826

HR11 Rotavatora

	HR11/105 (1.02m)	HR11/125 (1.26m)	HR11/155 (1.52m)
540 pto Transmission rating 37 kW			
Standard Rotavator	$4,234	$4,476	$4,872
Rotacadet	$4,894	$5,249	$5,761

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.	$6,433	$6,597	$6,875	$7,681	$8,045
Standard Rotavator c/w crumble roller	$7,380	$7,582	$7,910	$8,341	$8,743

HR30 (AR) 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.	$12,361	$13,221	$14,567
Standard Rotavator c/w crumble roller	$13,112	$14,002	$15,485

HR50 (HD) Rotavator

	HD3.05 (3.05m)	HD4.05 (4.05m)
1000 p.t.o. Transmission rating 122 kW		
Standard Rotavator	$18,287	$21,448

(iii) Gallagher Rotohoes

Lightweight Made to Order

A1217	1.07 m	$3,956
A1218	1.32 m	$4,105
A1219	1.57 m	$4,352

(Wheels and roller crumbler extra)

Roller Crumbler (Optimal Accessory) For Lightweight Rotohoe

A1293	Roller Crumbler complete, excluding Arms	$291
A1294	Roller Crumbler complete, excluding Arms	$315
A1295	Roller Crumbler complete, excluding Arms	$337
A1296	Roller Crumbler complete, excluding Arms	$362
A1290	Arms Complete	$132
A1292	Wheels complete, excluding Arms	$328

Heavy Duty

A1325	offset mounted, skid & wheel	1.27 m	$6,369
A1326	offset mounted, skid & wheel	1.52 m	$6,604
A1327	central mounted, two wheels	1.52 m	$6,993
A1328	offset mounted, two wheels	1.78 m	$7,175
A1329	central mounted, two wheels	2.03 m	$7,467
A1330	central mounted, two wheels	2.29 m	$7,728

Dreadnought

A1413	central mounted	2.03 m	$8,829
A1414	central mounted	2.29 m	$9,422
A1415	central mounted	2.54 m	$10,040
A1416	central mounted	3.05 m	$12,230

Roller Crumbler (Optional Accessory)
for Heavy Duty and Dreadnought Rotohoes

	Width	
A1393	1.27 m	$559
A1394	1.52 m	$578
A1395	1.78 m	$602
A1396	2.03 m	$628
A1397	2.29 m	$652
A1398	2.54 m	$679
A1399	3.05 m	$731

2.27.12 Harrows (conventional):

(i) Duncan

Zig-Zag Harrows	1 leaf (less drawbar)	$196
	3 leaf bar	$135
	4 leaf bar	$178
	5 leaf bar	$216
Self-clearing Harrows	1 leaf (less drawbar)	$143
	3 leaf bar only	$198
	4 leaf bar only	$221
	5 leaf bar only	$254
Drill covering Harrows	Single leaf (less bar)	$ 83
	3 leaf bar and sliders	$328
	4 leaf bar and sliders	$420
	5 leaf bar and sliders	$546
	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			Recommended Retail Price
A	B		
64	86	16 Run 701 Seedliner	$429.00
67	90	18 Run 701 Seedliner	$448.00
71	94	20 Run 701 Seedliner	$470.00
78	104	24 Run 702 Seedliner	$520.00

(ii) Howard

AR Rotaharrow

	1.80 m	2.00 m	2.30 m
Trash Rotor c/w steel D.C.W.	$7,171	$7,811	$8,250
Trash Rotor c/w crumble roller	$8,206	$8,471	$8,943 with DCW
Bar Rotor c/w steel D.C.W.	$7,333	$8,002	$8,403
Bar Rotor c/w crumble roller	$8,368	$8,662	$9,101 with DCW

AH Rotaharrow

	2.28 m	2.54 m	3.05 m

Trash Rotor c/w pneumatic D.C.W	$12,014	$13,473	$14,902
Trash Rotor c/w crumble roller	$13,654	$14,254	$15,820 with DCW
Bar Rotor c/w pneumatic D.C.W.	$12,689	$13,664	$15,097
Bar Rotor c/w crumble roller	$13,440	$14,445	$16,015 with DCW

2.27.13 Power Harrows

(i) Kuhn

HR250	$ 8,758
HR300	$10,698

2.27.14 Rollers

(i) Cambridge Rollers

Duncan

300 Field Roller	2.4m, 660mm rings	$2,547
	2.7m, 660mm rings	$2,603
	3.0m, 660mm rings	$2,677
	2.4m, Deep Vee Rings	$2,625
	2.7m, Deep Vee Rings	$2,898
	3.0m, Deep Vee Rings	$2,972
Roller Seed box	2.4 m	$1,661
c/w Gears & Fitting	2.4 m	$1,720
	3.0 m	$1,813

(ii) Heavy (Water Ballast) Rollers

Hydes Distributors

3m x 1.7m x 16mm shells	$9,685
3m x 1.9m x 16mm shells	$10,655

2.27.15 Drills and Seed Boxes

(i) Duncan

	Recommended Retail Price
710 Agvance	
15 run hoe colter	$7,994
19 run hoe colter	$9,201
23 run hoe colter	$10,467

15 run double disc colter		$9,434
19 run double disc colter		$11,025
23 run double disc colter		$12,671

734 Multi-seeder

A	B		
	1755	15 Run Triple Disc	$11,701
	2226	19 Run Triple Disc	$14,843
	2532	23 Run Triple Disc	$16,878
57	67	200mm D/A Depth Stop Ram and Hoses	$ 336

750 Till-Seeder

A	B		
690	919	11 Run	$ 4,597
815	1087	15 Run	$ 5,433

Turnip and Rape Seeds Box	P.O.A.

Eclipse Sowing Box

A	B		
138	184	11 run	$ 918
186	249	15 Run	$1,243
162	215	16 Run	$1,070
170	227	18 Run	$1,135
182	243	20 Run	$1,216
195	260	24 Run	$1,299

Seedmatic 1000 Series Linkage Drill - Seed Only

	N.I.	S.I.
Model 1012 12 row 1.8m	$4,976	$5,226
Model 1016 16 row 2.44m	$5,276	$5,526

(Series 1000 do not include hectameter and rear tread boards)

Seedmatic 1100 Series Linkage Drills - Seed and Fertilizer

Model 1112 12 row 1.8m	$5,985	$6,285
Model 1116 16 row 2.4m	$6,445	$6,745
Model 1120 20 row 3.0m	$6,990	$7,290

(Series 1100 include hectameter and rear treads)

Seedmatic 1100 "T" Trailed Series

Model 1112T 12 row 1.8m	$7,430	$7,730
Model 1116T 16 row 2.4m	$7,890	$8,190
Model 1120T 20 row 3.0m	$8,435	$8,735

Seedmatic 1100 Coulter Trailed Drill

Model 1112CT 12 row 1.8m	$9,554	$9,854
Model 1116CT 16 row 2.4m	$10,722	$11,022
Model 1120CT 20 row 3.0m	$11,967	$12,275

Individual Coulter Assembly $177

2.27.16 Precision Drills

(i) Stanhay

Handpush	Single Row	$ 812
S870 MLW	3 row	$5,508
	4 row	$6,686
	5 row	$7,638
	6 row	$8,710

2.27.17 Transplanters

Howard

Type C	Automatic Gripper	1 row	$1,835
Type C		2 row	$2,535

2.27.18 Fertiliser Spreaders and Topdressers 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	$6,124
	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) Aitchison Industries

Agri-Spred, Fertiliser Spreaders	N.I.	S.I.
Type Oscillating Pipe-Mounted		
SP400 Capacity 350 kg	$1,611	$1,661
SP500 Capacity 500 kg	$1,837	$1,887
SP600 Capacity 600 kg	$1,925	$1,975
Type Trailed		
L.P. 1200 Standard and Low profile 1.2 cu meter	$3,438	$3,558
Precision Spinner, Mounted		
SN400 Capacity 350 kg	$1,494	$1,544
SN500 Capacity 500 kg	$1,720	$1,770
SN600 Capacity 600 kg	$1,808	$1,858
Trailing Trolley		
Will fit all SP, SN and SNE models	$ 380	$ 400
Economy spinner ("Zero") Mounted		
SNE400 Capacity 350 kg	$ 975	$1,020
Garden (Trailed)		
SN25 Capacity 50 kg	$ 494	$ 514
Garden Maxi, mounted		
SN30 Capacity 32 kg	$ 577	$ 597

Agri-Spred Attachment Accessories Available.

(iii) Vicon

Vari Spreaders PS302 300 litre	$1,516
PS302 hopper extension	$ 185
PS302 hopper cover	$ 45
PS302 extension hopper cover	$ 50
Vari Spreaders PS602 600 litre	$2,484
PS602 hopper extension	$ 297
PS602 hopper cover	$ 70
PS602 quick hitch	$ 230
Vari Spreaders PS1002 (602 with hopper extension) 1000 litre	$2,799
PS1002T	$4,390
PS1002T (trailer only)	$1,764
PS1002 hopper cover	$ 80
PS602 Hopper extension only to make 1000 litre	$ 270
D.M.L.	
T.H.S. model 2000 (2 - 2.5 tonne)	$5,298
T.H.S. model 3000 (3 - 4 tonne)	$5,695

2.27.19 Combine Harvesters

(i) Claas

DOM.48 3.7m Cutterbar, mechanical Drive	$82,862
DOM.76 Std 4.6m Cutterbar, Mechanical Drive	$108,550
DOM.86 4.6m Cutterbar, Mechanical Drive	$122,840
DOM.96 4.6m Cutterbar, Hydrostatic Drive	$147,245
DOM.106 5.8m Cutterbar, Hydrostatic Drive	$184,680

(ii) Massey Ferguson

Model	Description	$
810	12' table with cab	$99,600
815	14' table with cab	$104,500
845	16' table with cab	$139,000
860	18' table with cab	T.B.A.

(iii) International Harvester

1420	4.6 m platform	$127,807
1460	5.2 m platform	$142,873
1480	6.7 m platform	$188,972
STB with air conditioning monitors, trailer, spare knife, seives		

(iv) John Deere

JD 1055		4.2m Platform	$103,000

(v) New Holland/Clayson

8030		Ford 2712E Mech. drive 55.7 kW (no cab, no perf. monitor)	P.O.A.
8040		Fiat 806, 77.2 kW (no cab, no perf. monitor)	P.O.A.
8050	4.6 m	Mech. drive	P.O.A.
8060	4.6 m	with grain monitor, Ford 82 kW (116 h.p.) engine	P.O.A.
8070	5.2 m	with grain monitor, Ford 96 kW (140 h.p.) engine, tinted glass	P.O.A.
8070	5.2 m	Hydrostatic drive, Merc. 96 kW (140 h.p.)	P.O.A.
	6.0 m	Hydrostatic drive, cab, Merc. 100 kW (175 h.p.)	P.O.A.

2.27.20 Windrowers

(i) Hesston

Model	Description	$
1014	3.6 m Header, Hydraulic Drive	$20,820
	Conditioner for 1014	$ 2,750

2.27.21 Mulchers (Straw Choppers)

Taarup

SKT 1500	$4,200
SKT 2100	$5,580
SKT 2700	$8,500

2.27.22 Forage Harvesters

(i) Gallagher

Multicut	1.07 m Offset	1.07 m Offset	1.37 m Central	1.83 m Central
Without chute	-	$4,931	$5,137	$5,731
With wide mouth chute	-	$5,361	$5,565	$6,244
With main chute and short top swivel	-	$5,647	$5,857	-
With side loading chute and long top swivel	-	$5,817	$6,021	$6,791

Fine cut

Offset built to order	$4,116	-	-	-
Without chute	-	$4,518	$4,810	$5,122
With wide mouth chute	-	$4,948	$5,240	$5,635
With main chute and top swivel	$4,756	$5,234	$5,532	-
With side loading, chute and long top swivel	-	$5,404	$5,696	$6,182

Back loading chutes

Wide mouth chute only	-	$ 430	$ 430	$ 513
Main chute without swivel	$ 330	$ 406	$ 412	-
Top swivel chute (short)	-	-	$ 310	-
Top swivel chute (long)	-	-	$ 316	-
Extension chute	-	-	$ 101	-
Side loading chute only	-	-	$ 570	$ 744
Hydraulic control for top swivel chutes	-	-	$ 450	$ 450
Pre-wilt and Hay Chutes	$ 221	-	$ 336	$ 355
Scrub and Safety Chutes	$ 330	-	$ 393	$ 467

(ii) Giltrap

Electric remote control for turning chute on Gallagher Forage Harvester	$ 480
Extra switch and cable	$ 70

(iii) Taarup

105	Precision chop	$13,000
106	Precision chop	$16,061
502	Precision chop	$14,642
602	Precision chop	$23,697
605	Precision chop	T.B.A.
DMH 1350		$ 5,941

(iv) Hesston

7155 Forager	6' Pick up, Electric Sharpener Electric Remotes, 175 m hp rating	$31,500

(v) Gehls

CB 750 'cut and blow' designed for tractors up to 90 PTO kW	$24,955

Attachments:

HA 1100, 2 m pickup front	$ 6,465
HA 1200, 2 m pickup front	$10,080
CA 660, single row corn front	$ 6,165
TR 600, two row corn front	$ 9,735
Hydraulic Lift Ram and hose kit	$ 585

(vi) JF Precision Cut Forage Harvester - trailed

JF Precision Cut Forage Harvester (side mounted)		$11,855
FC 80	Single row maize attachement	$ 3,885
FC 90	Complete with electric controls for chute and sprout	$16,445
	Single row maize attachment	$ 3,885
	Two drum mower attachment	$ 4,825
FC 110	Complete with electric controls for chute and sprout	$20,265
	Two row maize attachment	$ 8,135
	Two drum mower attachment	$ 4,825

(vii) New Holland

339 1.5 m	manual controls	
	electric controls	$15,000
717 S 1.5 m	Sickle bar	$ 3,100
719	Base unit fine chop 100 RPM, metal detector fitted	$28,000

(viii) Claas

Jaquer 40	$16,500
Jaquer 62	$21,440

(ix) Andrews and Beaven

339	Double chop forage harvester	$18,750
719	Forage harvester	$37,200

2.27.23 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 harvesting wagon.	
With Gallagher Multi Cut Head	$16,780
With Gallagher Fine cut head 1370 mm	$16,478
Less cutting head, ram, hoses and roof	$ 9,044
Model 40 H.C. 4 tonne capacity as feed wagon and 8.75 cubic metres as harvesting wagon.	

With Gallagher Multi Cut Head	$16,030
With Gallagher Fine cut head 1370 mm	$15,720
Less cutting head, ram, hoses and roof	$ 8,288

Model 65 HC 6.5 tonne capacity as feed wagon and 15.5 cubic metres as harvesting wagon

With Gallagher Multi Cut Head	$19,566
With Gallagher Fine cut head	$19,266
Less head, ram, hoses and roof	$11,744

Giltrap Fella Loaderwagon.
Model 250 H complete with imported German cutter head, 8 or 10 cubic metres capacity as feed out wagon or 22 or 30 cubic metres equivalent as Harvesting Wagon.

Pickup and discharge wagon only 22 cubic metres	$17,950
30 cubic metres	$18,950
With hitch elevator section for centre feeding at rear	$ 1,400
With brakes - plus	P.O.A.
With cross conveyor - plus	$ 2,784

Model 25 P.T.O. front centre feed, approx. 2.5 tonne capacity, 3.93 cubic metres.	$ 6,300
Model 40 P.T.O. Front centre feed model, approx. 4 tonne capacity, 6.08 cubic metres	$ 7,400
Model 40 H with complete hydraulic drive	$ 7,400
Model 50 P.T.O. Front Centre Feed Model, approx. 5 tonne capacity, 8 cubic metres.	$ 8,100
Model 50H with complete hydraulic drive	$ 8,100
Model 65 P.T.O. Front Centre Feed model, approx. 6 tonne capacity, 10 cubic metres.	$10,700
Model 30 P.T.O. Cross conveyor, side feed model, approx. 3 tonne capacity, 5.25 cubic metres.	$ 8,400
Model 45 P.T.O. Cross conveyor, side feed model, approximately 5 tonne capacity, 8 cubic metres.	$ 9,680
Model 60 P.T.O. cross conveyor side feed model, approx. 6 tonne capacity, 10 cubic metres.	$12,300
Giltrap - Extras available for all self feed wagons.	
Hydraulic Drive Kitsets (for all P.T.O. models)	$ 595
Extension high side for green maize, silage models 45, 50, 60, 65	$ 120
Extension high side model 25, 30, 40	$ 90
Single Bale Cradle, Centre Feed Models	$ 190
Double Bale Cradle, Centre Feed Models	$ 240
Raising Blocks for towing wagon over stack, pair	$ 34

Swivel hitch (bolt on attachment) for towing behind silerator	$ 130
Brakes M40 - work off tractor external hydraulic	P.O.A.
10.0/75 x 15 tyres	$ 1,280
11.5/80 x 15 tyres	$ 1,480
Gordon Bros. Silage Spreader	$ 686
Trailer Drawback jack	$ 70
Kuhn D2500 Stage Handler	$ 7,674
Kuhn D1700 Stage Handler	$ 8,805
Kuhn D200 Stage Handler	$ 9,921
Grantways - Feed Systems, Feed Handlers	
Bambi Utility single axle	$ 5,900
Bambi custom single axle	$ 6,600
Chettah Utility single axle	$ 7,960
Bronco Standard tandem	$ 8,900
Bronco Custom tandem	$ 9,650
Jumbo tandem	$11,800
Hydes Distributors	
Model 500 Centre Feed	$ 7,825
Model 650 Centre Feed	$ 8,665
Model 800 Centre Feed	$ 9,190
Model 500 Side Feed	$ 9,820
Model 650 Side Feed	$10,450
Model 800 Side Feed	$11,080
Tandem Axles	Extra $ 1,470

2.27.24 Mowers

(i) Turner

LR 14 Hydramower	(45 h.p. plus)	$13,050
LR 16 Hydramower	(45 h.p. plus)	$15,223
Hydramower 15 rear mount	(55 h.p. plus)	$21,056
Hydramower 15 mid mount	(55 h.p. plus)	$24,355
Hydramower 18 rear mount	(55 h.p. plus)	$22,208
Hydramower 18 mid mount	(55 h.p. plus)	$25,860

(ii) Kuhn

GMD 44 Hydraulic	$4,269
GMD 44 Plain multi disc mower	$4,056
GMD 55 Hyd. multi disc mower	$4,891
GMD 66 Hyd. multi disc mower	$5,299
FA 367 sticklebar mower 5 ft 6"	$2,551

(iii) Busatis

1102	1.9 m double knife	$2,982

(iv) Vicon

CM 165	4 disc 1.6 m	$4,232
CM 240	6 disc 2.4 m	$5,694

(v) Claas Rotary

WM20	1.65 m	$3,998
WM24	1.85 m	$4,895
WM30	2.45 m	$7,590

(vi) Gallagher

Multimows

Parks and verges twin rollers, with safety chute

A3106	Central mounted	$6,608

Rotomow Orchard and Topping Mower

		Width of cut	Price
A3101	Central Mounted 30 kW (40 hp)	1.8 m	$4,339
A3202	Central Mounted 33 kW (45 hp)	2.13 m	$4,468
A3203	Offset right - 18 kW (25 hp)	1.22 m	$3,855
A3204	Offset right - 22 kW (30 hp)	1.52 m	$3,974
A3205	Offset right - 30 kW (40 hp)	1.83 m	$4,101
A3206	Offset right - 33 kW (45 hp)	2.13 m	$4,230

(vii) Munro

60	1.5 m	$2,886

(viii) Kubota - tractor mounted

Sabra	1200 offset and in line	$1,435
	1500 two blade	$1,860
	1500 four blade	$1,910
Dualmaster		$2,354
Fieldmaster 2250		$3,950
Flailmaster HD60		$2,886

(ix) Flaid King (Bucktons Engineering)

146	1.5 m	$3,279
189	1.8 m	$3,458
213	2.1 m	$3,517
244	2.4 m	$3,827
Lightweight	1.2 m	$2,065
Lightweight	2.45 m	$2,120
Lightweight	1.7 m	$2,275
Mulching King	1.5 m	$3,724
Mulching King	1.8 m	$3,848
Mulching King	2.1 m	$3,962
Mulching King	2.4 m	$4,272
Mighty Mulcher	1.8 m	$4,675
Mulching Bars		$ 96
Windrowing Attachment		$1,520

(x) Moller

Sabre

1200 Offset and In Line Models	$1,435
1500 Offset and In Line Models	$1,860
1500 Offset and In Line (4 blades)	$1,910
Dualmaster with Swathboard	$2,345
Dualmaster (closed left skid)	$2,354

Welger

CM 135 Cyclomower	$3,130
CM 165 Cyclomower	$3,572
CM 185 Cyclomower	$4,412
CM 185 HYD Cyclomower	$5,543
CM 210 Cyclomower	$6,151
CM 211 Cyclomower	$5,515

2.27.25 Ride on Mowers

(i) Cheetah

.7 m cut, 8 hp, electric start	$3,100
1.2 m cut, 11-12 hp electric start	$4,000

(ii) Cox

Automatic, .76 m cut, 11 hp	
Briggs Engine	$4,079
Honda Engine	$4,879

(iii) Rancher

Australian Made		
1 m cut, 11 hp, Briggs Engine		$5,100

(iv) Moller Trikes and Mowers

BA ST	800 Ride-on 8 hp (E) B and S	$2,925
BA ST	1100 Ride-on 11 hp (E) Honda	$3,210
BA MM	800 Mid Mt Mower 800 mm	$ 832
BA MM	1040 Mid Mt Mower 1040 mm	$1,075

(v) Power Pony Tractor and Attachments

BB PP16T	16 hp Power Pony with Lift Lever	$4,882
MM38	.96 m Mid Mt Mower	$1,390
MM57	1.4 m Mid Mt Mower	$1,710
RH32	.41 m Rotary Tiller	$1,998
9013	1.1 m Grader Blade	$ 440
F.E.L.	Front End Loader Kit	$1,895

2.27.26 Self Drive Mowers

(i) Rotomoa

BR RM660-LM	Rotomoa 660 Less Mtr	$1,725
BR RM660-L8	Rotomoa 660 8 hp B/S	$2,198
BR RM660-LH	Rotomoa 660 11 hp Honda	$2,527
BR RMS	Riding Sulky	$ 175

(ii) Gravely

BG 5240K	Gravely 5240 Tractor with 8 hp Kohler 4 stroke - mudgrip tyres	$4,330
BG 5240/R	Gravely 5240 Tractor with 6.5 hp Robin 2 stroke - mudgrip tyres	$4,274

2.27.27 Mower Conditioners

(i) Vicon

OM165 nylon flail	$ 7,635
OM240 nylon flail	$13,805
KM165 crimper	$ 9,819
KM241 crimper	$15,973
KM321 crimper	$19,995
KM240 crimper	$14,700

(ii) New Holland

Haybine 477 with hydraulic ram 2.1 m	$ 6,500

(iii) Kuhn

FC 200 3 pt linkage	$ 9,303
FC 250	$16,027
FC 300 ML	$16,872

(iv) JF

CMT 245c 2.4m cut with fail conditioner	$14,175
less conditioner but with swath plates	$12,360
GCS 240 2.4m cut, disc type	$14,585

(v) Claas

WM 24C 1.85 m	$ 7,710

2.27.28 Hay Conditioners

(i) Kuhn

GA 300 Gyrotedder	$3,010
GA 402 Gyrotedder	$3,585
GA 45T Gyrotedder	$4,129
GRS 24 Gyrotedder	$3,185
GRS 25 Gyrotedder	$4,552

(ii) Claas

Swather WSDS 30	$2,975
WSDT 310	$2,750

2.27.29 Hay Rakes

(i) Kuhn

GA 402 Gyro rake	$3,585

(ii) Vicon

HKX 620 4 finger wheels, 2 pt linkage	$2,380
H 1020 6 finger wheels, trailing	$3,895
H1240/H1340 Trapeze 8 finger wheel V rake	$5,195

(iii) Claas Tedders

W450 Working width 4.5 m	$3,340
WAS450 Working width 4.5 m	$3,690

2.27.30 Balers (Conventional)

(i) Massey Ferguson

Vermeer model 504H	$22,942

(ii) Welger

AP 53	$14,715
AP 63	$20,393
AP 71	$20,121

(iii) Claas

Square Balers	
Markant 55 Bale chamber 460 x 360	$16,798
Markant 65 Bale chamber 460 x 360	$18,922

(iv) Hesston

Beeline Baler, complete with bale tensioner and bale chute	$17,960
Less hydraulic bale tensioner	$16,800

(v) John Deere

456 Square Baler	$18,050
550 Round Baler	$26,940

2.27.31 Big Balers

(i) Hesston

4800	Big Baler	Flotation Tyres, bale chute	$115,400
5580	Rounder	Gathering Wheels, bale counter density plus kit	$ 26,995
5540	Rounder	Bale counter, density plus kit short crop kit, roll scraper.	
		New stock machines, gathering wheels are extra $995.00.	$ 23,543
		Pick up wheel	$ 970
5530	Rounder	Gathering wheels, short crop kit, bale counter, manual tie, roll scraper.	$ 17,678
		Optional extra axle extension kit	$ 172

(ii) International

2400	Big Roll	$17,500
AIC RC121		$25,720

(iii) New Holland

847	Round Baler, 4 ft 6" bale width	$24,900
851	Round Baler, 5 ft 6" bale width	$29,250

(iv) Welger

RP 12		$22,354
RP 15		$23,351
RP 180		$28,654

(v) Gehl

1460	Round Baler (make 1.1m x 1.5m bale up to 454 kg)	$26,885
1850	Round Baler (makes 1.5m x 2m bale up to 908 kg)	$33,305

(vi) Claas

Round Balers		
Rollant 44,	Bale chamber 1.2 m x 1.2 m	$19,708
Rollant 62,	Bale chamber 1.6 m x 1.2 m	$22,250
Rollant 85,	Bale chamber 1.8 m x 1.5 m	$25,172

(vii) Duncan Industries Ltd

DML - FM 1400 - Big bale side feeders		
FM-3P/TSF	Standard 3 point (motor mounted) forks (1200 kg capacity)	$3,195
FM-3P/SSF	Heavy duty 3 point (motor mounted) forks (1600 kg capacity)	$3,390
FM-2B/HC	2 bale feeder with hydraulic control valve	$4,980
FM-2B/LHC	The above less hydraulic valve	$4,895
FM-1400-LA	Standard bale feeder only	$2,775
FM-1200/TSF	Side feeder - C/W standard 3 point (motor mounted) 1200 kg forks	$3,195

2.27.32 Grain Handling Equipment

(i) Portable Grain Augers
Slade Engineering (N.B. Prices do not include motors)

Double Augers 200 mm diameter	P.T.O.	Electric	Petrol
7.2 m	2,547	2,321	2,472
8.4 m	2,679	2,453	2,604
9.6 m	2,857	2,631	2,782
10.8 m	3,015	2,989	2,940
12.2 m	3,174	2,948	3,099
13.2 m	3,333	3,106	3,257
14.4 m	3,491	3,264	3,415
Hydraulic operation available - electric add $495.			
175 mm diameter			
7.2 m	2,476	2,250	2,360
8.4 m	2,556	2,330	2,439
9.6 m	2,636	2,410	2,519

Sweep Augers 150 mm diameter		
2.4 m	Hand operated	$314
3.0 m	Hand operated	$343

Unloading Augers 50 mm diameter		
3.6 m		$273
4.2 m	All with detachable power head	$292
4.8 m	discharch guard and motor mounting	$311
100 mm diameter		
3.0 m		$339
3.6 m		$374
4.2 m		$408
4.8 m		$443
5.4 m		$478
175 mm diameter		
3.6 m		$475
4.2 m		$520
4.8 m		$565

Silo Unloading Equipment A. M. Bisley & Co.

15 mm Heavy Duty Unloading Equipment
Unloader auger and well with rate control

4.2 m	Complete	$2,851
5.4 m	Complete	$2,960
6.3 m	Complete	$3,059
7.2 m	Complete	$3,279
10.2 m	Complete	$3,556
15.0 mm	Well Assembly	$ 711
15.0 mm	Sweep Gearbox	$ 714
4.2 m	Sweep Auger	$ 149
5.4 m	Sweep Auger	$ 177
6.3 m	Sweep Auger	$ 193
7.2 m	Sweep Auger	$ 234
10.8 m	Sweep Auger	$ 317

20 mm Heavy Duty Unloading Equipment
Unloader auger and well with rate control

6.3 m	Complete	$3,749
7.2 m	Complete	$3,952
10.2 m	Complete	$4,378
20.0 mm	Well Assembly	$ 824
20.0 mm	Sweep Gearbox	$1,109

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

Springston Agricultural Engineering

1 m Grain Auger	$3,200

(ii) Grain Dryers

Moridge

Model 400 400 bu. capacity LPG fuel	$16,600
Model 8770 700 bu. capacity LPG fuel	$43,000

Bisley Centrifugal Drying Fans

Talyor Richardson 300 CP belt driven fan	$3,711
Talyor Richardson 300 CP bare shaft fan	$2,492
Talyor Richardson 445 CP belt driven fan	$4,665
Talyor Richardson 445 CP bare shaft fan	$3,235
Talyor Richardson 490 CP belt driven fan	$5,851
Talyor Richardson 490 CP bare shaft fan	$3,829

Bisley Electric Heater Banks

Model	
24 kW	$2,887
36 kW	$3,381
48 kW	$3,712
75 kW	$5,115
110 kW	$6,340
180 kW	$7,012
250 kW	$9,174

Bisley Fans for grain dryer

Type 1 Fixed Temperature Burner	$1,958
2A Fixed Temperature Burner	$2,669
2B Hi Low Burner Flowmatic Type	$3,240
3 kW Electric Unit	P.O.A.

(iii) Miscellaneous

Bisley Hammermills

BM2 7.0 kW	$2,813
BM3 11.2 kW	$4,105
BM3 15.0 kW	$4,299
BM3 18.7 kW	$4,872
BM3 PTO drive	$5,640
BM3 Bare shaft pulley drive	$2,310
Horizontal suction feed control	$ 273
Gravity Feed Control and Hopper	$ 340
Magnetic trap	$ 225
BM5 30.0 kW	$7,834
BM5 37.5 kW	$9,593

Seedkote Applicator (Hydes Distributors)	$2,995
Input augur	$ 970

2.27.33 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

(ii) Garth D. Stewart

Accumulator	$1,996

(iii) Gallagher

A8501	Feeder for Round bales with hard centres	$1,468
A8502	Feeder for Round bales with soft centres	$1,568

(iv) Hydes Distributers

Turner Patent Auto Hay Feeder	$2,685

2.27.34 Feed Mixers

(i) Gehl

MX100 Mix-all Feedmaker (2.270 t tank)	$26,230
MX100 equipped with swinging auger feeder	$28,760
MX135 (3.06 t tank)	$30,755
MX135 equipped with swinging auger feeder	$33,285
MX135 equipped with power bale feeder	$34,655

(ii) Bisleys Milling and Mixing System

A3	Vertical Mixer	$ 5,925
A1	Vertical Mixer	$ 5,510
Bagging off Attachment for Mixer		$ 275
S1	0.7 kW Horizontal Mixer	$ 3,220
S20	7.0 kW Horizontal Mixer	$ 8,992
S30	11.2 kW Horizontal Mixer	$11,245
S40	15.0 kW Horizontal Mixer	$17,440
S60	22.0 kW Horizontal Mixer	$20,598

2.27.35 Trailers

General Purpose
(i) Drum Machinery

Hydraulic Tip Trailer 3 tonne capacity with 3 m x 2.2 m deck	$ 2,777
Tailgate and High Sides	$ 286
Hay Extension 1.1 m	$ 286
Hay poles	$ 85
Dual wheels	$ 200
Silage cages	from $ 2,028
Drum Motor Bike trailer 1.2 m x 1 m	$ 806
Car trailer with Stock Crate	$ 1,406 $ 1,736

(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	$ 5,874
Gallagher Multi Cut	$13,118
Forage Head Fine Cut	$12,818
Forage Head Precise Cut	$10,500
5 tonne tip trailer combination, as above but with 14 cm capacity	
Less Head Ram, Hoses, Linkage	$ 6,964
Gallagher Multi Cut	$14,200
Forage Head Fine Cut	$13,900
Forage head precise Cut	$11,500
1.5 tonne horticulture trailer 2 cubic yards 75mm single stage ram	$2,550
2 tonne hydraulic trailer 2 cubic yards 75mm single stage ram	$ 2,650
3 tonne tip trailer 2.3 x 2.3 deck Standard 11.5/80 x 15 new tyres	$ 3,170
5 tonne tip trailer 3.5 x 2.3 deck	
Giltrap Scissors lift trailer - bulk unloader	
Model 110 with hydraulic stabilisers	P.O.A.
Model 110C combination, no stabilisers	
Multi cut	P.O.A.
Fine cut	P.O.A.
Precise cut	P.O.A.
Giltrap Silage Cages - with mechanical power gates	
Standard side loading complete with high mesh front, 3 tonne	$ 1,440
5 tonne	$ 1,666
Front loading complete with low front pipe frame roof and heavy cover, 3 tonne	$ 1,670
5 tonne	$ 1,910
Roof and cover only to fit existing cage	
3 tonne	$ 300
5 tonne	$ 350

Giltrap extras for both models of tip trailer,	3 tonne	5 tonne
All steel deck	$260	$360
Steel tail door with chains	$210	$210
.914 m hay extension	$140	$140
Swivel hitch for towing behind silerator	$130	$130
Brakes - work off tractor, external hydraulics		P.O.A.

(iii) Bucktons Engineering

CF300 3 tonne centre discharge loading

capacity 5.3 cubic metres 11L x 15 flotation tyres	PTO	$6,649
	Hydraulic	$6,860
CF425 4.5 tonne centre discharge loading capacity 6.7 cubic metres 11L x 15 flotation tyres	PTO	$7,345
	Hydraulic	$7,575
CF600 6 tonne centre discharge loading capacity 8.1 cubic metres Tandem axle 11L x 15 flotation tyres	PTO	$9,375
	Hydraulic	$9,455
Single axle 15.5 x 15 12 ply tyres	PTO	$7,749
	Hydraulic	$7,975
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		$8,695
SD450 4.5 tonne side delivery loading capacity 7.3 cubic metres 15.5 x 15 tractor tyres		$8,985
SD600 6 tonne side delivery loading capacity 8.8 cubic metres Tandem axle 11L x 15 tyres		$10,675
3 tonne hydraulic tip trailer 3.0 x 2.29 deck with .300 sides 75mm single piston ram 1L x 15 flotation tyres		$2,750
6 tonne hydraulic tip trailer 3.6 x 2.29 deck with .480 sides 90mm 2 stage telescopic ram 11.5 x 15 tyres		$4,240
15.0/55-17 tyres		$5,094
Side tipping trailer loading capacity 13 cubic metres Tandem axle 11L x 15 flotation tyres		$7,955

(iv) Hydes Distributors

3-4 Tonne Hydraulic Tip Trailer	$6,125
Grain Sides	$1,240
Shingle Sides	$1,030
6.4 m Flat Deck, 4 Wheel with Turntable	$6,875
Master (3 m x 1.5 m Tandem)	$3,285

Big 'T' (3.9 m x 1.8 m Tandem)	$3,485
Dual Load (3 m x 2.1 m Tandem)	$3,485
Maxi Load (3.9 m x 2.4 mTandem Flat Deck)	$3,980

4.27.36 Chainsaws

Where chainsaws have variable bar lengths available, price quoted is for smallest bar.

(i) Dolmar

112	51 cc	38 cm bar	$ 738
123	70 cc	42 cm bar	$1,011
	51 cc	38 cm bar	$ 753
117	51 cc	38 cm bar	$ 841
120	61 cc	38 cm bar	$ 891
153	110 cc	52 cm bar	$1,189

(ii) Stihl

032AV	51 cc	41 cm bar	$ 720
038AVEQ	61 cc	41 cm bar	$ 780
048AVEQ	76 cc	51 cm bar	$ 870
056AV	81 cc	51 cm bar	$ 910
051AV	90 cc	53 cm bar	$ 960
076AVE	111cc	53 cm bar	$1,000
90AV	137cc	63 cm bar	$1,100

(iii) Poulan Chain Saws

Handyman Chainsaws

2000-12	33 cc	25 cm sn bar	$ 195
2000-14	33 cc	36 cm sn bar	$ 309

Farmer/Contractor

2300 AV-16	38 cc	40 cm sn bar	$ 419
2300 CVA-16	38 cc	40 cm sn bar	$ 449
3400-16	56 cc	40 cm snr bar	$ 588
3400-18	56 cc	45 cm snr bar	$ 598
3400-20	56 cc	50 cm snr bar	$ 608

Professional

3700-16	61 cc	40 cm snr bar	$ 605
3700-18	61 cc	45 cm snr bar	$ 610
3700-20	61 cc	50 cm snr bar	$ 615
4400-20	69 cc	50 cm snr bar	$ 730
4400-24	69 cc	60 cm snr bar	$ 750

4900-20	77 cc	50 cm snr bar	$ 760
4900-24	77 cc	60 cm snr bar	$ 780
5400-24	85 cc	60 cm snr bar	$ 797
5400-27	85 cc	68 cm snr bar	$ 817

(iv) McCulloch

MAC 1300E	35 cm bar	1300 W	$215
Eager Beaver	25 cm bar	32 cc	$280
Eager Beaver	35 cm bar	32 cc	$285
Eager Beaver (including Carry Case)	35 cm bar	32 cc	$330
PM 360	30 cm bar	30 cc	$329
PM 480	40 cm bar	38 cc	$457
PM 610	40 cm bar	60 cc	$616
PM 610 Farm Mac	50 cm bar	60 cc	$629
PM 700	40 cm bar	70 cc	$746
PM 700	50 cm bar	70 cc	$758
PM 700	60 cm bar	70 cc	$769

(v) Homelite

XL	25 cm bar	26 cc	$236
SXL2	36 cm bar	31 cc	$416
240	35 cm to 40 cm bars	39 cc	$440
XL12	31 cm to 50 cm bars	54 cc	$689
330	40 cm to 50 cm bars	54 cc	$598
410	40 cm to 60 cm bars	57 cc	$727
550A0	40 cm to 90 cm bars	84 cc	$790
750A0	48 cm to 109 cm bars	112 cc	$968

(vi) Husqvarna

44	44 cc	$540
50 Rancher	49 cc	$580
154 SE	54.2 cc	$650
61	61.5 cc	$640
181 SE	81 cc	$870
2100 CD	99 cc	$960

4.27.37 Portable Generators and Welders

(i) Kawasaki Portable Generator

KG500B	460 Watts	17.5 kg	$ 865
KG1100B	1000 Watts	30.0 kg	$1,020
KG1600B	1350 Watts	42.0 kg	$1,460
KG2900B	2500 Watts	54.0 kg	$1,940
KG5000A	4500 Watts	98.0 kg	$2,510
KG5000AS	4500 Watts	108.0 kg	$2,795

(ii) Lincoln Electric

Tractapac basic (Mobile DC Welder and 240 V Aux. Power Source)	$1,492
35 cm wheels and tyres trailer	$ 988
Weldanpower 175 (petrol)	$4,510
Weldanpower 175 (diesel) roll cage, rope start	$4,499
Weldanpower 175 (petrol) roll cage, recoil start	$2,245
Weldanpower 175 (diesel) roll cage, electric start	$3,591

2.27.38 Spray Equipment

(i) Tanks and Sprayers

F.M. Winstone Ltd

100 l Sprayer - No Pump	$ 570
100 l Sprayer - C/W model 215 petrol	$1,320
100 l Sprayer - C/W model 215 electric	$1,250

Econo Sprayer

500 litre rotationally moulded tank with three point linkage, line strainer, sight glass, bypass fittings and boom/reel mounts	$ 625

Sprayers Pasture Pak

525 litre rotationally moulded 525 tank with three point linkage, screw lid, tank fitting strainer, line strainer, sight glass, emptying facility and bypass fitting	$2,995
700 litre Sprayer	$1,145
700 litre Sprayer C/W 600 mm Fan x P74 Pump	$3,950
700 litre Sprayer C/W P68 Pump	$2,195
700 litre Sprayer C/W BP60/20 Pump	$2,140
700 litre Sprayer C/W P48 Pump	$2,090
700 litre Sprayer C/W BP105/20 Pump	$2,210
700 litre Sprayer C/W A290 Pump	$2,369

'Sprayrite' (Moller)	polythene 200 litre with 3 pt linkage	$448.50
	500 litres freestanding tank with 3 pt linkage frame	$512.05 $599.50
700 litres with 3 pt linkage		$764.50

(ii) Spray Pumps

F.M. Winstone pump kits

Model 33	Golden Hypro N6400 nylon roller pump W.P. = 1400 kPa; output = 39 litres/minute	$ 365
Model 630	Comet A230 double diaphragm pump W.P. = 3000 kPa; output = 30 litres/minute	$ 490
Model 648	Comet P48 d.d. pump W.P. = 3000 kPa; output = 51.7 litres/minute	$ 610
Model 668	Comet P68 d.d. pump W.P. = 3000 kPa; output = 69 litres/minute	$ 715
Model 6105	Comet BP 105/20 triple diaphragm pump W.P. = 2000 kPa; output = 104.9 litres/minute	$ 730
Model 660	Comet BP60/20 pump double diaphragm pump W.P. = 2000 kPa; output = 64.2 litres/minute	$ 660
Model A290	Triple diaphragm pump W.P. = 5000 kPa; output = 100 litres/minute	$1,210
Model A2120	Quadruple diaphragm pump W.P. = 5000 kPa; output = 140 litres/minute	$1,555
Model IDS1800	six diaphragm pump W.P. = 5000 kPa; output = 196 litres/minute	$2,270
Centrifugal Pump - Hydro PTO/Gear Driven	PTO mounted pump output = 290 litres/minute W.P. up to 420 kPa	$ 590
Pump Flojet Model 2000/637	Electric diaphragm with 12VDC Supply and cooling fans W.P. = 245 kPa; output = 12.5 litres/minute	$ 204
Pump Kit Flojet Model 2000/650 (By-pass)	Internally by-passing pump W.P. = 450 kPa; Output = 7.5 litres/minute	$ 165

Mini Comet	lightweight portable pumping unit W.P. = 1500 kPa; output = 11 litres/minute	
	petrol	$ 525
	electric	$ 489
R15 Spray Kit	Comet MC15 pump; for attachment to Masport Rotahoe; W.P. = 1500 kPa; output = 11 litres/minute	$ 370

'Sprayrite'

Bertolini 36S	Double Diaphragm pump W.P. = 3400 kPa; output = 36 litres/minute	
	P.T.O. or engine drive available	$ 402 to $ 455
Bertolini 55S	Double Diaphragm pump W.P. = 4000 kPa; output = 55 litres/minute	
	P.T.O. or engine drive available	$ 500 to $ 626
Bertolini 85S	Triple diaphragm pump W.P. = 4900 kPa; output = 85 litres/minute	$856.75
Bertolini 110S	Triple diaphragm pump W.P. = 6370 kPa; output = 110 litres/minute	
	P.T.O. or engine drive available	$1,265
Bertolini 67SD	Double diaphragm pump W.P. = 1475 kPa; output = 65 litres/minute	
	P.T.O. driven	$373.75
Bertolini 103SD	Triple diaphragm pump W.P. = 1500 kPa; output = 100 litres/minute	$ 493

Plunger Pumps

Bertolini Models $935 to $1,1578
depending on output (60-140 lites/minute)

Pressure Wash Pumps

Bertolini Models $808.45 to $838.50

(iii) Spray booms

F.M. Winstone

3m straight boom, 9 Precision nozzles, 3m of 13 mm plastic hose	$140
6 m Articulated boom, 15 Precision nozzles, 6 m of 13 mm plastic hose	$643
10 m Articulated boom, 25 Precision nozzles, 13 mm connecting hose	$910
12 mm Articulated boom with non-drip Easifit 2 series nozzles	$3,565
Art 56 Vertical boom for vine and berryfruit application	$340
Art 57 Vertical boom for med. size trees, crops and vines	$480

'Sprayrite'

3.5 m straight boom, electro-galvanised tubing	$ 92.95
6 m boom	$630.20

10 m booms

Standard	$1,350.00
Heavy duty manual folding	$1,907.57
Heavy duty hydraulic folding	$3,829.00
Heavy duty electric folding	$3,829.00

12 m booms (Heavy duty)

Manual folding	$2,057.57
Hydraulic folding	$3,979.00
Electric folding	$3,979.00

(iv) Hose Reels

F.M. Winstone. Holds 100 m of 13 mm hose or 110 m of 10 mm hose	$295.00
'Sprayrite'. Holds 100 m of 10 mm hose or 100 m of 10 mm hose	$244.95

(v) Hoses - price per metre

Kuraray hose	10 mm, 4000 kPa	$ 3.40/m
Kuraray hose	13 mm, 4000 kPa	$ 4.95/m
Suction hose	19 mm, 2000 kPa (rubber)	$13.50/m
Suction hose	25 mm, 1300 kPa (rubber)	$17.70/m
Bypass hose	25 mm, 350 kPa (plastic)	$ 5.95/m
Bypass hose	13 mm, 680 kPa (plastic)	$ 2.75/m
Bypass hose	19 mm, 350 kPa (plastic)	$ 4.35/m
Pirelli hose	10 mm, 7500 kPa (rubber)	$ 5.60/m
Pirelli hose	13 mm, 7500 kPa (rubber)	$ 7.70/m

Suction hose	25 mm, 680 kPa (plastic)	$ 8.60/m
Suction hose	32 mm, 680 kPa (plastic)	$ 9.90/m
Suction hose	13 mm, 1720 kPa (plastic)	$ 7.80/m
Suction hose	19 mm, 1500 kPa (plastic)	$ 8.20/m
Connector hose	19 mm, 735 kPa (plastic)	$14.35/m
Suction hose	25 mm, 975 kPa (heliflex)	$14.75/m
Suction hose	32 mm, 725 kPa (heliflex)	$18.90/m
Suction hose	38 mm, 725 kPa (heliflex)	$22.50/m

(vi) Spray Guns (Winstone F.M.)

Spray Gun Art 25	$115.00
Maxi Gun	$130.00
Mini Gun	$ 84.00
Lancer Gun	$105.00
Gun Set	$165.00
Spray Pistol	$ 55.00
Shortly Pistol	$ 49.00

(vii) Control Units

F.M. Winstone	
MKV Unit	$ 75.00
Remote 3 way outlet (248)	$ 97.00
2 Outlet (A230, 225)	$109.00
B.P. Series 4 outlet	$120.00
Control Assy (A290, A2 120)	$185.00
Control Unit (A215)	$ 49.00
Winstone Select	$180.00
Winstone Select	$120.00
Controller - H.P. Solenoids	$110.00
Control Unit A2	$225.00
Selecta Box GB Remote	$ 75.00
Pressure Control for Flojet Pumps	$ 27.00

(viii) Pressure Gauges

0-1000 kPa rear entry	$23.00
0-1600 kPa rear entry	$23.00
0-2500 kPa rear entry	$23.00
0-4000 kPa rear entry	$23.00
0- 600 kPa bottom entry	$23.00
0-2500 kPa bottom entry	$23.00
0-6000 kPa (glycerine)	$34.00

'Sprayrite'

New Bertolini unit (includes glycerine filled pressure guage and 3 outlet taps). Max. delivery 120 litres at 120 litres per minute.	$117.30

Polmac 5 point direction control and unloader valve. Capacity to 120 litres per minute at 6000 kPa $250.00

Bertolini remote mounting control unit. High pressure or medium low pressure. $102.89

(ix) Strainers

Footstrainer 19 mm	$ 9.50
Line Filter	$ 26.00
Line Filter	$ 26.00
Line Filter	$ 26.00
Filter	$ 13.50
Venturi Filter	$ 32.00
Venturi Filter	$120.00

(x) Nozzles and Tips

Spray Tips	$ .98
Nozzle Hollow Cone H.C. 1.5	$ 6.25
Nozzle Hollow Cone TXSS 1.5	$ 11.50
Nozzle 110 Deg. Pink Fan Nylon	$ 2.00
110 Deg. Light Brown Fan Nylon	$ 2.00
110 Deg. Deg. Fan Nylon	$ 1.75

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).

(xi) Portable Sprayers and Applicators

Solo Knapsack Sprayers

Hand Operated	Retail	$179.00
accessories - tree spraying extension land		$ 22.50
- spray guard		$ 17.00
- pressure gauge and nozzles		$ 37.00
- pressure valve		$ 44.00

Platz Gnome motorised knapsack, pump on back	$573.00
Platz Boss	$625.00
Alpha H.P. Knapsack	$170.00

Donaghys 'Weed Wand' for application of liquid herbicides.

Minimum Order	No./Carton	$/Carton	$/10 Cartons or more
1.0	10	241.29	$198.03

(xii) Wheelbarrow Sprayers

Sprayrite 100 litre tank in frame on 6 350 mm wheels. Pump is 15 litre Trial to 2 stroke petrol motor. Complete 10 m hose and spray pistol. $950.00

2 metre boom with mounting brackets for above $160.00

(xiii) Horticultural Spray Equipment

Cropland 'Cropliner'

Attachment	Pump	2000 lt	1500 lt	1000 lt
920 mm Fan	AR150 lt/m	$9245.00	$9003.00	$8773.00
920 mm Fan	AR120 lt/m	$9045.00	$8803.00	$8573.00
820 mm Fan	AR150 lt/m	$9071.00	$8829.00	$8599.00
820 mm Fan	AR120 lt/m	$8871.00	$8629.00	$8399.00
720 mm Fan	AR150 lt/m	$8686.00	$8444.00	$8214.00
720 mm Fan	AR120 lt/m	$8486.00	$8244.00	$8014.00
620 mm Fan	AR150 lt/m	$8256.00	$8014.00	$7784.00
620 mm Fan	AR120 lt/m	$8056.00	$7814.00	$7584.00
Braglia	AR150 lt/m	$6675.00	$6433.00	$6203.00
Braglia	AR120 lt/m	$6475.00	$6233.00	$6003.00
Nil	AR150 lt/m	$6200.00	$5958.00	$5728.00
Nil	AR120 lt/m	$6000.00	$5758.00	$5528.00

New streamlined fibreglass tank with level gauge and flotation tyres on galvanised wheels inset in profile of tank. Dual Venturi agitation. Three large stainless filters - variable height axle - adjustable swivel drawbar - remote controls with P.T.O. shaft. Chemical premix included.

Metter Sprayer

tank 785mm fan	$11,000.00
1500 l tank 735mm fan	$10,500.00

(xiv) Trailer Sprayers (Sprayrite)

Horticultural or commercial use on 8 wheels	
200 litre tank	$1,479.50
500 litre tank	$1,699.50
Turbo Models	
500 to 2000 litre modesl available	$4,500 to $9,200

(xv) Miscellaneous

R.A.D. Electric Foam Marker	$485.00

2.27.39 Windmills

Hayes 1.8 m Wondermill

Factory No.		Available with galvanised head gear optional extra		
170 :	1. Headgear only	$9.12	170 g	$ 996
170 p	2. Headgear with glandless pump	$1,092	170 gp	$1,176
170 s	3. Headgear with steel stand, no pump	$1,105	170 gs	$1,145
170 ps	4. Headgear with glandless pump and steelstand	$1,280	170 gps	$1,365
170 pps	5. With 52 mm glandless pump and steelstand	$1,460	170 gps	$1,555
170 DWS	6. Headgear with deep well cylinder compensating heads and steelstand	$1,485	180 gDWS	$1,570

2.27.40 Farm Machinery Accessories

(i) Tractor Trays

2.0 m x 1.2 m	$255.00
Hayes utility tray	$265.03
with steel stock sides	$486.78
with 6' front	$341.00

(ii) Grader Blades

New World Products	
Standard	$895.00
Levelling Wheel	$165.00
Big Ed	$1,495.00
Big Ed Levelling Wheel	$185.00

(iii) Loaders and Fork Lifts

Zetor Heavy Duty		$3,600.00
Heavy Duty loader silage fork		$ 720.00
Heavy Duty single acting lift rams		
Heavy Duty double acting bucket rams		
4 ft wide bucket		
2 bank control valve	2WD	4WD
Hoses	$5,075	$5,525

Hayes tractor fork lift $160.92

Begg/Allen bucket loader (1982)
Standard Loader from $3,600 to $4,00

Hood and Belcher crowd action loader
Price varies depending on size of tractor, range from:

25 hp Tractor	$2,900.00
100 hp Tractor	$5,500.00

2.27.41 Horticultural Machinery

(i) Hustler Masts Forklift 1360 kg to 2.4 m

(Category 'C') rear mounted	$2,800
Sales Tax $230.40	
front mounted	$4,990

Sales Tax $399.20 (depending on size of tractor it is to go on)

(ii) Pruners

Pneumatic:

Limblocker	
V3, vinepruner	$350.00
J24, V3 with 24 inch extension	$575.00
Maibo	
SE2 medium duty vine pruner	$296.00
SE4 suitable most horticultural work	$316.00
SE6 heavy duty pruner	$440.00
Vineyard Pruners:	
V3 without nose	$ 350
Hand: Felco No. 2	$36.78
LH	$18.90
No. 3	$14.78

	No. 4	$25.16
	No. 6	$27.84
	No. 7	$48.84
Lion	Secateurs	$16.24
Snapcut	Long handled loppers 145	$29.23
Lion	Long handled loppers	$47.07

(iii) Picking Platforms

Highpick - Ladder	$10,050
Kohler engine, Hamilton hydraulic motor	$6,900
Picking frame and bucket	$ 217
Fed Hoist	$7,000

(iv) Mechanical Harvesters

Asa-lift: Potato Harvester	
Hydraulic pump, P.T.O. driven, single row	$43,600
Asa-lift: Potato Digger/Lifter	
Prices range from $5,000 to $8,000 depending on size	
Howard Grape Harvesters	
G.M. Turbo, self propelled	$180,000
Standard G.M.	$165,000
MP-Trailed Unit	$ 64,000
Peco: Blackcurrant Harvester (10)	$47,900
Blackcurrant Harvester (20)	$99,760
Raspberry/Boysenberry Harvesters	
'Keen R Berrymasters'	
with Mechanical drive	$49,850
10 R Hydrostatic Berrymaster	$66,200

* Note, Peco prices all basic, sorting bars etc. not included.

(v) Mechanical Protection

Hydrel 1500 Portable Probe 2501, 50 cm	$54.00
Birdscarers:	
Exid birdscarers c/w clock	$468.68
4.5 kg cylinder	$ 70.88
Gas unit	$ 8.89
Razzo (complete)	$485.00

Frost Alarms:

Exale Alarm thermometer, sensor	$173.00
Raco alarm	$320.71
Mains adaption	$ 20.00

(vi) Rotomow/Pulverizer

Dekka Profile Orchard and Park Mowers

Cutting Width	Orchard Model	Park Model
1. 1.3m	$2,350	$2,395.00
2. 1.8m	$2,290	$2,390.00
3. 2.3m	$3,650	$3,750.00
4. 2.73m	$3,874	$3,975.00
5. 3.3m	$4,660	
6. 3.8m	$5,150	

(vii) Howard Wine Press $22,200-$31,300

2.27.42 Rotary Hoes

Howard		C/W Turf
HR11 Rotovator 540 P.T.O.		Renovating Rotor
1.02m Rotavator	$4,234	$4,894
1.26m Rotavator	$4,476	$5,249
1.52m Rotavator	$4,872	$5,761

AH Rotovator 540 or 1000 P.T.O.	
2.28m Rotovator C/W pneumatic P.C.W.	$12,361
2.54m Rotovator C/W pneumatic P.C.w.	$13,221
3.05m Rotovator C/W pneumatic P.C.W.	$14,567
2.28m Rotovator C/W crumble roller	$13,112
2.54m Rotovator C/W crumble roller	$14,002
3.05m Rotovator C/W crumble roller	$14,485

Horticultural Rotovator	
H352 410 mm	$ 2,604

2.28 BUILDINGS

2.28.1 Dwellings

New cost varies considerably but is approximately $500 per square metre for an average farm homestead.

2.28.2 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

		Galvanised	Delux
4.8 m x 3 m	Windows 3	$1,852	$2,764
9.0 m x 3 m	Windows 8	$2,869	$3,351
4.8 m x 3.6 m	Windows 4	$2,090	$2,442
9.0 m x 3.6 m	Windows 9	$3,062	$3,377
6.0 m x 3.6 m		$2,372	$2,770
Garage Workshop			
4.8 m x 4.2 m		$2,285	$2,677
9.0 m x 4.2 m		$3,326	$2,886
4.8 m x 4.8 m		$2,442	$2,853
9.0 m x 4.8 m		$3,564	$4,163
4.8 m x 5.4 m		$2,262	$3,110
9.0 m x 5.4 m		$3,890	$4,544
4.8 m x 6.0 m		$2,785	$3,254
9.0 m x 6.0 m		$4,057	$4,739
Double Garage			
5.4 m x 5.4 m		$2,975	$3,462
9.0 m x 5.4 m		$3,970	$4,624
6.0 m x 6.0 m		$3,252	$3,786

New World Sheds	Kitset $	Erected $
9 m x 6 m x 3 m (3 x 3 m bays)		
Open 1 side	$2,770	$3,230
Closed in with 1 sliding door in side bay	$3,415	$3,995
14.4 m x 8 m x 3 m (4 x 3.6 m bays)		
Open 1 side	$5,990	$6,990
Closed in with 1 sliding door in side bay	$6,880	$7,990
18 m x 9 m x 3.5 m (5 x 3.6 m bays)		
Open 1 side	$8,225	$9,750
Closed in with 1 sliding door in side bay	$9,280	$10,870

2.28.3 Sleepouts (Skyline)

2.4 m x 3.0 m	$2,247	$2,462
2.4 m x 3.6 m	$2,417	$2,653

3.0 m x 3.0 m	$2,541	$2,780
3.0 m x 3.6 m	$2,725	$2,987
3.6 m x 4.8 m	$3,874	$4,214

2.28.4 Woolsheds

(i) Fletcher Brownbuilt Shearing Shed and Covered Yards

3 bay Woolroom - 3 stand - 5 bay covered yard.

	Kitset	Est. to Erect
Concrete floor	$33,635	$8,264
Wooden floor	$36,567	$7,025
Standard Shearing shed - 3 bay woolroom, 3 stand, for concrete floor.	$22,381	$6,620
3 bay woolroom, 3 stand, wooden floor	$25,314	$5,517
Woolroom extra bays		
For concrete floor, grating, stand excluded	$3,322	$ 951
For wooden floor, grating, stand excluded	$4,525	$ 612
For concrete floor, grating, stand included	$6,157	$1,172
For wooden floor, grating, stand included	$7,196	$ 835
Covered yard extra bays		
11 m x 4.235 m	$1,934	$ 310
Extra for netting and foil per bay	$ 168	$ 42
Standard Sheds		
Extra Stands	$ 675	$ 105
Return race conversion kit	$ 65	$ 25

Aabaas Bros.
Woolshed
Steel frame $38.80-$42.20 per sq. metrekitset.
Timber frame cheaper.

2.28.5 Haybarns

(i) New World Round Barns

	Length	Kitset Form	Erected
2 bay	6 metre	$1,605	$2,095
3 bay	9 metre	$2,290	$2,915
4 bay	12 metre	$2,290	$3,815
5 bay	15 metre	$3,615	$4,665
6 bay	18 metre	$4,265	$5,580
7 bay	21 metre	$4,965	$6,410
8 bay	24 metre	$5,665	$7,290
9 bay	27 metre	$6,350	$8,240
10 bay	30 metre	$7,025	$9,030
Blank end		$ 545	$ 595
Door end		$ 855	$ 905
Slid. door end		$1,265	$1,365

Novaroof panels $10.00

(ii) Hawker Engineering (North Island Prices)

Round Haybarns				
Bale capacity 1100	2 Bays	$2,080	to	$2,277
1650	3 Bays	$2,900	to	$3,136
2200	4 Bays	$3,800	to	$4,074
2750	5 Bays	$4,650	to	$4,948
3300	6 Bays	$5,500	to	$5,840
Implement Sheds				
10.8 x 6 x 2.7 stud		$3,520	to	$3,630
14.4 x 6 x 2.7 stud		$4,380	to	$4,750

(iii) Fletcher Brownbuilt Utility Shed

	Kitset	Estimate to Erect
Standard 3 bay	$8,099	$2,500
Extra bays	$1,887	$ 450
All materials for closing in front of shed.		
1 bay	$ 280	$ 72
2 bays	$ 524	$ 122
3 bays	$ 802	$ 148

(iv) Fletcher Brownbuilt Implement Shed

Standard 3 bay	$8,629	$2,500
Extra bays	$1,982	$ 450
All materials for closing in front of shed.		
1 bay	$ 217	$ 72
2 bays	$ 410	$ 122
3 bays	$ 621	$ 148
Netting and foil.		
To roof slopes only (per bay)	$ 131	$ 35
Spouting D.P.s (both sides)	$ 46	$ 15

(v) Aabaas Bros Oval Hay Barns

Available numerous size variations, here are six examples

6m lean-to 2.4m backwall height	Kitset	Erected
650 bales	$1,770	$2,770
1625 bales	$4,687	$6,187
10m Arched roof, steel frame		
10m x 10m, backwall height 2.4m		
1100 bales		$4,160
10m x 27m, backwall 2.4m		
6000 bales		$10,644
9m Gable Steel frame		
9m x 9m, 3.2 backwall height		
1300 bales		$4,806
4000 bales		$11,162

2.28.6 Glasshouses

(i) Fletcher Brownbuilt

Size (m)	Area (sq.m.)	Kitset
15.2 x 9.8	149	$14,673
20.1 x 9.8	197	$18,064
24.9 x 9.8	244	$21,456
29.8 x 9.8	292	$24,849
34.7 x 9.8	340	$28,268
20.1 x 19.15	385	$32,206
24.9 x 19.15	477	$38,033
29.8 x 19.15	571	$43,859

34.7 x 19.15	665	$49,865
39.6 x 19.15	758	$55,692
44.4 x 19.15	850	$61,518

Size (m)	Area (sq.m.)	
29.8 x 28.5	849	$62,874
34.7 x 28.5	989	$71,135
39.6 x 28.5	1129	$79,396
44.4 x 28.5	1265	$87,657
29.8 x 37.85	1128	$82,167
34.7 x 37.85	1313	$92,856
39.6 x 37.85	1499	$103,547
44.4 x 37.85	1681	$114,217

2.28.7 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. $5,850

Coolpak (hiring)
Berryfruit: 5.5c/kilo for first month
(if fruit is soft)
4.0c/kilo for first month
(if fruit is frozen)
3.0c/kilo thereafter.

2.28.8 Grain Silos

Dan Cosgrove Ltd - Farm Sized Silos

Metric Wheat	Eave Height (m)	Diameter (m)	$
22	2.46	3.66	$2,189
29	3.27	3.66	$2,376
35	4.09	3.66	$2,757
42	4.90	3.66	$2,819
36	2.46	4.58	$2,576
46	3.27	4.58	$2,811
57	4.09	4.58	$3,093
67	4.90	4.58	$3,364
54	2.46	5.49	$3,279
68	3.27	5.49	$3,625
83	4.09	5.49	$4,102
98	4.90	5.49	$4,400

113	5.71	5.49	$5,055
127	6.52	5.49	$5,589
142	7.34	5.49	$6,122
116	4.09	6.41	$5,060
136	4.90	6.41	$5,657
156	5.71	6.41	$6,339
176	6.52	6.41	$7,094
196	7.34	6.41	$8,294
154	4.09	7.32	$6,042
180	4.90	7.32	$6,750
206	5.71	7.32	$7,527
233	6.52	7.32	$8,430
260	7.34	7.32	$9,223

Wheat Tonnes	Eave Height (m)	Diameter (m)	$
Cone - 6	2.31	2.74	$1,948
10	3.12	2.74	$2,095
14	3.93	2.74	$2,239
17	4.74	2.74	$2,387
13	2.31	3.66	$2,449
20	3.12	3.66	$2,363
27	3.93	3.66	$2,822
33	4.74	3.66	$3,013
40	5.55	3.66	$3,293
46	6.36	3.66	$3,421
Flat - 23	2.49	3.66	$2,430
30	3.30	3.66	$2,621
36	4.11	3.66	$2,902
43	4.92	3.66	$3,092

(ii) Springston Agricultural Engineering

V bottom on legs, gravity feed

10 tonnes	$1,800
15 tonnes	$2,000
25 tonnes	$2,300
35 tonnes	$2,000

(iii) Cyclone Silo Mesh

Roll Size: 16 m long x 2365 mm wide - per roll $264.41

(iv) Oxford Industries
(on skids)

	Flat	Cone
20 tonnes	$2,200	-
30 tonnes	$2,700	-
15 tonne	-	$1,950

25 tonne short leg	-	$2,350
25 tonne long leg	-	$2,400
35 tonne	-	$2,750
40 tonne	$2,900	-

(v) A. M. Bisley & Co. Ltd - Transportable Silos

Model	Capacity (Wheat)	$ (Av. $ of prices for Canterbury
12/4	33 tonne	$2,744.00
12/5	40 tonne	$3,123.00
12/6	46 tonne	$3,350.00

2.28.9 Petrol Tanks

(i) Overhead

1250 litre (300 gallon)	
Tank	$646.00
Stand	$290.00
Kitset	$196.00
2200 litre (500 gallon)	
Tank	$896.00
Stand and Kitset as for 1250 litre	

(ii) Underground

Kitset and Pipework	$490.00
Plus Tanks: 1250 litre	$646.00
2200 litre	$896.00

2.28.10 Pig Shelters

Springston Agricultural Engineering:

Small)
Large) P.O.A. but in the range $150 to $200

2.28.11 Dog Kennels

(i) Aabaas Dog Motels:

Single	$224.00
Double	$389.00
3 berth	$579.00
4 berth	$714.00

(ii) Drum Machinery and Engineering:

Dog Kennel and Run .8 m sq. - single	$275.88
- double	$488.84
- triple	$694.54

(iii) Hydes Distributors

Single Motel	$352.00
Double Motel	$590.00
Triple Motel	$830.00

2.28.12 Sheep Yards

Cyclone Sheep Yards (made in panel form, add 30% for cost of erection).

Yard for handling 1,200 sheep P.O.A.

2.28.13 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 and Drafting Gates. P.O.A.

Head Bail	$ 502.04
Lifting arm extra	$ 21.38 each
Cattle Ramp (Hydes Distributors)	
Complete	$1,240.00
Without timber	$ 865.00

2.28.14 Dairy Sheds

The cost 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 1983/84 are shown below.

(i) Turn-style Rotary Dairies

(Platforms are available from Turn-Styles Ltd, and Milking Systems from Alfa-Laval).

Convential Platform		Milking Systems		Open-	Milking Systems	
		HP102	EP100	Centre	HP102	EP100
	$	$	$	Platform	$	$
16 unit	14,420	11,420	13,584		P.O.A.	P.O.A.
20 unit	17,890	13,107	15,309		P.O.A.	P.O.A.
24 unit	22,560	14,967	17,881			
28 unit	25,600	17,412	20,389	25,500	19,071	21,370
32 unit	30,680	19,067	22,085	29,120	20,596	22,932
36 unit	34,040	20,859	23,917	32,400	22,227	24,607
40 unit	36,425	22,531	25,628	34,200	26,529	28,741
50 unit	44,920	P.O.A.	P.O.A.	42,750	30,821	33,786
60 unit	54,800	P.O.A.	P.O.A.	51,300	35,316	38,360

All Opencentre Platforms (28 cows and above) are fitted with dial controlled vari-speed drive units.

(ii) Ardco Rotary Dairies

(Platforms are available from Ardco Limited and Milking Systems from Alfa-Laval)

	Platform	Milking Systems	
		HP102	EP100
	$	$	$
16 unit	11,360	10,441	12,624
20 unit	14,400	12,075	14,305
24 unit	17,363	13,557	16,518
28 unit	19,700	15,192	18,199
32 unit	22,010	23,635	25,334
36 unit	P.O.A.	25,244	26,994
40 unit	26,900	26,885	26,687
48 unit	33,100	30,423	33,015
60 unit	39,500	P.O.A.	P.O.A.

The milking systems are complete with rubberware and milking equipment. Milk pumps, coolers, vacuum pumps and electric motors are extra, as are the electric wiring and plumbing costs.

(iii) Costings for Rotary Milking Complex - Octagonal Building with Silo Vat

Supplied by Ardco Limited

No. of Bails	20	24	28	32
	$	$	$	$
Platform	28,389	33,872	38,521	42,521
Octag Buildings	17,754	20,808	23,791	27,790
Yard	9,122	10,271	12,382	12,382

Switchboard	1,932	1,932	1,932	1,932
Sub Total	57,197	66,883	76,626	84,625
Milk Machine*	18,000	22,000	25,000	29,000
Electricity*	2,100	2,200	2,300	2,400
Total Cost	$77,297	$91,138	$103,926	$116,125
Cost/Bail	$3,864	$3,795	$3,711	$3,625

No. of Bails	40	48	60
	$	$	$
Platform	52,185	62,622	73,294
Octag Buildings	34,351	41,746	56,419
Yard	13,750	15,520	17,110
Switchboard	1,932	1,932	1,932
Sub Total	102,218	121,820	148,755
Milk Machine*	36,000	44,000	50,000
Electricity*	2,600	2,800	3,000
Total Cost	$140,818	$168,620	$201,755
Cost/Bail	$3,520	$3,513	$3,362

Note 1. These prices are for new site with Octagonal Buildings and include overhead Top Gate, automatic draughting gate, machine washing and heating. Freight and travelling to be added.

2. These prices are for a freestanding outside milk silo pad. If a vat is used requiring a vat stand the prices will increase according to the number and size of vats.

* Estimates Milking machine prices can vary considerably depending on type and wash sytem.

(iv) Herringbone Dairy Sheds

Estimate Prices for the below sheds are from C. and F. Industries, Carterton.

C. and F. Industries Dairy Sheds	
12 aside	$43,000
16 aside	$48,000
20 aside	$52,000
24 aside	$57,000

Note: These estimates do not make allowances for any sub-trades such as electrical, plumbing or milking plants etc.

2.28.15 Building Materials

(i) Construction Plywood (Placemakers)

Aorangi Construction

	7.0 mm	9 mm	12 mm	17.5 mm
2400 x 1200 Cp-C	$23.06	$29.57	$34.96	$49.35
2400 x 1200 C-C	$19.39	$24.28	$32.47	$46.09

(ii) Durolite

8 corrugated Durolite (per metre)	$17.80
10.5 corrugated Durolite (per metre)	$20.26
900 mm Flat Durolite (per metre)	$20.82
1200 mm Flat Durolite (per metre)	$24.79

(iii) Particle Board

		2400 x 1200	2400 x 1800	3600 x 1800
Super Flake	9 mm	$16.53	$23.45	$35.19
Super Flake	12 mm	$18.92	$26.91	$40.32
Super Flake	15 mm	$22.53	$32.10	$48.17
Super Flake	18 mm	$25.55	$36.46	$54.70
Pyne Floor	21 mm	$32.99	$48.35	$72.77

(iv) Corrugated Iron

Standard 706 mm wide	1500 mm	$ 9.50
	1800 mm	$11.39
	2100 mm	$13.29
	2400 mm	$15.19
	2700 mm	$17.09
	3000 mm	$18.99
	3300 mm	$20.89
	3600 mm	$22.79

(v) Galvanised Weatherboard

	1800 mm	2100 mm	2400 mm
Galvanised weatherboard	$15.14	$17.20	$19.21
Galvanised plain ridging (450 mm)	$ 7.90	$ 9.22	$10.54
Galvanised 75 mm downpipe	$ 7.61	$ 8.88	$10.15

(vi) Nails

	Steel/ case	Steel/ kg	Galv./ case	Galv./ kg
100 x 4	$51.49	$2.59	$81.99	$4.29
75 x 3.15	$54.29	$2.79	$53.69	$4.19
60 x 2.8	$56.49	$2.99	$86.39	$4.39
50 x 2.5	$57.29	$2.99	$87.29	$4.39
40 x 2.0	$58.69	$2.99	$88.99	$4.49
60 x 3.55 (lead nails)	$80.59	$4.49	-	-
75 x 3.55 (lead nails)	$80.79	$4.49	-	-

(vii) Concreting Requisites

Cement bagged

	Per Tonne	Bags
Guardian	$159.08	$6.71
Milburn	$159.08	$6.71
Rapid Hardening	$172.98	$7.59

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	$ 82.44
150	x	150	x	7.10	$ 73.88
150	x	150	x	6.30	$ 59.36
150	x	150	x	6.00	$ 53.32
150	x	150	x	5.30	$ 43.52
150	x	150	x	5.00	$ 40.14
150	x	150	x	4.00	$ 27.74
150	x	150	x	3.15	$ 19.96
75	x	75	x	6.30	$119.12
75	x	75	x	6.00	$107.00
75	x	75	x	5.30	$ 87.34
75	x	75	x	4.00	$ 55.12
75	x	75	x	3.15	$ 40.32

Placemakers 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	$13.58	Bags $1.74
11 mm crushed metal	$12.34	Bags $3.24

Plastering sand	$35.79	Bags $2.94
Mortar Ex Yard		
Per cubic yard (0.76 cubic metres)	$54.50	Bags $4.52

Posts

1.35 m butt	$8.37
1.85 m	$9.09
2.77 m	$12.69

Fletchers Concrete Piles and Posts

30 cm	$1.98
38 cm	$2.12
45 cm	$2.55
53 cm	$2.98
60 cm	$3.42
69 cm	$3.99
76 cm	$5.36
90 cm	$6.73

(viii) Steel

665 mesh	10 metres square	$43.52
668 mesh	10 metres square	$27.74
6 m x 9 mm	RM steel	$ 3.37
6 m x 12 mm	RM steel	$ 4.78

29 DRAINAGE

2.29.1 Drainage Materials

(i) Field Tiles

Boyes (.5 m lengths)	Cost per Metre
100 mm	$2.00
150 mm	$3.05
250 mm	$7.50

(ii) Novaflow/Novacoil Pipe

Drainflo (A.H.I.)

65 mm	150 metre coils	$1.33
110 mm	100 metre coils	$2.17
160 mm	45 metre coils	$4.25

10% discount for 20 rolls or more

(iii) Backfill Shingle

(Per cubic metre) $10 to $12 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)

2.29.2 Trenching Costs

These cnarges are for average conditions.

Cable	70c per metre
Irrigation	70c per metre
Drainage	$1.00 to $1.20/m according to size of pipe

Cartage costs are extra (10c per mile)

2.29.3 Mole Drainage

Rate of work approximately 2.5 hours per ha. Approximate cost $35.00 per hectare. $35/hour average

2.29.4 Well Drilling

Wells are now undertaken on a "schedule of rates" basis, with the screen-in-place development and test pumping charged separately.

150 mm	$150
200 mm	$180
250 mm	$205
300 mm	$240

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	$528.00	$615.00	$828.00	$1,350.00
Development work - per hour	$ 55.00	$ 55.00	$ 55.00	$ 55.00

Test pumping:
includes pump and generator, etc. - per hour.

-	up to 5 kW pump	$55.00
-	up to 15 kW pump	$55.00
-	up to 35 kW pump	$55.00
-	over 35 kW pump	$55.00

Larger diameter wells, test drilling and all work outside our normal retail areas shall be upon quotation according to location, site conditions etc.

0 IRRIGATION

2.30.1 Basic Equipment

(i) Aluminium Pipes and Couplings

Diameter	Price of Lengths
51 mm	$ 5.85/m
76 mm	$ 9.00/m
102 mm	$11.75/m
127 mm	$19.80/m
155 mm	P.O.A.

(ii) Sprinklers

Naan	501			Each	$ 8.60
	501 Stake and Tube				$ 2.80
	213/98				$ 14.10
	223/94				$ 19.20
	322/34				$ 26.20
	425				$ 11.45
	622/96				$ 22.60
	233/96		$14.37	to	$ 28.80
	2033/96				$ 34.10
	254/96				$ 43.50
	254/31				$ 70.00
	255/31				$196.30
	233/31				$ 45.00
	7102	Sprinkler Complete			$ 3.05
	7102	Mist			$ 2.80
	7102	Sprayer			$ 2.80

Homershams

Toro Ag 1 half inch base	$ 19.68
Toro Ag 1 three quarter inch base	$ 20.80

(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	$ 9.00	$12.77
150 mm	$12.88	$18.32
200 mm	$19.61	$28.21

(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 $9,200 to $11,500

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 from $4,000 to $5,000.

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	$ 460
Series Controller	CRC4	$ 350
	CRC6	$ 403
	CRC8	$ 505
	CIC8	$1,006
	CIC12	$1,273

(viii) Connectors (Harvin)

ST - 103	$1.74 each

(ix) Valves

Harvin:	
No. 3 quick coupling	$35
valve key	$12
No. 5 quick coupling	$44
valve key	$26

(x) Rotors (Harvin)

Internal Parts	
63 interal	$104.74
64 interal	$108.68

(xi) Brass Spray Heads (Harvin)

RB 2200 Flower bubbler	$ 4.50
RB 2400 Full: square or part circle	$ 5.50
RB 2400 Strip and three quarter	$ 5.50
RB 2400 Flat	$ 6.00
RB PA85 Adapter (plastic)	$ 1.50

(xii) Impact Sprinklers (Harvin)

25 AFP	$ 25.00
35 ADJ	$ 72.00
40 EFCH	$ 43.00
80 ATEW	$167.00
70 SWH	$135.00
140 70 WH	$ 56.00
P3	Approx. $ 19.00
85 EPSH	$235.00

(xiii) Irrometers (Soil moisture indicators - Harvin)

30 cm Model R	$63.50
45 cm Model R	$64.90
60 cm Model R	$66.30
90 cm Model R	$58.50

2.30.2 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) CPT 300	$36,750
Irrigating run: 660 metres (unit carries 300 m x 114 mm hose) CPT 350	$37,780

Double head sprinklers: 2.6-4.6 kPa
Output: 81 cubic metres per hour
Three travel speeds: water powered self propulson system.

(iii) Briggs 'Roto Rainer'

Model	125	175	250
Price ($)	33,700	41,975	42,975
Hose length (m)	200	200	200
Hose Int. Dia. (mm)	103/90	112	125
Drum Rope (m)	440	440	440
Boom Length (m)	43/30	68	68
Irrigating width (m)	75/60	100	100
Area Covered/Run (ha)	3/2.4	4	4

Optimum Working Pressure (all models) 280 kPa.

Model 205L Linear-Rain Fixed
Boom Travelling Irrigator $45,975

(iv) Andrews and Beaven 'Water Winch'

Model T25					
100 m	x	76 mm	Plus	P150	$15,000
150 m	x	76 mm	Plus	P150	$16,000
200 m	x	76 mm	Plus	P150	$17,500
Model T30					
150 m	x	89 mm	Plus	P150	$20,900
200 m	x	89 mm	Plus	P150	$22,700
Model T35					
200 m	x	103 mm	Plus	P150	$29,000
Model T45					
200 m	x	112 mm	Plus	P200	$31,100
200 m	x	126 mm	Plus	P200	$32,000
Boomer					
200 m	x	89 mm			$35,000
200 m	x	103 mm			$38,000
200 m	x	112 mm			$40,000
200 m	x	126 mm			$41,000
Extra Hose Including Couplings					
50 m	x	112 mm			$ 1,600
50 m	x	126 mm			$ 3,100

Travelling Irrigators

Model 30 (PCC) Irrigator

With 100 m of 4 cm Angus $ 5,210
With 100 m of 5 cm Angus $ 5,340
(Includes irrigator, hose, hose connectors,

anchor, Naan sprinkler, nozzle, 7.5 cm starting coupling).

Option: Power Winder with Engine	$ 695

Model 2000 (TCD) Irrigator

With 100 m of 5.5 cm Angus	$ 8,750
With 150 m of 5.5 cm Angus	$ 9,660
With 100 m of 7.5 cm Angus	$10,140

(Includes irrigator, hose, hose connections, tractor anchor, P100 for 5.5 cm hoses or P150 for 7.5 cm hoses, nozzle, 10 cm or 7.5 cm starting coupling).

Option: Brakes	$ 86
Front Wheels	$ 185
Stake Anchor (up to 1500 lbs end pull)	$ 56

Model 3000 (TCE) Irrigator

With 100 m of 7.5 cm Angus	$11,560
With 150 m of 7.5 cm Angus	$12,960
With 200 m of 7.5 cm Angus	$14,360
With 100 m of 8.5 cm Angus	$12,705
With 150 m of 8.5 cm Angus	$15,155

(Includes irrigator, hose, hose connections, tractor anchor, P150 sprinkler, nozzle, 10 cm starting coupling, hose purge).

Option: Brakes	$ 86

Model NCL - 3700 Kg

With 200 m of 10 cm Angus	$23,700
With 200 m of 11 cm Angus	$23,035
With 150 m of 12.5 cm Angus	$23,664

(Includes irrigator, hose, hose connection, P200 sprinkler, nozzle, tractor anchor, 12.5 cm starting coupling).

Model LHW Fixed Boom

With 200 m of 11 cm Angus	$44,360
With 200 m of 12.5 cm Angus	$45,070
With 250 m of 11 cm Angus	$49,270
With 250 m of 12.5 cm Angus	$50,150
With 300 m of 11 cm Angus	$51,920

(Includes Boom Irrigator, hose, hose connections, 4 off PC100 sprinklers, nozzles, balance kits, tractor anchor, 12.5 cm starting coupling.

250 m and 300 m Angus hose machines include irrigator with double nose reel, longer cable, 2 additional hose connections and quick action hose joiner).

(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	$42,500 to $54,500.			

(viii) 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

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		$ 36.06
25mm filter 130 micron		$ 80.05
40mm filter 130 micron		$193.15
50mm filter 130 micron		$232.00
50mm filter 130 micron - super 2		$323.00

Larger sizes in stock, prices available on request.

(ix) Horticultural Irrigation Equipment - Southern Cross

Irrigation Pump Sets

RHB 22 kW 2 pole	$4,197.00
RHC 30 kW 2 pole	$4,255.00
RHD 37 kW 2 pole	$5,370.00
RHE 45 kW 2 pole	$6,575.00
RHE 56 kW 2 pole	$6,759.00
RHF 75 kW 2 pole	$7,631.00

2.31 MICRO-COMPUTERS

2.31.1 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.

2.31.2 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.

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?

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?

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?

2.31.3 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.

Note: A computer with this sort of capability could be expected to cost within the range of $3,000 to $10,000.

(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.

A reliable printer for general farming use would cost between $800 and $1,200.

(v) A farmer would normally require the following software:
Database package
Word processing
Spread sheet
Financial Recording system

These may be purchased separately or as a

collective package in some cases. Cost would be in the vicinity of $2,500 to $3,500.

In many cases some software may be included as part of the total price when purchasing the computer itself.

32 FARM AIDS

(i) Weighing Platforms

Hayes Cattle Weighing platform 1000 kg	$ 790.00
With 3 point linkage 1000 kg	$ 960.00
Sheep Weighing platform (squeeze) with swing gate	$ 687.21
With drafting gate	$ 719.36
Sheep/Pig Weighing platform (with crate)	$ 680.54
Donalds Sheep and Pig Hydraulic weighing platform Draftmaster 100	$ 842.00
Draftmaster 100 with wheels and handles	$ 902.00
Cattle weighing platform 1000 kg	$ 990.00
Cattle weighing platform 1500 kg	$1,140.00
Donalds Grain weigher 122 cm x 66 cm	$1,020.00
Fleece weigner	$ 180.00
Model 1000 Hopper weigher	$1,020.00
Model 1500 Hopper weigher	$1,170.00
Rubber mats - model 1000 cattle weigher	$ 65.00
Rubber mats - model 1500 cattle weigher	$ 79.00
Transport wheels and handles	$ 78.00
Column support	$ 32.95

(ii) Animal Crushes

Donalds Squeeze Cattle Crush (with sliding gate and walk-through head bail)	$2,160.00
Sliding Gate	$ 231.00
Head Bail Automatic Walk-through	$ 712.00
Head Bail Gate Type	$ 432.00

Easybail Enterprises Combined:

	Standard Finish	Galvanised
Optional left or right hand opening easybail	$825.00	$975.00
Non return race gate	$195.00	$245.00

Hayes Walk-through Cattle Head Bail	$ 378.00
Squeeze Cattle Crush with Floor (no head bail)	$1,413.00

Squeeze Cattle Crush with Head Bail (no floor) 446/416	$1,676.00
Squeeze Cattle Crush with Head Bail and floor 446F/416	$1,788.00
Squeeze Cattle Crush with Head Bail, Floor and Rear Operating Attachment 446F/416/449	$1,896.00
Sliding Cattle Gates	$ 286.50

Hydes Distributors

Sheepmaster Sheep Handler	$6,893.00
Curved 90° ramp complete	$ 965.00

(iii) Loading Ramps

Donalds Sheep Loading Ramps with walkway

Gun crutcha with decoy pen, loading ramp and two curved races	$2,575.00
Gun crutcha with decoy pen, loading ramp without curved races	$2,030.00
Gun crutcha with decoy pen, without ramp and races	$1,848.00

Springston Agri. Eng. Sheep Loading Ramps

6.1 m long mobile height adjustable	$ 925.00

(iv) Sheep Cradles and Chutes

'Roydon' canvas Sheep Cradle	$ 53.16
S.J. Gallagher Lamb Tailing Chute	$ 301.00
Hayes 'Stevlyon' Single Lamb Cradle	$ 55.27
Multilamb Cradle (4)	$ 386.00
Hagerson Double Docking Cradles	$ 37.50

Garth D. Stewart
Stewarts Revolving Docking Cradle

3 lamb	4 lamb	6 lamb
$240.00	$280.00	$410.00

With Stand $56 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) Footrot Troughs

3.6 m x 1.0 m footrot trough	$595.00
3.6 m x 1.3 m footrot trough	$695.00
Wooden Sides	$178.00
Light Galvanised 3 m x 0.710 m footrot trough	$120.00

(vii) Offal and Pig Tucker Cookers

12 Gallon Tucker Pot	$ 368.00
22 Gallon Tucker Pot	$ 541.00
44 Gallon Tucker Pot	$ 725.00
66 Gallon Tucker Pot	$1,060.00
88 Gallon Tucker Pot	$1,357.00
120 Gallon Tucker Pot	$1,541.00

(viii) Miscellaneous

Johnstone Portable Deer Pen (including metal gate, trip mechanism and netting)	$400.00
Hayes Cow Lifter	$ 72.65
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	$ 29.59
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)	$ 59.97
Light Blocks 50 mm 136 kg (with 12m rope)	$ 30.71
Hayes All Metal Gambrel	$ 5.37
Hayes Snig Chains 10 mm with Slip or Grab Hooks	$ 71.00
Hayes Dipping Crutch	$ 15.89
Hayes Snig hook for light chain	$ 7.20
Hayes Snig hook for 10 mm chain	$ 14.36
Hayes Grab gook for 13 mm chain	$ 20.73
Gambrel (sheep) restrainer	$ 7.75
Hayes Dog Chains - 9 gauge twisted link	$ 6.97
- 12 gauge twisted link	$ 6.22
Bay Lambing Instrument	$ 3.45
Bale Hook - wool	$ 7.63
Bale Hook - Bent Hook	$ 6.40
Bag Hooks - narrow and wide	$ 5.82
Hay Hooks	$ 6.05
Animal Weight Banks	$ 0.52

Sack Barrow		$ 99.90
Clough 450 hydro-axe		$2,519.00
Gallagher heavy duty wood splitter		$860.00
Varteg Portable Firewood Saw		from $4,870 complete
Batten Mill		
- mechanical		from $3,700
- hydraulic		from $4,400
Sawmill - hydraulic		$6,700
Breakdown and Breastbench		$13,800
Wellsford Offal Cooker (oil fired)		$120.00
Ace galvanised and stainless steel		
22 litre boiler pail - Stainless Steel	205	$23.57
- Galvanised		-
63 litre boiler pail - Stainless Steel	385	$44.25
- Galvanised	295	$32.90
94 litre	445	$52.30
	335	$52.30
130 litre boiler pail- Stainless Steel	580-670	$66.70-$77.00
- Galvanised		
200 litre boiler pail- Stainless steel	820	$93.72
	510	$51.75
Sidewinder Offal Cookers:		
44 litre		$320.00
100 litre		$470.00
200 litre		$630.00
Secateurs:		
Stafix		$ 5.85
Fumigun (glasshouse fumigation)		$255.75
Garden Time Secateurs		$ 5.85
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.		$ 82.41
1580TP 432mm adjustable to 610mm long x 203mm Dia.		$ 85.85
15010TP 432mm adjustable to 610mm long x 254mm Dia.		$ 99.85
15012TP 432mm adjustable to 610mm long x 305mm Dia.		$106.26
Ladders:		
1.8 m Aluminium Alloy		$133.00
2.1 m		$157.00
2.4 m		$175.00

McCullock Bushcutter	MAC 60A	$336.31
	MAC 80A	$417.69
	MAC 90A	$521.91
Humes:		
Cattlestops 1.2 m		$197.30
Cattlestops 1.8 m		$262.38
Cyclone Rat Traps	- rail freight paid	$ 18.16
Cyclone Opossum Traps	- rail freight paid	$ 19.81

3 PROTECTIVE EQUIPMENT AND CLOTHING

Gloves	
Knitted gloves	$ 1.28 - $ 3.76
Fabric gloves	$ 3.84 - $ 6.07
Fabric and leather gloves	$ 7.04 - $ 7.88
Leather gloves	$ 9.75 - $22.32
Leather mitts	$14.70 - $17.81
Leather gauntlets	$16.79 - $31.89
P.V.C. gloves	$ 4.63 - $16.16
Edmont gloves	$ 7.70 - $21.21
Kelvar knitted gloves	$14.72 - $52.24
Kelvar sewn gloves	$22.47 - $66.50
Rubber gloves	$ 1.77 - $ 7.31
Eye protection (Wormald)	
Spectacles	$10.45 - $21.16
Goggles	$ 5.43 - $10.08
Airstream Anti-Dust Helmet (Wormald)	
Complete with battery	$588.15
Battery charger 240 v	$ 62.18
Wormald Safety Helmet H46	$ 15.88
Wormald Welding Equipment:	
Helmets - Hiderok lift up	$ 34.92
- fixed front	$ 29.85
- Nylerok	$ 50.10
Goggles	$ 11.26 to $ 19.50
Face Shield - inner handle	$ 29.33
- outer handle	$ 24.77
See through Welding Curtain	$ 29.24
Gloves	$ 18.09 to $ 19.08
Aprons - Hay	$ 37.70
- Dairy shed (with pocket)	$ 17.04
Ear muffs	
- Wormald Silencer Mark II	$ 16.44
Dust guard Masks Single	$ 5.12

- Filler PKT of 20		$ 0.79
Respirators		
- 'Agriculture'	Single Filter	$ 25.78
	Double Filter	$ 33.91
	Hood	$ 93.50
	Filters	$ 5.59
Overalls		
- Zip comb. Size 3- 8 (depending on colour)		$37.33 - $42.00
Size 9-10 (depending on colour and size)		$39.53 - $44.28
- Bib and brace		$29.81 - $31.86
- Safety Boots		$44.21 - $92.70
Gumboots		
- Marathon Knee		$ 57.00
- Perth Knee 6-12		$ 45.70
- White & Black	Bata Jobmaster	$ 26.13 and $ 26.61
	Bata Capwell	$ 29.17 and $ 29.59
- Redband Short		$ 41.83
Shearers Moccasins (leather)		$ 23.35
Parkas - Oilskin		$ 45.00 to $ 60.00
- P.V.C. coated		$ 42.35
Swandri Zip front jacket		$ 86.67 to $ 89.95
- Bushshirt		$ 65.03 to $ 77.00
Leggings		
- Oilskin		$ 27.00
- P.V.C. coated		$ 25.74
Picking aprons		$ 36.90
Picking bags		$ 31.60
Picking buckets		$ 75.00
Line 7		
P.V.C. Farmers Jacket three-quarter unlined coat No. 701		$ 42.00
P.V.C. Overtrouser (tie waist) No. 702		$ 24.00
P.V.C. Overtrouser (elastic waist) No. 703		$ 24.50
Oily Japara Jacket		$ 50.50
Oily Japara Trousers		$ 23.00
Spray Suit		$ 52.00

2.34 PACKAGING MATERIALS

2.34.1 Horticultural Packaging (N.Z. Fruitgrowers Federation)

Apple Bags: polythene with holes		per thousand
Plain:	5 kg	$ 58.40
	9 kg	$ 93.35

Cellophane:	
255 x 255 pkt plain	$ 17.73 less 5% disc.
300 x 400 pkt plain	$ 34.54 per thousand

Containers: Berry (ex factory)	per 100
L.M. Strawberry tray with 2 dividers	$ 67.12
Export Strawberry Tray	$120.18
3 kg bulk berry pack	$237.95
9 kg gate sale box (white)	$ 55.54
2.5 kg gate sale box (white)	$ 26.63
4.5 kg tomato/stone fruit box and full liners	$ 51.60

Punnets:	per thousand
8 oz. No. 50	$ 78.95
12 oz. No. 75	$ 82.69
1.5 kg light	$187.71
1.5 kg heavy	$261.52

Plastic containers:	
5 litre	$ 1.48
Bag ties:	
10 mm x 19 g wire ties (per 2000)	$ 23.18
Twistits - 10 cm boxes	$ 4.91
- 20 cm boxes	$ 7.93
- 23 cm	$ 9.83
- 30 cm	$ 12.77
Sundries:	
Stamp pad	$ 2.35
Stamp pad ink - 110 ml	$ 3.32
Markers - radiant	$ 1.60
- vivid	$ 0.97

35 HORTICULTURAL LEVIES

Berryfruit:

	Berryfruit Levy
Less than 250 sq metres	Nil
250 sq m but not over 8000 sq m	$100.00
8000 sq m and over	$187.50

Blackcurrants:
A levy of 1.5 cents per kilogram shall be paid in respect of

all blackcurrants sold for processing or export (over and above the general berryfruit levy).

Blueberries:
All growers pay 20c per kilogram for all blueberries sold fresn or for export. In respect to this, the exporter adds a further 4c/kg (voluntary) therefore levy is 24c/kg.

Boysenberries:
A 3c per kilogram fixed applies for all export and processed boysenberries.

Raspberries:
North Island raspberries under The Berry Federation. Flat rate of $25/garden. 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. Maximum of $300.

Pip and Stonefruit, Kiwifruit, Avocardos, Citrus:
$10 per ha with a minimum of $40 and a maximum of $400.
Stonefruit advertising levy 5 to 7c per 7 kg.

Citrus Fruit:
6c per bushel levy for promotion.

Vegetables:
Registration fee to Vegetable Federation.
Fresn vegetables: 4% of purchasing price. 0.25% of gross price to growers at first point of sale, free of any deductions.
Processed vegetables: .5625% of price at which vegetables are purchased for processing or canning.
Asparagus 2% of purchase price, voluntary levy for promotion, payable to Asparagus Council.

Fresh Tomatoes:
Voluntary levy of 5% of purchase price for promotion, payable to Fresh Tomato Industry Fund. Exporters of onions, squash and buttersquash. Voluntary levy of 50c/t.

Auction Rates:
Flowers: 12.5%
Fruit: 10%
Vegetables: 10% (except watermellons - 12.5%)

2.36 HORTICULTURAL EQUIPMENT

2.36.1 Birdnetting

4m x 3m	P.O.A.

50m x 3m		P.O.A.
50m x 1m	(12mm gauge)	P.O.A.

2.36.2 Polythene Film

	per metre black	per metre 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

2.36.3 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.

37 BEES

Hives - complete		
A6	each	$ 68.21
Hive Mats		
Hardboard with Wood Rim	each	$ 3.03
	per 10	$ 25.21
	per 100	$229.20
Hardboard only	each	$ 1.47
	per 10	$ 12.23
	per 100	$111.14

Roofs		
With iron	each	$ 11.31
	per 10	$107.84
Iron only	each	$ 4.10
	per 10	$ 40.00

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:		
4 frame		
non reversible with		
Stainless Steel Can	each	$329.86
Honey Pumps:		
'Ecroyds' 31.4mm Gear Type	each	$185.95
Honey Tanks - Stainless Steel:		
.25 tonne - fitted with		
44.1mm Nylon Honey Gate	each	P.O.A.
.50 tonne - fitted with		
63.7mm Socket	each	P.O.A.
1 tonne - fitted with		
63.7mm Socket	each	P.O.A.
Honey Cartons:		
500 g	per 100	$ 17.09
	per 1000	$138.11
900 g	per 100	$ 24.65
	per 1000	$199.20
Honey Containers - Plastic:		
200 per carton		
2 kg - in carton lots	each	43.5c
less than carton lots	each	.52c
Embedders:		
Hand - spur type	each	$ 6.90

Fumidil B		
0.5 g bottle	each	$ 12.25
9.5 g bottle	each	$109.59
Hats		
Ventilated Bee Helmets	each	$ 18.95
Smokers		
75 cm stainless steel	each	$ 31.52
100 cm tin with shield	each	$ 23.70
Replacement bellows for Dadant Smokers	each	$ 12.18
Study Prints:	per set	$ 47.95
25 cm plain uncapping knife	each	$ 17.50
25 cm steamheated uncapping knife:	each	$ 56.20
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:		
Single sided		$ 9.75
Bee Feeders: (plastic)		
Holds 4 litres syrup		$ 3.80

SECTION 3

ENTERPRISE ANALYSIS

3. ENTERPRISE ANALYSIS

3.1 INTRODUCTION

Farmers in many parts of New Zealand have a range of alternative crop and livestock activities which may make up the farm enterprise.

The choice of which alternatives to use will be dictated by many factors, including management and the ranking of the profitability of each activity. Profitability of each enterprise may be measured by the Gross Margin technique, which is the Gross Revenue minus the Variable Costs associated with that particular activity.

ie.

VARIABLE COSTS		FIXED COSTS
Sheep	Crop	
Stock purchases	Seed	Interest, Rates.
Animal health	Fertiliser	Insurance, Rent
Feed purchases	Cultivation etc.	overheads etc.

Basic assumptions are required, one of which is that the fixed cost structure is not altered by the activity being considered, if this is, then partial budgets or detailed budgeting may be required. Gross Margins also assume linearity ie. that each additional unit of production has the same costs and revenues as all other units and that each unit can be operated independently of the others.

When using the G.M. approach to determine a better farm plan, first list the alternative enterprises and estimate Gross Margins for each. Make sure that the levels of production are relative to each other. Then draw up various rotations taking into account the farmer's preferences and any constraints influenced by soils, climate, capital, etc. The Gross Margin for each enterprise in the rotation (i.e. both crops and stock) will be added together and then averaged per hectare per year. The rotation having the highest G.M. can then be tested by drawing up the whole farm budget to confirm it is a better farm plan.

3.2 WORKED EXAMPLES OF CROP, SMALL SEED AND HORTICULTURAL GROSS MARGINS 1985

3.2.1 1st Wheat Crop (Oroua ex pasture):

Programme:

Cultivation:

The paddock is disced twice in March, ploughed in April, heavy harrowed, grubbed and heavy harrowed in May, drilled in late May along with 125 kg/ha of superphosphate.

Weed and Pest Control:

The crop is sprayed after the 2 leaf stage but before third joint is detectable in the wheat crop, for the control of various weeds and wild oats.

Harvesting:

The crop is headed in January using own machinery, stored in on-farm bulk silos until August. A firebreak is ploughed after the crop is harvested and the stubble is raked up and burned in late January.

Direct Costs (per hectare):

Cultivation: 5 hrs/ha @ $12.80/hr	$64.00
Seed: 130 kg/ha seed @ $525/t treated, e.g. Baytan (no royalty)	$68.25
Fertiliser: 125 kg/ha super phosphate @ $136.25/t on farm (bulk)	$17.03
Weed Control: e.g. M.C.P.A. @ 3 litres/ha @ $5.06/litre plus spraying @ .33 hrs/ha @ $12.80/hr	$19.40
Wild oat spray (e.g. Avenge): 5 litre/ha @ $17.40/litre plus spraying @ .33 hrs/ha @ $12.80/hr	$91.22
Rust Control: e.g. Bayleton @ 500 ml/ha @ $47.5/litre spraying @ .33/hr @ $12.80/hr	$27.97
Cartage: from field to silos @ $3.50/ha	$ 3.50

Raking and Ploughing Firebreak: $12.80/hr	$ 1.28
Heading .75 hrs/ha @ $26.00/hr	$19.50
Cartage: from silo to rail (by contract) @ $5.83/t (8 km distance)	$23.49
TOTAL DIRECT COSTS	$335.64

Gross Revenue:

Yield: 4.00 t/ha Price: $287.70/t plus storage increment to August 1st of $8.00/t Income: 4.00 x $295.70/t less levy of $1.64/t	$1176.24
TOTAL REVENUE	$1176.24

Thus it appears that in this example using own machinery, the costs are about $335 and the revenue is $1176 leaving a gross margin of $841/ha.

3.2.2 White Clover (ex wheat):

Programme:

The seed is oversown into wheat in September. Fertiliser is applied at 250 kg/ha of superphosphate in March.

Grazing:

The paddock is lightly grazed in March and is then consistently grazed over the winter to help spread the straw. Over the spring months, the grazing pressure is about 5 s.u./ha. The paddock is closed in early October and then heavy rolled.

Weed Control:

The paddock is spot sprayed with Asulox in July for dock control. It is sprayed in August with Carbatamex and M.C.P.B. for control of annual grasses, flatweeds and suckling clover. In January, the crop is dessicated with Reglone plus Agral LN wetting agent.

Harvest:

After dessication (5-6 days), the crop is headed. The field dressed seed is then carted to a merchant to be machine dressed. Extra sacks are required for double bagging the M.D. seed (capacity of a sack is 50 kg).

Direct Costs:

Seed: Oversowing of 3 kg/ha @ $3.00/kg	$ 9.00
plus 0.6 hr/ha @ $12.80/hr	$ 7.68
Fertiliser:	
250 kg/ha superphosphate @ $136.25/t(Bulk)	$ 34.06
Heavy Rolling: 0.6 hr/ha @ $12.80	$ 7.68
Weed Control: Dock Control, spot spraying	$ 4.80
General weeds: e.g. M.C.P.B. 3.5 litres @ 5.46/l	
plus spraying @ .33 hrs/ha @ $12.80/hr	$ 23.33
Grass Removal: e.g. Carbetamix @ $18.12/kg	
4 kg/ha, plus spraying	$ 76.70
Dessicating: (a growthy crop) e.g. Reglone @ $12.71/litre	
3 litres/ha plus spraying costs	$ 42.35
Mowing: 1.75 hrs/ha @ $12.80/hr	$ 22.40
Heading: 2.5 hrs/ha @ $25.00	$ 62.50
Box hire: 1 box (cartage out and in for dressing)	$ 6.20
Consolidated Dressing and Store Handling Charge:	
500 kg/ha F.D. @ 26c/kg	$130.00
Sacks: 14 @ $1.26 (350 kg double sacks @ 50 kg/sack)	$ 17.64
TOTAL DIRECT COSTS	$444.34

Gross Revenue:

Yield: 500 kg/ha F.D.; 30% less on machine dressing; 350 kg/ha M.D.	
Price: $2.00/kg for 1st Generation seed	
Income: 350 kg x $2.00/kg	$700.00
TOTAL REVENUE	$700.00

In this example, the gross margin is about $610/ha with direct costs of about $404/ha and revenue of about $700/ha.

To this should be added some return from the winter grazing. A gross margin of $32.16/s.u. can be expected this season (see Sheep Gross Margins,

Section 5.2.6) from the consumption of 590 kg D.M. over a 12 month period.

If one hectare produces 1500 kg D.M./ha in the winter-spring period, this represents 254% of the annual requirement of one s.u. Thus the return to be added to the above figure is:

$32.16 x 2.54 = $81.69 which brings the total white clover gross margin to about $336/ha.

3.2.3 Field Peas (Blue Rondo ex Greenfeed Oats):

Programme:

The paddock is disced twice at the end of July and then ploughed, heavy harrowed, vibratillered to mix in Treflan, rolled and drilled at the end of August. 250 kg/ha of peas are sown with 250 kg/ha of Mo superphosphate.

Weed Control:

The paddock is sprayed with Pre-emergence herbicide, e.g. Treflan in July at 2.5 litres/ha.

Harvesting:

The crop is direct headed in February into sacks and then carted to a merchant for machine dressing. The pea straw is raked and baled and sold in the paddock.

Direct Costs (per hectare):

Cultivation: 4 hrs/ha @ $12.80/hr	$ 51.20
Seed: 250 kg/ha Blue Rondo @ $370/t (Contract price includes treating and sacks)	$ 92.50
Fertiliser: 250 kg/ha molybdate super @ $140.50/t (Bulk)	$ 35.08
Weed Control: 2.5 litres/ha Pre-emergence herbicide, e.g. Treflan @ $9.95/litre plus .33 hrs/ha @ $12.80	$ 29.09
Harvesting: 1.75 hrs/ha @ $25.00/hr	$ 43.75
Sacks: 36 sacks/ha (75 kg/sack) @ $1.46	$ 52.56
Cartage: 2.7 tonnes 2.5 boxes to store (own cartage).	$ 3.00
Box hire: 2.5 boxes @ $6.20/box	$ 15.50
Consolidated Dressing & Store Handling Charge:	

2.7 tonnes @ $46.50/t	$125.55
Raking pea straw (own machinery):	
.5 hr/ha @ $12.80/hr	$ 6.40
Baling pea straw (contract):	
90 bales/ha @ 55c/bale	$ 49.50
TOTAL DIRECT COSTS	$504.13

Gross Revenue:

Yield: 2.7 t/ha	
Price: contract $260/tonne	
Income: 2.7 t x $260/tonne	$702.00
Pea Straw: 90 bales/ha @ $1.25c/bale	$112.50
TOTAL REVENUE	$814.50

With costs approximating $504/ha and revenue in the vicinity of $815 the gross margin in this example becomes about $311/ha.

3.2.4 New Grass for Nui Seed (ex peas)

Programme:

Following the pea harvest in February, the paddock receives two grubbings and lime is worked into the soil. To sustain a rotation of this nature, the pH should be brought up to 6.2 at this stage which means 2.47 tonnes of lime per hectare if the pH following peas is about 5.7. Cultivation follows a programme of grub, harrow and roll in sequence three times to achieve effective weed control. New pasture is drilled with a mixture of 23 kg/ha Ariki ryegrass and 3 kg/ha white clover sown with 250 kg/ha of superphosphate.

Grazing:

This new grass is given a light first grazing in May and is lightly grazed over the winter to allow light into the clover seedlings. Then although the paddock is not available for the whole spring period, the equivalent spring grazing rate is 6 s.u./ha. The paddock is closed from grazing in the middle of September and at the end of September receives either 125 kg/ha of urea or 250 kg/ha of sulphate of ammonia.

Harvesting:

In early January the crop is mown and left for 5-6 days before being headed. The field-dressed seed is then carted in sacks to the merchant for dressing and sale.

Direct Costs (per hectare):

Seed Bed Preparation: 6.5 hrs/ha @ $12.80/hr	$ 83.20
Seed: 23 kg/ha Basic Nui ryegrass @ $2.50/kg	$ 57.50
3 kg/ha Huia white clover @ $3.00/kg	$ 9.00
Fertiliser: Lime 2.47 t/ha @ $25.00/t (includes cartage and spreading)	$ 61.75
250 kg/ha superphosphate @ $136.25/tonne (Bulk)	$ 34.06
250 kg/ha sulphate of ammonia at $232.20 (Bags)	$ 58.05
Harvesting: Mowing 1.5 hrs/ha @ $12.80/hr	$ 19.20
Heading 2.25 hrs/ha @ $25.00/hr	$ 56.00
Sacks: 14 sacks @ $1.46 each	$ 20.44
Box hire: 1.5 boxes @ $5.20	$ 9.30
Consolidated Dressing and Handling Charge: 9.8c/kg F.D. weight x 900 kg/ha	$ 88.20
Raking ryegrass straw (own machinery): 0.3 hr/ha @ $12.80/ha	$ 3.84
Baling ryegrass straw (contract): 100 bales/ha @ 55c/bale	$ 55.00
TOTAL DIRECT COSTS	$555.79
GROSS REVENUE:	
YIELD: 900 kg/ha F.D.; 25% loss on machine dressing. Thus yield becomes 675 kg/ha M.D.	
Price: 1st Generation Nui @ 90c/kg	
Income: 675 kg x 90c	$607.50
Ryegrass straw: 100 bales/ha sold in the paddock at 80c/bale	$ 80.00
TOTAL REVENUE	$687.50

This example suggests a gross revenue of $687/ha with direct costs of $555/ha, giving a gross margin of $132/ha. Some recognition in terms of income should also be attributed to the grazing provided by the paddock during the winter-spring period.

With an estimated feed production of 2200 kg/ha over the grazing period, representing an annual grazing equivalent of 3.7 s.u./ha, then the gross margin contribution is:
3.7 x $32.16 = $118.99, which brings the G.M. to about $250. Without the liming charge, the gross margin would be about $62/ha extra.

3.2.5 2nd Year of New Grass for White Clover Seed:

Programme:

Following the ryegrass harvest, the paddock is grazed consistently until being closed in early October. The autumn application is 250 kg/ha of superphosphate. The programme is very similar to the earlier white clover crop (example (iii)), except that no weed spraying is done and there is more likelihood of a case bearer problem. The crop is dessicated with Reglone 5-6 days prior to mowing.

Direct Costs (per hectare):

Fertiliser: 250 kg/ha superphosphate @ $136.25/tonne	$ 34.06
Heavy Rolling: 0.6 hr/ha @ $10.15/hr	$ 7.68
Pest Control: Case bearer sprayed twice @ $21.49/ha (Bromophos @ $17.28/l plus spraying costs)	$ 42.98
Crop Dessication: Dessicating a growthy crop, e.g. 3 litres Reglone @ $13.69/l plus spraying	$ 44.49
Heading and Mowing: as before	$ 84.90
Box hire: 1 box (cartage in and out)	$ 6.20
Consolidated Dressing and Store Handling Charge: 9 @ $1.26 (double sacks)	$ 11.34
26c/kg F.D. weight x 340 kg/ha	$ 88.40
TOTAL DIRECT COSTS	$320.05

Gross Revenue:

Yield: 340 kg/ha F.D. (4-5 sacks/ha); 30% loss on machine dressing Thus yield becomes 238 kg/ha M.D. Price: White clover @ $2.00/ha	
Income: 238 kg/ha x $2.00/kg	$476.00
TOTAL REVENUE	$476.00

Thus with gross revenue of $476/ha and direct costs of about $320/ha, the gross margin becomes about $156/ha. Again the grazing contribution should be added to this figure. The estimated feed produced over the grazing period is 2700 kg/ha or an annual grazing equivalent of 4.6 s.u./ha which means a gross margin contribution of:
4.6 x 32.16 = $147.97

Thus the white clover gross margin now becomes about $304/ha.

3.2.6 Pasture (2 years grazing):

Programme:

The pasture is grazed, and hay is made in the summer. Fertiliser is applied in the autumn.

Direct Costs (per hectare):

Fertiliser: 250 kg/ha superphosphate @ $136.25/tonne	$ 34.06
Hay making: Mowing and raking @ 1 hr/ha @ $12.80/hr x 0.2	$ 2.56
Baling: 140 bales/ha @ 55c/bale x 0.2 (contract rates)	$ 15.40
Cartage: 140 bales/ha @ 55c/bale x 0.2 (contract rates)	$ 15.40
TOTAL DIRECT COSTS	$ 67.42

Gross Revenue:

The estimated utilised feed during the grazing period is 8250 kg/ha D.M., which at 590 kg D.M./s.u. means a stocking rate of 14 s.u./ha. At $32.16/s.u. the gross revenue becomes 14 x $32.16.

TOTAL REVENUE	$450.24

NOTE: Regarding the haymaking charges, the cost has been assessed as that of providing the 14 s.u./ha with 2 bales of hay per s.u. for wintering, i.e. 28 bales/ha required. This represents 20% of the normal hay crop of 140 bales/ha.

Thus with gross revenue of about $450 and direct costs of about $67/ha the gross margin for pasture is about $383/ha.

3.2.7 Vining Peas:

Direct Costs (per hectare):

Cultivation: 6 hrs @ $12.80/hr	$ 76.80
Seed: 300 kg/ha @ 40c/kg	$120.00
Fertiliser: 250 kg/ha. Potash molybdate super @ $166.90/tonne (Bulk)	$ 41.73
Spraying: 5 litres weed spray applied; pre-emergence Treflan @ $11.02/l plus spraying	$ 57.55
Irrigation: 2 irrigations @ $15/ha/ irrigation	$ 36.00
TOTAL DIRECT COSTS	$332.08

Gross Revenue:

Yield: 5.0 t/ha	
Price: 18.2c/kg @ average tenderometer reading of 110 ($180 per tonne).	
Income: 5 x $182	$910.00
TOTAL REVENUE	910.50
GROSS MARGIN (approximately)	$578/ha

3.2.8 Barley:

Direct Costs (per hectare):

Cultivation: 6.5 hrs @ $12.80/hr	$ 83.20
Seed: 130 kg/ha @ $520/t	$ 67.60
Fertiliser: 200 kg/ha superphosphate @ $136.25/t (Bulk)	$ 27.25
Weed Spray: M.C.P.A. applied	$ 19.40
Heading: 1.25 hrs/ha @ $26.00/hr	$ 32.50
Cartage: 4.5 t, 20 km	$ 26.24
Firebreak:	$ .48
TOTAL DIRECT COSTS	$256.67

Gross Revenue:

Yield: 4.5 t/ha	
Price: $200/tonne (South Island)	
Income: 4.5 t x $200	$900.00
TOTAL REVENUE	$900.00
GROSS MARGIN (approximately)	$640.00
	$643.33

3.2.9 Lucerne:

Establishment Costs (per hectare):

Cultivation: 13 hrs/ha @ $12.80	$166.40
Seed: 5 kg/ha @ $6.00/kg	$ 30.00
Fertiliser: 250 kg/ha reverted superphosphate @ $151.95/t (including cartage and spreading)	$ 37.98
Lime: 2.5 t/ha @ $22.85/t on the ground	$ 57.13
Seed Innoculation: 5 kg @ $1/kg	$ 5.00
TOTAL ESTABLISHMENT COSTS	$296.51
Dryland - Stand life = 9 years Therefore Annual Establishment Costs =	$ 32.95
Annual Costs:	
Fertiliser: 250 kg/ha lucerne fertiliser @ $201.485/t (including cartage and spreading)	$ 50.46
Heavy Roll: 0.6 hr/ha @ $12.80/hr	$ 7.68
Weed Spray: 2, 4-DB @ 4 litres/ha @ $6.79/litre	$ 27.16
plus .33 hr/ha @ $12.80/hr (spraying)	$ 4.22
TOTAL ANNUAL COSTS (including establishment)	$122.47
Annual Revenue:	
Yield: 6000 kg/D.M./ha/year = 11.54 s.u./ha	
Income: $32.16/s.u. x 11.54 s.u./ha	$371.13
TOTAL ANNUAL REVENUE	$371.13
GROSS MARGIN (approximately)	$248.66/ha

3.2.10 Carrots

Assumptions:
Direct seeding November, harvest autumn (March-April).
Variety Manchester Table.
Medium to light soil type.
Sowing four double rows per tractor bed, 10 cm between rows, 2 cm between seeds.
Labour costed at $6.70 per hour, tractor at $12.80 per hour.

Gross Returns:		
38 t/ha (packed) @ ($4.48/20 kg bag) $224/t (average)		8,512
Direct Costs - materials:		
Seed: 2.5 kg/ha @ $23/500 gm	115.00	
Seed pelleting @ $22.65/500 gm	113.25	
Fertiliser: 600 kg sulphate of ammonia @ $251.05/t	150.63	
800 kg serpentine super @ $141.95/t	113.56	
400 kg muriate of potash @ $223.80/t	89.52	
Herbicides: Preglone (1 x) 3 l/ha @ $63.55/5 l	38.13	
Linuron (2 x) 450 gm/ha @ $18.20/kg	16.38	
Gesagard (2 x) 450 gm/ha @ $18.38	16.54	
Fungicides: nil		
Insecticides: Metasystox (2 x) 0.5 l @ $14.710/l	14.10	
		667.11
Labour and Machinery:		
Soil preparation 9 hours @ $12.80/tractor hour plus $6.70/man hour	175.50	
Drilling: 4 hours @ $19.50/ha	78.00	
Fertiliser application: 1.2 hours @ $19.50/hr	23.40	
Spray application: 0.75 hrs @ $19.50/hr	14.63	
Irrigation	179.00	
		470.53
Harvesting:		
Topping (machine) 2 hrs/ha @ $12.80/hr	25.60	
Lifting and bagging (unwashed) 1,357 bags @ 10 bags/hr (28 kg bags) @ $9.90/hr (man and quarter tractor)	1,343.43	
Picking up: 1,357 bags @ 28 kg 45/hr/2 men and tractor @ $16.60/hr	500.58	
Washing, rebagging and tying 12 bags @ 18 kg/hr/man @ $6.70/hr	126.00	
Ties: 3c each	40.71	
Cartage: 38 tonne @ $23.33/t (45 km trip)	886.54	

Bags: 1,400 bags @ 28 kg		
59 c net/bag	826.00	
Commission: 10% gross return	851.00	
		4,599.86
TOTAL DIRECT COSTS		5,737.50
Gross Margin		$2,774.50

3.2.11 Glasshouse Tomatoes

Assumptions:
1500 m^2 of Glasshouse crop planted early July and harvested over 9 months from late September to mid-May. Spaced at 3.6 plants per m^2. Yield 20 kg per m^2. Heated by coal burner.

Direct Costs:	
Soil tests 5 at $18.50	92.50
Straw 160 bales at $1.50	240.00
Soil Fumigation - contract rates $1.10/$m^2$	1,650.00
Base Fertilizer (June)	
Serpentine Superphosphate 225 kg at $128/tonne	28.80
Hydrated lime 225 kg at $9.00/tonne	2.00
Sulphate of Potash 225 kg at $640/tonne	144.00
Epsom Sals 160 kg at $45/ 100 kg	72.00
Liquid Feed	
Nitrate of Potash 210 kg at $728/tonne	153.00
Urea 43 kg at $470/tonne	20.00
Epson Salts 63 kg at $45/ 100 kg	28.00
Plants 5500 at $175 per 1000	962.50
Coal for heating 70 tonnes at $140/tonne	9,800.00
Twine 20 balls at $12.50	250.00
Sprays Eurapen 2 kg at $40.78/kg	81.50
Lannate 2.5 litres at $17.50	44.00
Ambush 1 litre at $85/500 m	170.00
Ronilan 1 kg at $71.50/kg	72.00
Maneb 1.4 kg at $27.79/kg	39.00
Labour (over and above owner) 28 hrs/week for 36 weeks @ $5	5,040.00
Packing Cases 4.5 kg 6667 cases at 50c 3334	
- allowance 38c 2533	801.00
Cartage 20c per case	1,333.00

Commission 10%			7,751.00	
Vegetable Fed Levy .25%			194.00	
Direct Costs				28,968.20
Yield				$
Sept	2%	600	5.33	3,198
Oct	19%	5,700	4.55	25,935
Nov	16%	4,800	3.77	18,096
Dec	10%	3,000	2.33	6,990
Jan	12%	3,600	1.66	5,976
Feb	15%	4,500	1.24	5,580
Mar	13%	3,900	.89	3,471
Apr	7%	2,100	1.97	4,137
May	6%	1,800	2.29	4,122
		Gross Income		77,505
		Gross Margin		48,537
		$/m^2$ $32.36		

Labour costs have been omitted from the above G.M. However it is estimated that in addition to the owner, part time labour would need to be employed over the nine month harvest period. Say 28 hours per week at $5.00 per hour for 36 weeks $5,040.

3.3 SHEEP GROSS MARGINS

(Prepared by M.J. McGregor, February 1983 and updated December 1984)

Introduction

The following two examples show relativity between the same breed of sheep (Corriedale) but under different management policies. It must be stressed that the prices and costs used approximate those ruling at 1 December 1984.

The gross margins should therefore be adjusted as policies, prices and cost parameters, change.

Note: Gross margins are calculated for 1000 ewes. This allows flock composition, deaths, sales and purchases to be shown as whole numbers. The gross margins calculated only apply to small changes in stock numbers as changes in the order of 1000 ewes would require additional labour, feed, etc.

Example 1.

This example gross margin is for a Corriedale 2 year flock system, buying 5 year old ewes annually, which are all mated to an export lamb sire.

Production Parameters:

110% lambing (survival to sale); 10% first year ewes culled; death rate 6%; ewes clip 4.0 kg wool per head; lambs not shorn.

SHEEP RECONCILIATION

Stock Units Opening Rate 1/7/81		Class of Stock Breed	Opening Nos. @ 1/7/81	Nat. Incr.	Killed	Deaths and Losses	Sales	Purch-ases	Closing Nos. @ 30/6/82	Class of Stock	Closing s.u.'s 30/6/82
	Ewes										
		Lambs		550			550				
		Unmated Hgts	0						0	Unmated Hgts	0
		Mated Hgts								Mated Hgts	
		Ewes: 2th								Ewes: 2th	
		4th								4th	
		6th								6th	
		4yr								4yr	
543	1.0	5yr	543					543	543	5yr	543
457	1.0	6yr	457		10	32	32		457	6yr	457
		Aged				27	420		0	Aged	
1000	1.0	TOTAL EWES	1000						1000	TOTAL EWES	1000
	Wethers - m.s. and wether										
		Lambs		550	10		530				
6	0.6	Hgts	10		10				10	Hgts	6
		2th							0	2th	
		Aged								Aged	
6	0.6	TOTAL WETHERS	10						10	TOTAL WETHERS	6
	Rams										
		Lambs									
		Hgts								Hgts	
4	0.8	2ths	5					5	5	2ths	4
12	0.8	Aged	15		4	1			15	M.Age	12
16	0.8	TOTAL RAMS	20						20	TOTAL RAMS	16
1022		TOTAL SHEEP	1030	1100	34	60	1554	548	1030	TOTAL SHEEP	1022
			(a)	(b)	(c)	(d)	(e)	(f)	(g)		

LAMBING PERFORMANCE (Based on Ewes to Ram)
Tailing = NA % Survival to Sale = 110 %

DEATH RATES
Ewes = 6 % Hgts = NA% Lambs = NA Rams = 5 %

RECONCILIATION
(1) Totals a + b + f = 2678
(2) Totals c + d + e + g = 2678
Total (1) must = Total (2)

CULLING RATES
Ewes = 10% Rams = 25%

Gross Revenue (per 1000 ewes):	$ c
Lamb sales - 1,080 prime lambs @ $24.19 (13.5 kg lamb meat @ 202.5c/kg = $27.24 plus skin @ 0.75 kg woolpull @ $4.92 minus 8.07c charges = 24.19	26,122.50
Cull ewe sales - 474 cull ewes to works @ (22.5 kg ewe meat @ 62.5c/kg = $4.29 plus skin and 0.5 kg woolpull @ $6.54 minus 8.07c charges = 12.76	6,048.24
Wool sales - 4000 kg @ $3.47 per kg net (1000 sheep @ 4.0 kg allowing for deaths. Wool price is gross less 33c/kg)	13,880.00
GROSS REVENUE	$46,050.74
Direct Costs (per 1000 ewes):	
Replacement purchase - 543 @ $14.00	7,602.00
Shearing (shearers only) - 1000 sheep @ $75/100	750.00
Tup crutch - 457 sheep @ $25/100	114.25
Main crutch - 1015 sheep @ $34/100	345.10
Drenching - 2 drenches @ 16c/dose for 1015 Sheep (ewes are drenched once before tupping and again before lambing)	324.80
- 1100 lambs : 50% drenched once, 30% drenched twice, lamb drench 7.8c/dose	68.64
Vaccination - triple vaccine, 980 ewes @ 11.79 c/sheep	115.54
Eartags, footrot and docking	475.00
Dipping - purchased ewes have been dipped, 457 ewes @ 33c/sheep	150.81
Woolshed expenses - including woolpacks, twine, glue, emery paper and shearing plant expenses approximate cost = 32c/head	320.00
Ram costs - 2 per 100, 4 year life, 5 @ $180/ram	900.00
Cartage - prime lambs to works, 1080 @ $0.66 each	712.80
- cull ewes to works, 474 @ $0.86 each	407.64
- replacement ewes from North Canterbury, 543 @ $1.44 each	781.92
- wool, 4000 kg @ 2.9c/kg	116.00
(Note: All cartage based on 32 km travel except for replacement ewes, 80 km)	
TOTAL DIRECT COSTS	$13,184.50
GROSS MARGIN PER 1000 EWES	$32,866.24
GROSS MARGIN PER EWES (- 1000)	$32.87
GROSS MARGIN PER STOCK UNIT (- 1022)	$32.16

Summary:

With a gross revenue of approximately $46.00 per ewe and expenses of about $13.18 per ewe, the gross margin is in the vicinity of $32.16 per ewe for a prime lamb 2 year flock system. The direct costs per ewe (excluding replacement cost) are approximately $4.80.
The gross margin per stock unit is calculated by dividing the gross margin (per 1000 ewes) by the total stock units (1022 stock units). This gives a value of $32.16 per stock unit.

Example 2.

This example gross margin is for a Corriedale flock, selling genuine 5 year old ewes and breeding own replacements. Ewes are on hand for 4 lambings. All ewes are mated to a Corriedale ram. Hoggets are culled as two tooths (20%). Surplus ewe lambs are sold store. 80% of the wether lambs are sold prime for export, the remainder (20%) being sold as stores. Lambs are not shorn but hoggets are.

SHEEP RECONCILIATION

Stock Units Opening Rate 1/7/81		Class of Stock Breed	Opening Nos. @ 1/7/81	Nat. Incr.	Killed	Deaths and Losses	Sales	Purch-ases	Closing Nos. @ 30/6/82	Class of Stock	Closing s.u.'s 30/6/82
	Ewes										
		Lambs		465			89		376	Unmated Hgts	226
226	0.6	Unmated Hgts	376			15	75			Mated Hgts	
		Mated Hgts								Ewes: 2th	286
286	1.0	Ewes: 2th	286			11	14		286	4th	261
261	1.0	4th	261			11	13		261	6th	237
237	1.0	6th	237			9	12		237	4yr	216
216	1.0	4yr	216		7	9	200		216	5yr	0
0	1.0	5yr	0						0	6yr	
		6yr								Aged	
		Aged								TOTAL EWES	1000
1000		TOTAL EWES	1000						1000		
	Wethers - m.s. and wether										
		Lambs		465			455		10	Hgts	6
6	0.6	Hgts	10		10				0	2th	
0	0.8	2th	0							Aged	
		Aged								TOTAL WETHERS	6
6		TOTAL WETHERS	10						10		
	Rams										
		Lambs								Hgts	
		Hgts								2ths	4
4	0.8	2ths	5					5	5	M.Age	12
12	0.8	Aged	15		4	1			15	TOTAL RAMS	16
16		TOTAL RAMS	20						20	TOTAL SHEEP	1248
1248		TOTAL SHEEP	1406	930	21	56	858	5	1406		
			(a)	(b)	(c)	(d)	(e)	(f)	(g)		

LAMBING PERFORMANCE (Based on Ewes to Ram)
Tailing = NA % Survival to Sale = 93 %

DEATH RATES
Ewes = 4 % Hgts = 4 % Lambs = NA % Rams = 5 %

RECONCILIATION
(1) Totals a + b + f = 2341
(2) Totals c + d + e + g = 2341
Total (1) must = Total (2)

CULLING RATES
Ewes= 5% Hgts = 20% Lambs = NA% Rams =25%

Production parameters:-
93% lambing; 5% ewe culling; 20% two tooth culling; death rate 4%; ewes clip 4.1 kg of wool as do the hoggets.

Gross Revenue (per 1000 ewes):-	$ c
Lamb sales - 364 prime lambs @ $24.19 (13.5 kg lamb meat @ 202.5c/kg = $27.24 plus skin and 0.75 kg woolpull @ $4.92 minus 8.07c charges	8,805.16
- 180 store lambs @ $12.00	2,160.00
Cull ewe sales - 75 two tooths @ $28.00	2,100.00
- 189 five year olds in yards @ $11.00	2,079.00
- 50 cull ewes to works @ $12.76	638.00
(22.5 kg ewe meat @ 63.5c/kg = $14.29 plus skin and 0.5 kg woolpull @ $6.54 minus 8.07c charges	
Wool sales - 4100 kg @ $3.47 per kg net (1000 sheep @ 4.1 kg allowing for deaths. Wool price is gross less 33c/kg)	14,227.00
- 1558 kg @ $3.47 per kg net (380 hoggets @ 4.1 kg allowing for deaths)	5,406.26
GROSS REVENUE	$35,415.42

Direct Costs (per 1000 ewes):-	
Shearing (shearers only) - 1000 sheep @ $75/100	750.00
- 380 hoggets @ "	285.00
Tup crutch - 990 ewes @ $25/100	247.50
Main crutch - 990 ewes @ $34/100	336.60
Drenching - 2 drenches @ 16c/dose for 1015 sheep (ewes are drenched once before tupping and again before lambing)	324.80
- lambs, 1850 doses @ 7.8c/dose (replacements drenched 3 times, stores twice, and primes once)	144.30
Vaccination - triple vaccine, 980 ewes @ 11.79c/sheep	115.54
- triple vaccine, 370 hoggets @ 11.79c/sheep	43.62
Eartags, footrot and docking	475.00
Dipping - 990 ewes @ 33c/head	326.70
- 376 hoggets @ 33c/head	124.08
- 660 lambs @ 33c/head	217.80
Woolshed expenses - including woolpacks, twine, glue, emery paper and shearing plant expenses, approximate cost = 32c/ewe and 21c/hogget	440.88

Ram costs - 2 per 100, 4 year life, 5 @ $180/ram	900.00
Cartage - prime lambs to works, 364 @ $1.18 ea.	429.52
- store lambs to yards, 180 @ $1.02 ea.	183.60
- cull two tooths and five year old to yards, 264 @ $1.69 each	446.16
- cull ewes to works, 50 @ $1.69 ea.	84.50
- wool, 5658 kg @ 5.6c/kg	316.85

(Note: All cartage rates are based on 97 km travel, the distance from North Canterbury to Christchurch.)

Selling charges - Yard fees, 444 sheep @ 26c/sheep	115.44
- Commission, $6726 @ 4.75%	319.49
TOTAL DIRECT COSTS	$6,627.38
GROSS MARGIN PER 1000 EWES	$28,788.04
GROSS MARGIN PER EWE (÷ 1000)	$28.79
GROSS MARGIN PER STOCK UNIT (÷ 1248)	$23.07

Summary:

The gross margin per stock unit for a breeding own replacement flock is $9.09 less than that of an export lamb policy. The factors having the greatest effect on the two examples presented are:

(i) Lambing percentage
(ii) Lamb sale price
(iii) Wool clip per head
(iv) Wool price
(v) Cull ewe price (both at yards and at works)

It is stressed that the example gross margins use one set of price and production parameters and when used in practice some account must be taken of likely variations to give a range of expectations.
It is interesting to note the comparison with past years:

Gross Margin Per Stock Unit

	80/81	81/82	82/83	83/84	% Change (from last year)
Two year flock	19.40	25.07	27.78	32.16	+ 13.6%
Breed own replacements	18.85	21.80	20.43	23.07	- 11.4%

The breeding own replacements policy shows wider fluctuations in the gross margin than the two year flock policy. The two year flock farmer is able to work on a margin for purchase and sale of ewes where as the store sheep farmer has no such margin available.

Again, it must be stressed that these gross margins are examples only. As the price, cost, and production parameters change throughout the season, the gross margins must be revised.

3.4 DEER GROSS MARGINS

The following physical parameters are common to both examples:

Breeding and velveting life = 10 years.
Fawning percentage (hinds fawn as 2 year olds) = 85%.
Death rate - adults = 4%.
- yearlings = 5%.
Stag: hind ratio = 1:20.
Dressed weight - cull stag = 90 kg
- C.F.A. stag = 75 kg.
- cull hind = 60 kg
Velvet yields - 1 year old = 0.6 kg
- 2 year old = 1.1 kg
- 3 year old = 1.8 kg
- 4-9 year old = 2.0 kg
- 10-12 year old = 1.8 kg

Velvet price -

Grade	Price ($/kg)
Super A	125
A	100
B	70
C	30
D	20

Example 1.
This example gross margin is for a policy of live sales of yearling hinds and stags with cull hinds and stags processed as venison.

No. on Hand (1 July)	Stock Units	Capital Value ($)
100 breeding hinds	150	110,000
16 yearling hinds	16	19,200
5 stags	7	12,500
121	173	141,700

Purchases	Deaths
Breeding stag (Half cost only)	5.5
Natural Increase	Sales
42 hinds	2 cull hinds
43 stags	10 C.F.A. hinds
	25 yearling hinds
	43 yearling stags
85.5	85.5

Gross Revenue (per 100 hinds):	
Cull hinds - 2 @ $319.20 (60 kg venison @ $5.20/kg less levy 8c/kg plus by-products @ $12)	$ 638.40
C.F.A. hinds - 10 @ $312 each	$ 3,120.00
Yearling hinds (sold on farm) - 25 @ $1,200	$30,000.00
Yearling stags (sold on farm) - 43 @ $200	$ 8,600.00
Velvet - 5 stags, 2 kg/head @ $100/kg (av.)	$ 1,000.00
GROSS REVENUE	$43,358.00
Direct Costs (per 100 hinds):	
Animal health - @ $5.60/head	$ 677.60
Freight - culled hinds and replacement stag, @ $8.20/head	$ 106.60
Supplementary feed - hay 2 bales per head @ $5 per bale	$ 1,210.00
- concentrates, 100 kg nuts to adult stags and 50 kg to all other stock @ $464.70/tonne	$ 2,927.61
Velvet harvesting - vet, etc. @ $25/stag	$ 125.00
Commission - $41,310 @ 7.25%	$ 2,994.98
Stock purchase - half stag @ $5,000	$ 2,500.00
TOTAL DIRECT COSTS	$10,541.79
GROSS MARGIN PER 100 HINDS	$32,817
GROSS MARGIN PER HIND (÷ 100)	$ 328
GROSS MARGIN PER STOCK UNIT (÷ 173)	$ 189

Example 2.

This example gross margin is for a policy of running velveting stags and buying replacements. Cull animals are processed as venison.

No. on Hand (1 July)	Stock Units	Capital Value ($)
100 Mixed aged stags	150	67,500
15 yearling stags	15	3,000
115	165	70,500
Purchases	Deaths	
15 weaner stags	5	
	Sales	
	2 cull stags	
	8 C.F.A. stags	
15	15	

GROSS REVENUE (per 100 stags):	
Cull stags - 2 @ $482.80	
(90 kg dressed @ $5.20 kg less	
levy 8 c/kg = 460.80	
plus by-products @ $22.00)	$ 965.60
C.F.A. stags - 8 @ $300.00	$ 2,400.00
Velvet - 100 stags, 2 kg/head	
@ $100/kg (av.)	$20,000.00
- 15 yearlings, 0.4 kg/head	
@ $20/kg	$ 120.00
GROSS REVENUE	$23,485.60
Direct Costs (per 100 stags):	
Animal health - at $5.60/head	$ 644.00
Freight - culled stags plus purchased	
replacements @ $8.20/head	$ 205.00
Supplementary feed - hay, 2 bales per	
head @ $5/bale	$ 1,150.00
- concentrates, 100 kg	
nuts to adult stags and 50 kg to all young	
stock @ $464.70/tonne	$ 5,111.70
Velvet harvesting - vet, etc. @ $25/stag	$ 2,875.00
Stock purchase - 15 weaner stags @ $350 each	$ 5,250.00
TOTAL DIRECT COSTS	$15,235.70
GROSS MARGIN PER 100 STAGS	$ 8,249.90
GROSS MARGIN PER STAG (- 100)	$ 824.00
GROSS MARGIN PER STOCK UNIT (- 165)	$ 50.00

Summary:
The gross margin per stock unit for a breeding policy is $139.00 higher than that of velveting policy.

3.5 CASH FLOWS FOR LONG TERM CROPS

The following Cash Flow should be regarded as an example only of how to cost out and compare returns for long term crop.

3.5.1 Sweet Cherry

Cash flows for a one hectare sweet cherry orchard, established and managed as:

(i) Traditional (T) (7 x 7m spacing, 200 trees/ha.
(ii) Semi-traditional (S) (4.5 x 3.65m spacing, 600 trees/ha).
(iii) Hedgerow plantings (H) (1m x 4.5m spacing, 2,225 trees/ha).

Costings per hectare as for March 1981.
Machinery and labour $4/hour.
Sprays on per hectare basis.
Note: Capital expenditure on crop protection ie. establishment of shelter both for wind protection or covering for hail, rain or bird damage has not been included in this cash flow.

(i) Traditional

Year 0

Establishment:	
Trees 7m x 7m = 200/ha @ $3.25	650
Fertiliser 1 kg/tree = 4 sacks @ $20	80
Machinery based on $4/hr	
- cultivation 1 subsoil 3 cultivations	8
- fertiliser spreading	8
- planting 10 hours	40
Labour based on $4/hour	
- cultivation	8
- fertiliser spreading	8
- planting 20 hours	80
Overhead irrigation (per ha)	
	$4,882

Year 1

Production:	
Pesticides	
- spray programme	100
- weedwiper "Roundup" $100/5 l	25

Irrigation	
- 20 kw motor	
- 5 hours, 10 applications, 5c/kw/hr	50
Machinery	
- spraying - 5 sprays, .5 hour	10
- pruning, 2 hours (buckraking)	8
- cultivation, 5 x .5 hour	10
Labour	
- spraying, 5 hours	20
- weed wiping	20
- pruning, 3 hours	12
- cultivation, 2.5 hours	10
- general: administration, irrigation, maintenance	100
	$365

Year 2

Production: As for Year 1.	
Plus fertiliser as for Year 0	80
Fertiliser spreading costs	
- machinery	8
- labour	8
	$461

Year 3

Production:	
Pesticides	
- spray programme	150
- herbicide strip "Roundup" (to year 12)	75
Fertiliser	
- orchard 8:4:8 NPK. 1 kg/tree	80
Irrigation	
- electricity (until year 12)	50
Machinery	
- spray programme, 3.5 hours	14
- herbicide-strip boom spraying (to year 12)	8
- fertiliser spreading (to year 12)	8
- pruning	8
- mowing 10 x .25 hour (to year 12)	20
Labour	
- spraying, 7.5 hours	30
- boom (until year 12)	8
- fertiliser (until year 12)	8
- pruning	30
- mowing, 5 hours (until year 12)	20
- general (until year 12)	100
	$609

Capital:	
Mower	
- ($1,500) 1 ha proportion	$150
Year 4	
Production: As for Year 3 plus:	
Additional	
- spray programme	200
- fertiliser 2 kg/tree	160
- spraying machinery	20
- pruning machinery	20
- spraying labour	40
- first detail pruning	80
	$817
Harvesting:	
Labour	
- 3 minutes/tree (10 hours)	40
Machinery (2 hours)	8
	$48
Marketing:	
Packing materials	
- 50 boxes (2 kg cartons) @ $0.65 each	33
Packing labour	
- 5 boxes/hour	40
allows for other workers in shed	
Toll Calls	10
Freight - $0.50/box	25
	$108
Revenue:	
100 kg @ $2.25/kg	$225
Capital:	
Picking bins 10 x $5.00 (10-12 kg capacity)	$50
Year 5	
Production:	
As for Year 4 but alter the following to read:	
Spray programme (now need Mesurol)	300
Spray machinery	24
Spray labour	50
	$931

Harvesting:	
Labour	
- 6 minutes/tree (20 hours)	80
Machinery	15
	$95
Marketing:	
Packing materials (100 boxes)	65
Packing labour	80
Toll calls	15
Freight	50
	$210
Capital:	
10 picking bins @ $5.00	50
2 ladders @ $75.00 (wooden)	150
	$200
Revenue:	
200 kg @ $2.25	$450

Year 6

Capital:	
20 picking bins @ $5.00	100
2 ladders @ $75 each (wooden)	150
1 grader (1 ha proportion)	150
	$400
Production:	
As for Year 5 but following now:	
Spraying programme (full protective and Mesurol)	500
Fertiliser	240
Spraying	
- machinery (as for previous year)	24
- labour (as for previous year)	50
	$1,221

Harvesting:	
Labour	
- 2 harvests 6 minutes/tree	160
Machinery	20
	$180
Marketing:	
Packing materials 200 x 0.65	135
Packing labour	
- with grader, 6 boxes/hour	135
Grader electricity	5
Toll calls	25
Freight	100
	$400
Revenue:	
400 kg @ $2.25	$900
Year 7	
Production:	
Additional to previous years	
- amend these headings:	
Spray programme	550
Pruning	
- machinery	40
- labour	160
	$1,361
Harvesting:	
Contract rate $0.50/kg	500
Machinery	50
	$550
Marketing:	
Packing materials	
- 500 boxes	325
Labour	
- 6 boxes/hour	335
Grader electricity	10
Toll calls	50
Freight	250
Promotion	150
	$1,120
Revenue: 1000 kg	$2,250

	Year 8	Year 9	Year 10	Year 11	Year 12
Capital:					
Bins @ $5 each	$ 700	$ 1,250			
Ladders @ $75 ea	150				
Grader @ $150		150			
	$ 850	$ 1,400			
Production:					
As for previous years but detail pruning costs rise to amounts shown	200	200	250	350	350
	$1,401	$1,401	$1,451	$1,451	$1,451
Harvesting:					
Labour based on $0.50/kg	1,500	3,000	4,500	5,500	6,000
machinery	75	100	100	100	100
	$1,575	$3,100	$4,600	$5,600	$6,100
Marketing:					
Packing materials cartons @ $0.65 ea	975	1,950	2,925	3,575	3,900
Packing labour, based on 6 boxes per hour (covers graders and packers)	1,000	2,000	3,000	3,670	4,000
Grader electricity	15	25	30	35	40
Toll calls	100	100	100	100	100
Freight	750	1,500	2,250	2,750	3,000
Promotion	250	350	350	350	350
	$3,090	$5,925	$8,655	$10,480	$11,390
Revenue:					
Based on $2.25/kg	6,750	13,500	20,250	24,750	27,000
	$6,750	$13,500	$2,025	$24,750	$27,000

(ii) Semi-Intensive

Year 0	
Establishment:	
Trees (4.5 x 3.65m) 600/ha @ $3.25	1,950
Fertiliser - 1 kg/tree - 12 bags @ $20	240
Irrigation	4,000
Machinery	
- cultivation and subsoil only	20
- contract tree planters	160
- fertiliser spreading	8
Labour	
- cultivation, 5 hours	20
- planting and surveying	20
- fertiliser spreading	8
	$6,426

Year 1		Year 2
Production:		
Fertilisers		
- supplementary summer urea	100	(NPK) 240 (S.U.) 100
Spray programme	300	300
Herbicides		
- "Roundup" - 3.75 l @ $100/5 l (weed wiper)	75	75
Irrigation		
- electricity	50	50
Machinery		
- fertiliser spreading	4	4
- spraying	12	12
- cultivation	20	20
- pruning	8	8
Labour		
- fertiliser spreading	4	8
- spraying	20	20
- weed wiper, 15 hours	60	60
- cultivation	20	20
- pruning - tipping and shaping (3 m/tree)	40	120
- general - irrigation, administration, maintenance	100	100
	$813	$1,141

Year	3	4	5	6	7	8	9	10	11	12
Capital										
Bins @ $5 each	150	300	550	1,000	2,500					
Mower @ 15 x 10	150									
Grader @ 15 x 10		150			150					
Pneumatic pruning equipment $8,000 (as listed for hedgerow)			800							
	$300	$450	$1,350	$500	$1,150	$2,500				
Production										
Fertiliser	340	**480	480	480	480					
Spray programme	400	*450	500	550	550					
Herbicides - efficient boom spraying	75	75	75	75	75					
Irrigation - electricity	50	50	50	50	50					
Machinery										
- fertiliser spreading	8	4	4	4	4					
- spraying	16	20	24	28	28					
- herbicide	4	4	4	4	4					
- mowing	40	40	40	40	40					
- pruning	8	8	75	75	150					
Labour										
- fertiliser spreading	8	4	4	4	4					
- spraying	24	30	32	36	36					
- herbicide strip	4	4	4	4	4					
- mowing	40	40	40	40	40					
- pruning	120	120	200	200	400					
- general	100	100	100	100	100					
	$1,237	$1,429	$1,632	$1,690	$1,965	$1,965	$1,965	$1,965	$1,965	$1,965

* Full programme with Mesurol reliance from Year 4.
** Now 2 kg per tree.

Year	3	4	5	6	7	8	9	10	11	12
Harvesting										
Labour	$ 80	600	1,500	3,000	6,000	9,000	12,000	13,500	15,000	15,000
Machinery	8	40	100	200	300	400	500	500	500	500
	$ 88	$ 640	$1,600	$3,200	$6,300	$9,400	$12,500	$14,000	$15,500	$15,500
Marketing										
Packing materials - cartons @ $0.65 each	98	390	975	1,950	3,900	5,850	7,800	8,775	9,750	9,750
Grader - electricity	-	10	15	25	40	45	50	50	50	50
Packing - labour	120	400	1,000	2,000	4,000	6,000	8,000	9,000	10,000	10,000
Freight	75	300	750	1,500	3,000	4,500	6,000	6,750	7,500	7,500
Toll calls	10	25	50	75	100	150	150	150	150	150
Promotion	25	100	150	250	400	400	400	400	400	400
	$318	$1,225	$2,940	$5,800	$10,940	$16,945	$22,400	$25,125	$27,850	$27,850
Revenue										
$2.25/kg	300kg	1200kg	3000kg	6000kg	12000kg	18000kg	24000kg	27000kg	30000kg	30000kg
	$675	$2,700	$6,750	$13,500	$27,000	$40,500	$54,000	$60,750	$67,500	$67,500

(iii) Hedgerow

Year 0

Establishment:	
Trees 4.5 x 1 m (2,225 trees/ha)	7,250
Fertiliser .25 kg/tree	220
Irrigation (overhead)	4,000
Machinery	
- cultivation and subsoiling	20
- planting (tree plant 4.5 hours @ $35)	160
- fertiliser spreading	4
Labour	
- cultivation	20
- planting	20
- fertiliser spreading	4
	$11,698

Year 1

Production:	
Fertiliser (urea 100 g/tree)	400
Spray programme	300
Herbicides	
- "Preglone" and "Roundup"	125
Irrigation	
- electricity	50
Machinery ($4/hour)	
- fertiliser spreading	4
- spraying	12
- boom spraying herbicides	8
- mowing	20
- pruning (buckrake, compressor)	40
Labour	
- fertiliser spreading	4
- spraying	20
- herbicide	8
- mowing	20
- pruning (1 minute/tree)	75
- general: administration, irrigation, maintenance	100
	$1,186

Capital:			
Mower			150
Pneumatic pruning equipment:			
- PTO driven compressor		$2,000	
- Handpieces - 6 J's @ $390		2,340	
- 6 F-24's @ $460		2,760	
- Hose and fittings		900	
		$8,000	
		÷ 10	
			800
			$950

	Year 2	Year 3	Year 4	Year 5
Capital:				
Bins @ $5 each	200	500	1,800	1,250
Graders @ $15 x 10	150		150	
3 Platforms @ $40 x 10			1,200	
	$ 350	$ 500	$3,150	$1,250
Production:				
Fertiliser	220 Spring NPK	880 Spring NPK 1 kg/tree	880	880
	400 Summer Urea			
Spray programme	400	450	550	550
Herbicides	125	125	75 (Round-up only)	75
Irrigation - electricity	50	50	50	50
Machinery				
- fertiliser spreading	8	8	4	4
- spraying	16	20	28	28
- herbicide	8	4	4	4
- mowing	20	20	20	20
- pruning	-	80	80	80
Labour				
- fertiliser spreading	8	8	4	4

3-37

- spraying	24	30	36	36
- herbicide	8	4	4	4
- mowing	20	20	20	20
- pruning	-	150	150	150
- general	100	100	100	100
	$1,407	$1,899	$2,005	$2,005
Harvesting:				
Labour	*150	**1,250	2,800	6,675
Machinery	20	40	200	200
	$170	$1,290	$3,000	$6,875
Marketing:				
Packing materials (@ $0.65)	145	1,270	3,620	8,680
Grader electricity	5	25	40	50
Packing labour	150	1,300	3,710	8,900
Freight ($0.50/box)	112	975	2,785	6,675
Toll calls	10	50	100	150
Promotion	25	150	400	400
	$447	$3,770	$10,655	$24,855
Revenue:				
$2.25/kg	445kg	3,894kg	11,125kg	26,700kg
	$1,000	$8,760	$25,030	$60,075

* Pneumatic hand pruning, 1 minute/tree.
** Platform pneumatic pruning.

Cash Flows are summarised in the following table.

SECTION 4

PRODUCTION AND MARKETING STATISTICS

4. PRODUCTION AND MARKETING STATISTICS

4.1 SHEEP AND BEEF

4.1.1 Sheep Numbers by Statistical Areas as at 30 June 1983

Statistical Area	Total Sheep 30 June 1983 '000	Percent change from June 1982 $	Breeding Ewes 30 June 1983 '000	Percent change from June 1982 $	Ewe Hog-gets '000	Wether Hoggets '000	Other Sheep '000
Northland	2,311	-1.2	1,595	-1.6	446	157	113
Auckland	1,106	0.1	741	0.4	178	117	70
South Auckland/ Bay of Plenty	10,007	0.2	7,169	0.1	1,971	449	418
East Coast	2,912	-4.4	2,093	-2.2	609	80	130
Hawke's Bay	7,679	-2.2	5,529	-2.5	1,621	228	301
Taranaki	1,741	1.3	1,247	-0.2	338	77	79
Wellington	11,309	3.2	7,955	2.1	2,399	513	442
North Island	37,065	0.2	26,329	-0.2	7,562	1,621	1,553
Marlborough	1,619	-4.0	1,094	-4.2	272	58	195
Nelson/ Westland	1,393	0.0	1,001	4.4	266	56	70
Canterbury	11,685	-2.6	8,669	-1.5	2,017	269	730
Otago	9,389	1.8	6,908	3.1	1,699	161	621
Southland	9,112	1.3	6,965	2.0	1,757	85	305
South Island	33,198	-0.3	24,632	0.8	6,011	629	1,921
NEW ZEALAND	70,263	-0.1	50,966	0.3	13,573	2,250	3,474

Source: Department of Statistics.

4.1.2 Ewe Numbers at 30 June for 1980 to 1983

Statistical Area	Ewe Numbers at June 1980 '000	1981 '000	1982 '000	1983 '000
Northland	1,420	1,617	1,636	1,595
Central Auckland	690	693	697	741
South Auckland/ Bay of Plenty	6,808	6,965	6,982	7,169
East Coast	1,966	2,007	2,071	2,093
Hawke's Bay	5,510	5,554	5,550	5,529
Taranaki	1,179	1,223	1,222	1,247
Wellington	7,338	7,536	7,506	7,955
North Island	24,911	25,595	25,664	26,329
Marlborough	1,059	1,078	1,108	1,094
Nelson/Westland	843	861	937	1,001
Canterbury	8,497	8,624	8,511	8,669
Otago	6,333	6,428	6,589	6,908
Southland	6,602	6,483	6,613	6,965
South Island	23,334	23,471	23,758	24,637
NEW ZEALAND	48,245	49,069	49,422	50,966

(Source: "Annual Review of the Sheep and Beef Industry)

4.1.3 Physical and Production Data 1981-82 - Per Farm
(unless otherwise stated)

Number of Farms in Sample	1 S.I. High Country (31)	2 S.I. Hill Country (40)	3 N.I. Hard Hill Country (72)	4 N.I. Hill Country (143)	5 N.I. Intensive Finishing (92)	6 S.I. Finishing Breeding (78)	7 S.I. Intensive Finishing (44)	8 S.I. Mixed Finishing (24)	ALL CLASSES AV. (Weighed av. of all farm classes)
AREA									
Total Hectares	9,948	1,866	810	397	197	359	197	231	525
Effective Hectares	9,948	1,777	668	362	185	356	191	231	498
STOCK NUMBERS									
Sheep at 1/7/81	8,227	4,765	4,447	3,260	2,067	3,125	2,606	1,621	2,973
Sheep at 30/6/82	8,737	4,929	4,454	3,270	2,040	3,097	2,610	1,609	2,979
Cattle at 1/7/81	321	289	414	265	164	80	25	8	162
Cattle at 30/6/82	320	274	404	251	149	65	24	10	152
Stock units: sheep at 1/7/81	7,085	4,229	3,900	2,868	1,886	2,803	2,385	1,481	2,658
: cattle at 1/7/81	1,559	1,323	1,918	1,185	650	337	95	28	709
: TOTAL at 1/7/81	8,644	5,552	5,818	4,053	2,536	3,140	2,480	1,509	3,367
Stock units/effective hectare	0.9	3.1	8.7	11.2	13.7	8.8	13.0	6.5	6.8
LABOUR									
Labour (man years)	2.92	2.27	2.27	1.70	1.51	1.95	1.68	2.19	1.83
LAMBING & CALVING PERCENTAGE									
Ewes to ram	3,794	3,279	3,004	2,222	1,583	2,300	2,022	1,252	2,121
Lambing percentage	88.1	97.2	84.8	94.2	97.3	104.3	108.5	113.9	99.0
Cows to bull	175	130	185	103	28	22	3	1	56
Calving percentage	84.6	80.8	75.7	82.5	85.7	81.8	100.0	100.0	82.1
STOCK LOSSES									
Lambs: as % of lambs marked	*	3.0	5.1	5.2	4.0	2.7	2.9	2.3	3.6
Sheep: as % of sheep at 1/7/81	5.9	4.6	6.7	5.5	5.9	5.4	4.6	5.7	5.5
Cattle: at % of cattle at 1/7/81	4.7	5.2	6.0	3.4	2.4	2.5	0.0	0.0	3.7
WOOL									
Wool sold (kg)	31,074	19,254	18,651	14,860	9,706	13,797	12,515	6,939	13,282
STOCK SALES & PURCHASES (no.)									
Sales: lambs	1,736	1,884	1,252	1,138	1,275	1,718	1,769	1,252	1,436
: sheep	889	793	860	724	664	606	465	333	630
: cattle	141	112	145	116	116	47	19	9	80
Purchases: lambs	250	15	36	31	196	82	170	165	111
: sheep	199	39	85	105	401	105	85	141	161
: cattle	9	8	20	28	81	16	16	11	31
PRODUCTION									
Meat per hectare (kg)	6.2	32.5	78.8	122.6	177.3	101.9	182.1	85.4	77.0
Wool per hectare (kg)	3.6	12.8	30.4	45.6	58.6	45.5	78.7	34.7	30.5

* Lamb losses included in sheep losses

Source: "Sheep & Beef Farm Survey".

4.1.4 Wool: Statistical Report - Seasonal Summary

	Year ended 30 June		
	1981/82	1982/83	1983/84
DISPOSALS			
1. Sales			
(a) At Auction			
(i) Greasy : Tonnes actual	255,909	259,215	260,042
: Ave. price (c/kg)	255.72	255.90	296.32
(ii) Scoured : Tonnes actual	2,854	2,059	1,188
: Av. price (c/kg)	366.60	325.79	382.29
TOTAL CLEAN TONNES SOLD AT AUCTION	193,429	193,878	193,619
TOTAL REALISED $'000	664,011	670,095	775,095
(b) Privately (Clean Tonnes)			
(i) Brokers	776	626	1,061
(ii) Private Buyers & WMA	45,174	39,694	41,286
(iii) Extra Choice	490	939	1,147
TOTAL SOLD PRIVATELY - CLEAN TONNES	46,440	41,259	42,494
- VALUE $'000	148,082	135,896	162,213
2. Growers Shipments (Clean Tonnes Equivalent)	-		
(i) Greasy	353	696	475
(ii) Scoured	4,472	3,839	3,338
TOTAL GROWERS SHIPMENTS - CLEAN TONNES	4,825	4,535	3,813
- VALUE $'000	15,964	14,444	14,603
3. Slipe Disposals			
Freezing Companies & Fellmongers			
- CLEAN TONNES	29,713	33,538	31,127
- VALUE $'000	92,832	101,905	119,156
TOTAL DISPOSALS			
(a) Clean Tonnes	274,407	273,210	272,053
(b) Value $'000	920,889	922,340	1,071,067
SCOURING (Clean Tonnes)			
(a) On Account Growers	6,493	5,350	4,297
(b) On Account Exporters	132,806	152,947	150,029
(c) On Account Manufacturers	16,649	14,951	18,925
TOTAL SCOURED	155,948	173,248	173,251
EXPORTS (Clean Tonnes Equivalent)			
(a) Greasy	98,514	111,391	103,766
(b) Scoured	134,716	149,020	146,734
(c) Slipe	15,300	18,150	17,358
TOTAL EXPORTS	248,530	278,561	267,858
FOB VALUE $'000	925,513	1,013,131	1,118,835
LOCAL MILLS PURCHASES (Clean Tonnes)	20,683	19,334	28,370
BOARD MARKET ACTIVITIES (N.Z. & U.K.)			
(a) Purchases			
- bales (i) Intervention	189,457	53,316	2,565
(ii) Extra Choice	3,603	8,304	10,233
(iii) Other	-	-	246
- Value all purchases $'000	65,875	19,611	5,467
(b) Sales			
- all (i) Bales	112,918	192,821	203,861
(ii) Value (realisation) $'000	41,261	67,399	70,320

Source: Woolnews, August 1984

4.1.5 Beef Cattle Numbers by Statistical Areas as at June 1983

Statistical Area	Total Beef Cattle	Change from June 1982	Beef Cows and Hf'ers Bred from June 1983	Change from June 1982	Cows and Heifers not Bred from June 1983	Steers & Non Breeding Bulls	Breeding Bulls
	'000	%	'000	%	'000	'000	'000
Northland	572	-8.8	184	-8.9	126	247	15
Auckland	239	-7.0	57	-3.4	59	118	5
Sth Auckland/ Bay of Plenty	1,076	-2.0	296	-4.8	247	503	30
East Coast	329	-16.7	148	-13.5	89	84	8
Hawkes Bay	458	-19.1	161	-12.5	124	161	12
Taranaki	179	-3.2	44	-6.4	46	86	5
Wellington	706	-2.2	212	-3.6	167	312	15
North Island	3,559	-7.6	1,102	-7.7	856	1,511	90
Marlborough	85	-18.3	34	-15.0	22	27	2
Nelson/Westland	131	-9.0	41	-10.9	35	52	3
Canterbury	285	-12.8	105	-8.7	74	98	8
Otago	263	-8.4	103	-8.0	65	88	7
Southland	174	-10.3	63	-8.7	44	63	4
South Island	938	-11.2	346	-9.4	240	328	24
NEW ZEALAND	4,497	-8.3	1,448	-8.1	1,096	1,839	114

Source: Department of Statistics

4.2 DAIRY COWS

4.2.1 Number of cows in milk in each statistical area at 31 January

	Ten-year Period				Last four years			
Statistical area	1950-51	1960-61	1970-71	1978-79	1979-80	1980-81	1981-82	1982-83
Northland	237 851	246 295	277 293	237 522	226 224	219 611	225 115	232 329
Central Auckland	186 764	179 534	193 058	155 203	152 911	150 766	150 151	154 896
Sth Auckland and Bay of Plenty	707 023	806 129	1 011 417	948 972	975 032	976 826	992 640	1 020 790
East Coast	20 940	13 686	7 762	3 185	2 202	2 384	1 894	1 959
Hawke's Bay	54 463	42 401	44 001	33 738	31 975	31 115	30 372	31 897
Taranaki	261 057	282 536	351 261	337 334	345 526	345 557	350 914	358 750
Wellington	217 286	190 359	199 090	171 252	167 462	161 119	164 170	170 058
North Island	1 685 384	1 760 940	2 083 882	1 887 206	1 901 332	1 887 378	1 915 256	1 970 679
Marlborough	14 003	12 236	13 991	14 512	13 687	13 670	13 417	14 435
Nelson	33 034	33 542	36 368	37 885	37 302	36 321	34 958	37 170
Westland	13 708	14 521	17 967	22 129	23 270	24 024	29 243	30 386
Canterbury	64 610	55 637	44 081	39 654	36 112	34 974	36 869	41 648
Otago	35 138	23 870	20 558	19 690	17 746	16 194	16 234	18 181
Southland	52 320	28 042	22 127	18 821	16 359	14 535	14 921	15 664
South Island	212 813	167 848	155 092	152 696	144 476	139 718	145 642	157 520
NEW ZEALAND	1 898 197	1 928 788	2 238 974	2 039 902	2 045 808	2 027 096	2 060 898	2 128 199

* The Department of Statistics no longer provides the number of cows in milk in each statistical area for the 31 January each year. From 1979-83 the figures have derived from Dairy Board sources.

4.2.2 Number of Herds of Ten or More Cows (includes factory supply and town milk herds)

Farming Region	1980/81	1981/82	1982/83
Northland	1 862	1 828	1 847
Central Auckland	1 347	1 316	1 306
South Auckland	5 429	5 360	5 360
Bay of Plenty	1 126	1 066	1 038
Central Plateau	411	413	426
Western Uplands	63	61	67
East Coast	30	24	23
Hawke's Bay	269	264	266
Taranaki	2 745	2 730	2 725
Wellington	926	875	842
Wairarapa	444	436	432
North Island	14 601	14 359	14 332
South Island	1 488	1 462	1 484
NEW ZEALAND	16 089	15 821	15 816
Total number of suppliers to dairy companies*	15 033	14 843	14 861
Number of dairy farms with town milk quotas	1 465	1 430	1 361

* Factory supply herds with one or more cows, from dairy company annual reports.

N.Z. Dairy Board
N.Z. Milk Board

4.2.3 Trends in Average Herd Size (N.Z. Dairy Board's survey of factory suppliers with herds of 10 or more cows)

AVERAGE NUMBER OF COWS IN HERDS OF 10 OR MORE (Index)

Farming Region	1980/81	1981-82	1982-83
Northland	118 (241)	123 (251)	126 (254)
Central Auckland	116 (258)	118 (262)	124 (268)
South Auckland	141 (220)	145 (227)	149 (231)
Bay of Plenty	134 (220)	142 (233)	145 (236)
Central Plateau	134 (253)	142 (268)	145 (271)
Western Uplands	133 (360)	146 (395)	141 (390)
East Coast	107 (334)	-	-
Hawke's Bay	113 (269)	116 (276)	120 (280)
Taranaki	126 (197)	129 (202)	132 (205)
Wellington	124 (276)	127 (282)	129 (284)
Wairarapa	127 (249)	132 (259)	137 (264)
North Island	131 (238)	135 (245)	139 (249)
South Island	100 (294)	107 (315)	112 (320)
NEW ZEALAND	129 (248)	133 (256)	137 (260)

4.2.4. Total Dairy Factory Manufacture (tonnes of product)

Product	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83*
Creamery butter	189 910	231 077	217 151	200 194	221 598	238 923
Whey butter	2 397	2 564	3 262	1 868	2 887	2 796
Anhydrous milkfat	38 881	21 021	(A) 34 413	44 989	14 649	8 530
Frozen cream	8 150	7 671	6 103	4 611	5 290	6 088
Cheese	80 727	90 310	105 727	84 342	111 914	114 002
Condensed and evaporated milk	5 664	4 648	5 980	4 769	4 418	3 072
Wholemilk powder	49 932	58 803	65 757	88 763	103 558	102 244
Infant food	17 404	11 192	10 747	7 991	9 951	14 147
Skimmilk powder	172 018	173 858	168 515	180 953	199 826	165 261
Buttermilk powder	19 409	22 945	24 075	25 006	23 685	23 963
Acid casein	43 855	45 906	45 157	42 297	-	-
Caseinates	9 862	9 976	8 392	7 336	-	-
Rennet casein	3 007	7 444	12 613	9 957	47 384	65 144
Lactose	9 329	10 796	11 391	11 804	11 804	10 950

(A) Includes compound fats.
* Provisional

4.2.5 Milk Produced and Milkfat Processed

Year	Processed by Dairy Factories					Milk consumed[1]	Total Production[2]	
	Butter	Cheese	Other Whole Milk Products	Total Processed Million litres	000 t milkfat	million litres	Million litres	000 tonnes milkfat
	000 tonnes milkfat							
1969/70	194.3	39.8	9.8	5,096	243.9	489	5,800	275.4
1970/71	190.1	43.0	10.6	5,049	243.7	495	5,777	276.5
1971/72	203.0	41.4	13.6	5.304	258.0	507	6,048	291.5
1972/73	193.1	39.8	13.7	5,121	246.6	519	5,881	280.5
1973/74	176.7	35.1	16.1	4,756	227.8	535	5,512	260.9
1974/75	197.3	33.9	12.7	5,222	243.9	558	5,907	273.3
1975/76	211.3	40.1	16.2	5,403	267.6	557	6,075	296.5
1976/77	225.8	33.3	16.0	5,775	275.1	525	6,420	302.9
1977/78	203.0	31.0	17.0	5,238	251.0	521	5,892	278.6
1978/79	217.1	33.6	23.5	5,655	274.2	518	6,297	301.3
1979/80	216.1	40.4	34.4	5,997	290.9	504	6,629	318.0
1980/81	215.0	32.3	34.6	5,868	282.0	487	6,483	308.1
1981/82	200.8	41.8	39.8	5,957	282.4	487	6,578	309.0
1982/83*	209.9	42.7	37.8	6,096	290.3	482	6,708	316.0

1 Liquid milk, cream and icecream; wholemilk equivalent
2 Includes milk fed to stock and waste; excludes separation loss
* Provisional

Source: New Zealand Dairy Board, 59th Farm Production Report, 1982/83 season. (All tables in Section 4.2)

4.3 DEER

4.3.1 Deer Numbers by Statistical Area as at 30 June 1983

	Male		Female		Total
	Under 1 Year	1 year and Over	Under 1 Year	1 Year and Over	Deer
Northland	189	318	176	823	1,506
Auckland	2,258	3,068	2,289	9,958	17,573
South Auckland/ Bay of Plenty	7,924	11,930	8,064	30,007	57,925
East Coast	516	1,140	573	1,710	3,939
Hawkes Bay	2,292	3,883	2,116	9,365	17,656
Taranaki	168	566	205	1,057	1,996
Wellington	1,463	2,599	1,809	6,005	11,876
North Island	14,810	23,504	15,232	58,925	112,471
Marlborough	691	1,417	522	1,576	4,206
Nelson/Westland	1,150	3,163	956	4,366	9,635
Canterbury	3,057	9,567	3,703	10,991	26,718
Otago	2,117	4,189	1,712	7,212	15,230
Southland	2,834	7,882	4,004	12,673	27,393
South Island	9,849	26,218	10,297	36,818	83,182
NEW ZEALAND	24,659	49,722	25,529	95,743	195,653

Source: Department of Statistics

4.4 PIGS

4.4.1 Pig Population in New Zealand as at 30th June 1982

Region	No. of holdings	Breeding sows 1 yr and over	Mated gilts	Boars	Total Pigs	Total Pigs Weanded	Total No. of Litters
Northland	562	1,699	174	224	12,305	24,385	2,939
Central Auckland	421	5,386	629	470	54,253	83,684	9,991
South Auckland/ Bay of Plenty	1,507	12,003	1,538	1,112	102,220	194,149	23,093
East Coast	242	492	33	77	3,153	6,341	748
Hawke's Bay	510	1,608	133	170	10,592	19,140	2,371
Taranaki	378	3,531	349	331	33,231	53,650	6,421
Wellington	844	6,779	706	661	55,784	97,741	11,711
North Island	4,464	31,498	3,562	3,045	271,538	479,090	57,274
Marlborough	156	1,792	133	168	15,194	27,442	3,389
Nelson	246	1,670	293	159	13,832	25,803	2,839
Westland	40	123	15	11	768	1,068	162
Canterbury	1,033	8,592	1,245	852	75,590	138,063	16,524
Otago	498	1,913	262	202	16,950	27,911	3,114
Southland	467	1,242	211	160	11,899	17,923	2,133
South Island	2,440	15,332	2,159	1,552	134,233	238,210	28,161
NEW ZEALAND	6,904	46,830	5,721	4,597	405,771	717,300	85,435

	1983	1982	1981	1980	1979	1978	1977	1976	1975	1974	1973
No. Holdings with Pigs	N/A	6,904	5,890	5,277	5,341	6,114	7,050	6,577	6,505	6,808	6,547
Farms on P.I.B. Register	1,603	1,630	1,815	1,971	2,057	2,393	2,645	2,577	2,612		

Average Number of Pigs Weaned/Litter 8.39
Average Number of Litters/Sow/Year 1.86
Average Number of Pigs Weaned/Sow/Year 15.6
Average Number of Pigs Marketed/Sow/Yr 14.9

Source: Department of Statistics.

4.4.2 NUMBER OF BREEDING SOWS AND PIGS SLAUGHTERED 1953-83

	Breeding sows (as at 31 January)	Total pigs slaughtered year ended 30 Sept.	Pigs marketed per sow	40 to 120 lb Porkers	121 to 200 lb Baconers	Over 200 lb in Choppers	Estimated total weight of pigmeat carcass form (tons)
1953	81,162	743,185	9.2	336,777	381,555	24,852	40,949
1954	87,104	763,350	8.7	446,507	294,660	22,183	38,484
1955	88,969	779,632	8.7	382,512	371,603	25,517	41,996
1956	85,850	813,946	9.4	427,940	355,040	30,602	43,625
1957	83,065	743,054	8.9	396,336	320,694	27,024	27,218
1958	87,162	760,230	8.7	330,411	403,961	25,858	39,539
1959	92,970	860,632	9.2	474,507	358,693	27,432	41,900
1960	87,824	842,845	9.6	416,621	396,704	29,520	41,000
1961	83,979	836,865	9.9	449,774	362,154	24,937	40,967
1962	84,499	848,800	9.9	434,599	376,681	25,883	41,129
1963	97,039	921,300	9.2	478,200	419,100	24,000	43,267
1964	95,179	1,002,100	10.2	527,600	448,000	26,500	46,921
1965	90,048	949,500	10.5	495,000	429,700	24,700	44,200
1966	81,746	852,000	10.4	413,300	410,100	25,900	39,900
1967	75,910	770,000	10.1	377,000	373,000	20,000	34,800
1968	77,412	801,000	10.3	426,000	348,000	27,000	36,000
1969	69,223	770,000	11.1	239,000	362,000	19,000	35,000
1970	73,204	805,000	11.0	413,200	374,300	18,400	38,900
1971	77,431	901,000	11.6	471,824	406,544	22,690	41,000
1972	75,230	877,600	11.9	472,100	377,600	28,000	39,178
1973	60,319	751,600	12.4	400,618	333,235	17,751	35,300
1974	57,690	744,954	12.6	N/A	N/A	N/A	34,400

	as at 30 June			Under 41 kg	%	Over 41 kg	%	Choppers	%	Tonnes
1975	54,835	720,100	12.2	262,000	36.4	439,900	61.1	18,200	2.5	34,200
1976	55,920	721,400	12.9	230,600	32.0	475,600	65.9	15,100	2.1	32,800
1977	60,809	825,700	13.2	285,500	34.6	519,500	62.0	20,700	2.5	39,800
1978	55,686	801,700	12.8	286,300	35.7	492,400	61.4	23,100	2.9	38,300
1979	51,761	733,500	12.8	254,130	34.9	453,760	62.4	19,620	2.7	36,710
1980	52,147	723,988	13.6	218,006	30.4	479,888	66.8	20,275	2.8	38,175
1981	49,495	719,013	13.3	194,387	27.1	501,356	69.7	23,270	3.2	38,711
1982	46,830	719,120	14.1	163,190	22.7	536,910	74.6	19,020	2.7	40,278
1983	N/A	724,210	15.4	183,530	25.3	521,885	72.1	18,795	2.6	39,972

Note: Because of the carry-over effect of actual sow production into the following year's kill the average number of pigs marketed/sow/year is calculated on the current year's kill divided by the previous year's sow numbers.

Source: N.Z. Pork Industry Board Annual Report 1983.

4.5 POULTRY

4.5.1 Chicken Numbers and Production

At 30 June	Units	1979	1980	1981	1982	1983 (est)
Number of entitlement holders 3 *	number	655	633	508	446	440
Number of birds on entitlement 4 *	(000)	3,842.1	3,802.0	3,615.1	3,561.6	3,240.2
Egg production 1 *	(m doz)	50.7	48.9	51.3	51.5	51.9
Meat production 2 **	(million)	27.3	27.0	28.0	28.0	28.0
Fresh - PRPA.SAADZ ***	Tonnes	-	-	13,742	11,745	13,743
Frozen - PRPA.SAAEZ ***	Tonnes	-	-	21,507	24,548	18,629

1 Egg production includes eggs handled by licensed distributors only.
2 Poultry meat production figures are all estimates based on annual surveys of the largest producers. They do not include culls and cockerels, turkeys, ducks or pheasants.
3 All persons farming 101 or more birds must hold an entitlement licence issued by the N.Z. Poultry Board. Licences can only be sold to the Board (since August 1978), apart from "going concern" sales. The Board has cancelled licences so as to reduce the excess size of the national flock.
4 Birds actually farmed are currently up to 20% below entitlement numbers because of various voluntary flock reductions arranged with the Board.

Sources: * New Zealand Poultry Board
** Ministry of Agriculture and Fisheries
*** Department of Statistics

Table from "Agricultural Statistics 1984"

4.6 CASH CROPPING

4.6.1 Area and Production 1982/83 Harvest

Statistical Area	Wheat		Oats		Barley		Peas		Maize	
	Area Threshed	Total Yield	Area Threshed	Total Yield	Area Threshed	Total Yield	Area Threshed	Total Yield	Area Threshed	Total Yield
	hectares	tonnes	hectares	tonnes	hectares	tonnes	hectares	tonnes	hectares	tonnes
Northland	-	-	18	40	65	207	-	-	344	1846
Central auckland	-	-	6	20	149	467	-	-	201	1686
South Auckland-Bay of Plenty	67	258	158	589	797	2904	4	10	12086	110397
East Coast	-	-	7	26	273	1116	53	331	2650	26348
Hawke's Bay	209	976	224	602	2996	11983	428	1578	1319	11677
Taranaki	412	1868	28	97	683	2626	8	20	383	3713
Wellington	5354	23472	487	1621	13422	58625	1269	4483	1614	13344
North Island	6042	26574	928	2995	18385	77928	1762	6422	18597	169011
Marlborough	1258	5672	174	484	2398	9407	927	2783	77	494
Nelson	18	77	28	101	693	2566	54	165	76	566
Westland	1	4	27	57	4	12	-	-	-	-
Canterbury	39933	144499	6628	20528	51164	192458	13801	39542	-	-
Otago	7570	34475	2215	9549	8781	38718	504	1670	-	-
Southland	16684	80751	5854	27225	7109	34698	642	2021	-	-
South Island	65464	265478	14926	57944	70149	277859	15928	46181	153	1060
New Zealand	71506	292052	15854	60939	88534	355787	17690	52603	18750	170071

Source: N.Z. yearbook 1984

4.6.2 Wheat Cultivars, Areas and Yield

Cultivar	Number of Farms	Area Threshed	Total Yield	Avg. Yield per/ha	% of Surveyed Area	% of Total Yield
		hectares (000)	tonnes (000)	tonnes	percent	percent
Wheat -						
Rongotea	1213	22395	85502	4	10.51	9.15
Hilgendorf	354	4739	15857	3	2.22	1.70
Arawa	123	1486	4927	3	0.70	0.53
Oroua	478	5935	22816	4	2.78	2.44
Kopara	826	12084	48264	4	5.67	5.16
Takahe	852	14506	69880	5	6.81	7.48
Karamu	535	6937	29954	4	3.25	3.21
Other	296	3424	14852	4	1.61	1.59
Total	4677	71506	292052	4	33.55	31.25

Source: N.Z. Yearbook 1984

4.6.3 Barley Cultivars, Area and Yield

Cultivar	Number of Farms	Area Threshed	Total Yield	Avg. Yield per/ha	% of Surveyed Area	% of Total Yield
		hectares (000)	tonnes (000)	tonnes	percent	percent
Mata	809	12666	47282	4	5.94	5.06
Hassan	1159	13501	54142	4	6.33	5.79
Manapou	193	2204	8011	4	1.03	0.86
Kaniere	862	9522	35927	4	4.47	3.84
Magnum	718	9964	42099	4	4.67	4.51
Zephyr	1325	15956	61233	4	7.49	6.55
Other	2021	24721	107093	4	11.60	11.46
Total	7087	88534	355787	4	41.54	38.07

Source: N.Z. Yearbook 1984

4.6.4 Oat Cultivars, Area and Yield

Cultivar	Number of Farms	Area Threshed	Total Yield	Avg. Yield per/ha	% of Surveyed Area	% of Total Yield
		hectares (000)	tonnes (000)	tonnes	percent	percent
Onward (Oware)	339	1496	6033	4	0.70	0.65
Mapua (Makaru)	1393	9603	38816	4	4.51	4.15
Taiko	232	1176	4010	3	0.55	0.43
Other white	282	1381	4806	3	0.65	0.51
Other coloured	176	966	3394	4	0.45	0.36
Amuri	323	841	2573	3	0.39	0.28
Black supreme	87	391	1307	3	0.18	0.14
Total	2832	15854	60939	4	7.44	6.52

Source: N.Z. Yearbook 1984

4.6.5 Pea Cultivars, Area and Yield

Cultivar	Number of Farms	Area Threshed	Total Yield	Avg. Yield per/ha	% of Surveyed Area	% of Total Yield
		hectares (000)	tonnes (000)	tonnes	percent	percent
Field Varieties-						
Maple	419	5464	15205	3	2.56	1.63
White	218	2076	6554	3	0.97	0.70
Blue Boiling	267	3752	11695	3	1.76	1.25
Other	197	2142	6146	3	1.00	0.66
Garden Varieties-	431	4256	13003	3	2.00	1.39
Total	1532	17690	52603	3	8.30	5.63

Source: N.Z. Yearbook 1984

4.6.6 Other Crops

Cultivar	Number of Farms	Area Threshed	Total Yield	Avg. Yield per/ha	% of Surveyed Area	% of Total Yield
		hectares (000)	tonnes (000)	tonnes	percent	percent
Maize	1113	18750	170071	9	8.80	18.20
Other grain	105	806	3021	4	0.38	0.32
Total	1218	19556	173092	9	9.18	18.52

Source: N.Z. yearbook 1984

4.7 Small Seeds

4.7.1 The production of machine-dressed grass, clover, brassica, and other seed for the year ended 31 December 1983 together with the corresponding totals for 1982. The figures are taken from returns from seed dressing plants.

Type of Seed	1982	1983
	tonnes	
Ryegrass-		
Hybrid	942	1260
Italian ryegrass (including Western Wolths)	344	1114
Perennial ryegrass	11534	9080
Tetraploid	369	966
Other grasses-		
Browntop	74	34
Chewing fescue	12	11
Cocksfoot	751	571
Crested dogstail	88	29
Prairie grass	35	69
Timothy	132	84
Yarrow	2	2
Yorkshire fog	23	9
Tall fescue	27	6
Clovers-		
Lotus	64	41
Mixed clovers	133	137
Suckling clover	232	17
White clover	4855	7714
Red clover	458	266
Other-		
Lucerne	94	89
Kale	284	221
Maize	1474	1610
Peas-		
Garden	11963	16858
Field	21872	23387
Rape	814	474
Turnip	100	44
Barley	12627	17261
Oat	5473	6259
Ryecorn	822	1028
Wheat	12872	11796
Linseed	271	367

Large quantities of grass and clover seed have been exported during recent years, especially to the United Kingdom, Australia, and the United States of America.

Source: N.Z. Yearbook 1984

4.8.1 Vegetable Production for the Fresh Market and for Processing 1980-82

Vegetable	1980		1981		1982	
	Fresh Market	For Processing	Fresh Market	For Processing	Fresh Market	For Processing
	tonnes					
Asparagus	463	682	655	917	733	1150
Beans: green *	672	10284	664	8207	530	10208
Beans: broad	191	690	153	823	115	1103
Beetroot	1177	3420	903	2895	901	2538
Brussel sprouts	1382	316	1693	370	1158	217
Cabbage	31072	1442	32186	1167	29922	307
Capsicums/peppers *	315	190	312	232	248	259
Carrots	27313	7790	25716	2576	22848	7392
Cauliflower (incl. broccoli)	23201	1056	23230	2542	17405	630
Celery	4589	274	4319	153	4992	250
Courgettes/zucchini	1034	14	833	42	457	14
Cucumbers *	498	-	236	9	284	6
Garlic	1330	-	962	-	1346	200
Gherkins	201	5	69	265	43	210
Kumera	15768	-	10301	-	6796	-
Lettuce	17897	-	19100	-	20982	-
Leeks	1329	-	1274	320	1205	98
Marrow	332	350	325	-	317	-
Melon: rock (cantaloupe)	378	-	650	-	624	-
Melon: water	2506	-	4386	-	3916	-
Onions	76817	2336	66416	2458	78599	731
Parsnips	13889	-	6975	-	13647	-
Peas	319	36963	1050	26525	305	40451
Pumpkin/squash	19753	-	29257	125	35633	340
Rhubarb	354	30	344	30	315	-
Silverbeet	1298	-	1242	-	1354	-
Sprouting broccoli	712	101	1083	120	1239	113
Sweet corn	5394	32331	4494	31932	3299	31340
Turnips: white	206	-	286	-	103	-
Turnips: swede	2856	-	4560	-	3901	-
Tomatoes (outdoor) *	9528	29454	9523	20185	7372	35929

* Does not include production in glasshouses.

Source: N.Z. Yearbook 1984

4.8.2. Potatoes

Area and Yield of Potatoes for the latest available 5 years.

Season	Area Dug	Yield					Yield per ha Dug
		For Table	For Processing	For Seed	For Pig Food	Total	
	hectares	tonnes					
1977 - 1978	9285	170940	35860	24406	6085	237291	25.56
1978 - 1979	7501	146493	31436	19567	5789	203285	27.10
1979 - 1980	7626	151782	32803	22599	6373	213557	28.00
1980 - 1981	7646	148475	31498	21736	7066	208775	27.31
1981 - 1982	8795	165853	44375	22874	5623	238725	27.14

Source: N.Z. Yearbook 1984

4.8.3 Onions

Approximately 85 percent of the onion crop is normally grown in the North Island, principally in the Pukekohe district. The following table shows the area and yield of onions for the latest available 5 seasons.

Season	Area	Total Yield	Yield per Hectare
	hectares	tonnes	tonnes
1977 - 1978	1893	61441	32.46
1978 - 1979	2122	69025	32.53
1979 - 1980	2289	79153	34.58
1980 - 1981	2137	68874	32.23
1981 - 1982	1920	*	*

* Onion yield is no longer collected.

Source: N.Z. yearbook 1984

4.9 ORCHARD FRUIT

4.9.1 Area planted in the various fruits in 1982 together with 1978 figures.

Fruit	1978*	1982+	Main Districts
	hectares		
Pip fruit -			
Apples	5596	6208	Nelson, Hawke's Bay
Pears	446	675	Hawke's Bay, Nelson
Stone fruit -			
Apricots	552	571	Otago
Cherries	110	182	Otago, Marlborough
Nectarines	364	706	Otago, Hawke's Bay
Peaches	1031	1202	Hawke's Bay, Auckland Otago
Plums	341	546	Hawke's Bay, Auckland
Citrus fruit -			
Grapefruit	445	510	Bay of Plenty
Lemons	114	257	Bay of Plenty
Mandarins	278	504	Bay of Plenty, Northland
Otanges (sweet)	519	902	Northland, Poverty Bay
Tangelos	489	766	Bay of Plenty, Northland
Subtropical fruit -			
Kiwifruit	2195	9451	Bay of Plenty
Tamarillos	225	571	Northland, Bay of Plenty
Avocados	126	741	Bay of Plenty, Poverty Bay
Feijoas	70	406	Bay of Plenty

* Figures collected by the Ministry of Agriculture & Fisheries. Agriculture Census.

\+ Figures collected by the Department of Statistics.

Source: N.Z. Yearbook 1984

4.9.2 Quantities of Apples and Pears (1982/83 Season)

Variety	Hawke's Bay	Nelson	Other Districts	Total
		cartons (000)		
Apples -				
Granny Smith	2400	1192	510	4102
Sturmer Pippin	200	493	165	858
Golden Delicious	200	438	144	782
Red Delicious	1250	662	308	2220
Cox's Orange Pippin	125	510	103	738
Other	721	571	317	1609
Total Apples	4896	3866	1547	10309
Pears -				
Packham's Triumph	40	58	9	107
Winter Cole	57	24	6	87
Winter Nelis	62	9	17	88
Other	33	29	16	78
Total Pears	192	120	48	360

Source: N.Z. Yearbook 1984

4.9.3 Grape Wine Production and Sales

Grape Wines	Year Ended June 1981/82	1982/83
Production -	litres (000)	
Table wines - white still	27388	35081
red & rose still	3396	4748
sparkling	5640	4837
Total table wines	36424	44666
Fortified wines (including all cocktail liqueurs)	10577	13077
Total production	47002	57743
Sales -		
Table wines - white still	20538	21075
red & rose still	2767	2779
sparkling	4745	4850
Total Table Wines	28049	28704
Fortified (including all cocktail liqueurs)	10662	10085
Total sales	38711	38789
Stocks at 30 June -		
Table	44034	57878
Fortified	13153	16824
Total	57187	74702

Source: N.Z. Yearbook 1984

4-27

4.10 HOPS AND TOBACCO

4.10.1 Hops

The whole of the hop gardens are located in Waimea County in Nelson and all the requirements of hops for New Zealand are produced. Production per hectare usually ranges between 1600 kilograms and 2000 kilograms.

The total crop produced in the 1983 season was 367,895 kilograms. All the crop is picked by machines. Hop gardens in production covered 301.66 hectares in 1983, the same as the previous year. The yield for the 1983 season averaged 1824 kilograms per hectare. A total of 181,674 kilograms of hops was exported to West Germany. The balance was used in this country. The average alpha acid for the seasons' crop was 13 percent.

Source: N.Z. Yearbook 1984

4.10.2 Area and Production of Tobacco

Season	Number of Growers	Area Planted*	Production	Estimated Value of Crop
		hectares	kg (000)	$(000)
1978-79	310*	1718	3750*	14340
1979-80	269	1513	3250	13604
1980-81	237	1027	2290	10148
1981-82	122	-	1530	7350
1982-83	135	657	1583	8279

Source: N.Z. Yearbook 1984

SECTION 5

INCOME TAXATION

Contributed by M.B. CLARK, M.Com. A.C.A.
Senior Lecturer in Agricultural Accounting
LINCOLN COLLEGE

CONTENTS

		Page
5.1	Introduction	5-5
5.2	Taxation in New Zealand	5-5
5.2.1	Overview	5-5
5.2.2	PAYE Tax on Personal Income	5-5
5.2.3	Provisional Tax System	5-7
5.2.4	Returns of Income	5-7
5.2.5	Assessment	5-9
5.3	Calculating Taxable Income	5-9
5.4	Taxation of Individuals	5-10
5.4.1	Overview	5-10
5.4.2	Exempt Income	5-11
5.4.3	Assessable Income	5-12
5.4.4	Deduction for Employment Related Expenses	5-13
5.4.5	Special Exemptions	5-14
5.4.6	Tax Rebates	5-15
5.4.7	Example Assessment	5-19
5.5	Taxation of Companies	5-20
5.6	Taxation of Partnerships	5-21
5.6.1	Overview	5-21
5.6.2	Family Partnerships	5-22
5.7	Taxation of Trusts	5-23
5.7.1	Classification of Trusts	5-23
5.7.2	Liability of Income Tax	5-23
5.7.3	Classification of Income	5-24
5.8	Farmers	5-25
5.8.1	Liability for Income Tax	5-25
5.8.2	Farm Income	5-26
5.8.3	Farm Expenses	5-27
5.8.4	Valuation of Trading Stock	5-31
5.8.5	Depreciation	5-38
5.8.6	Farming Investment Allowance	5-41
5.8.7	Development Expenditure	5-42
5.8.8	Recovery of Development Expenditure and Interest	5-44
5.8.9	Limitation of Tax Losses from Farming or Landowning	5-45
5.8.10	Timber Sales and Farm Forestry	5-46
5.8.11	Income Levelling Schemes	5-48

5.9 Horticulture..... 5-50

5.10 Fishing Industry..... 5-53
5.10.1 Spreading of Repair Costs on Fishing Boats..... 5-54
5.10.2 Depreciation..... 5-54
5.10.3 Fishing Investment Allowance..... 5-55
5.10.4 Development Expenditure - Fish Farming..... 5-55
5.10.5 Income Equalisation Scheme..... 5-57

5.11 Export Incentives..... 5-57
5.11.1 Export Performance Incentive for Qualifying Goods..... 5-58
5.11.2 Export Performance Incentive for Qualifying Services and/or Overseas Projects..... 5-60
5.11.3 Export Market Development Expenditure Incentive 5-60
5.11.4 Export Market Development Activities Incentive for Self-Employed Taxpayers..... 5-62
5.11.5 Export Programme Suspensory Loan Scheme..... 5-63

5.12 Dispositions of Matrimonal Property..... 5-64

5.13 Fringe Benefits Tax..... 5-66

5.14 Appendices..... 5-67
5.14.1 Last Days for Payments by Provisional Taxpayers..... 5-67
5.14.2 Rates of Income Tax for Individuals
1985 Income Year..... 5-68
1986 Income Year..... 5-69

5. INCOME TAXATION

5.1 INTRODUCTION

The law relating to income tax in New Zealand is detailed in the Income Tax Act 1976, as amended by subsequent taxation legislation and budgets. It must be appreciated that for reasons of brevity, only selected aspects of the taxation law have been included in this section, and that caution must be exercised when applying those guidelines to a particular circumstance. If in doubt, the Inland Revenue Department, your accountant, or financial adviser should be consulted.

5.2 TAXATION IN NEW ZEALAND

5.2.1 Overview

Income tax is collected throughout the income year by either the PAYE or Provisional tax systems. These monies are regarded as payments of tax for that year. After the income year has finished the taxpayer completes the appropriate annual Return of Income and files it with the Inland Revenue Department. The return is checked and the results notified to the taxpayer - for example, a refund of tax overpaid or an assessment notice requiring more tax to be paid by a specified date. A penalty of 10% is charged if this tax is not paid within one month of the specified due date and as from 1 April 1985, a further 10% will be added and compounded for each six month period the tax is outstanding.

Any taxpayer can object to his income tax assessment where the substance or accuracy is disputed. The requirement for objections are stipulated in the Income Tax Act and any person contemplating such action would be well advised to seek professional advice. It should be noted, however, that the lodgement of an objection does not suspend the taxpayer's obligation to pay the tax assessed, or the right of the Commissioner to collect the tax.

5.2.2 PAYE (Pay As You Earn) Tax on Personal Income

The PAYE system is where source deductions of tax are made by the employer. The PAYE system applies to three types of payment:

(a) Salary and wages - where the amount of tax depends on the tax code on the employee's IR 12 (Tax Code Declaration). The tax codes for primary employment take

account of the family rebates applicable to that taxpayer so that the tax deductions are calculated on a progressive basis. For secondary employment, PAYE tax is deducted at a flat rate of 31.5% on income earned up to 30 November 1984 and 33% thereafter.

(b) Extra emoluments, such as back pay or bonuses, where tax is deducted at a flat rate of 31.5% on income earned up to 30 November 1984 and 33% thereafter.

(c) Withholding payments, which basically refer to casual payments where there is not a strict employer-employee relationship. Common types of payment and the appropriate tax rates are specified on the back on the "employees" IR 13 (Withholding Payments Deduction Certificate) and include:

Company directors' fees	35%
Shearing work	15
Droving work	15
Farm work	15
Casual agricultural employees	15
Payments to suppliers of wild deer, pigs, goats (whole carcass or animal parts)	25
Honoraria	35

It should be noted that failure to provide an IR 13 to the employer will, in general, increase the rate of withholding tax deducted by 15 cents for every $1.

The employer must pay the total tax deductions for a month to the Inland Revenue Department by the 20th of the following month. Each year he is required to

(a) complete the pay details on the IR 12s and/or IR 13s, and give the yellow (bottom) copy to the employee: and

(b) provide the Inland Revenue Department with an annual reconciliation of all PAYE and Withholding Payments and tax deductions including the top copies of the IR 12s and IR 13s.

Relevant wage records, in English, must be kept for at least 7 years.

5.2.3 Provisional Tax System

Provisional tax is levied on all income which is not taxed as PAYE income, and ensures as far as possible that all income is taxed in the year in which it is earned. The following would be regarded as provisional taxpayers:

(a) Individuals who derive business or professional income, e.g. farmers.

(b) Individuals who earn more than $1,000 from net rents, interest and/or dividends (after deducting the $200 exemption).

(c) Companies.

(d) Trusts.

Provisional tax is paid to the Inland Revenue Department by the taxpayer, and is generally based on the income tax paid on non-PAYE income earned in the previous year, where last year's income is considered to be inappropriate, an estimated amount may be used instead. These amounts may be adjusted (re-estimated) as the year progresses, but it should be noted that a penalty may be imposed if there is gross underestimation.

In most cases, provisional tax is payable in two instalments: one third by 7 September, and the balance due by 7 March. (These dates for payment are not appropriate where the taxpayer has a non-standard balance date. Reference should be made to Appendix I at the end of this section.)

The situation may arise when the first instalment of provisional tax is payable before last year's return has been completed, and therefore last year's tax is not known. This is likely to occur when the balance date is between 7 June and 1 October. If the taxpayer has not estimated his provisional tax, the first instalment of tax is based on the last completed tax return (i.e. 2 years ago). The difference between last year's tax and the provisional tax already paid is the amount due as the remaining instalment.

5.2.4 Returns of Income

In general, every taxpayer must furnish a return of income each year setting out details of the assessable income

derived by him during the preceding year, plus such supporting information, accounts etc. as may be required. Annual returns relate to an income year ending 31 March unless an alternative balance date has been approved.

All companies, partnerships, trusts, and persons who are in business for any part of the income year must furnish returns of all their income, irrespective of whether a profit or a loss is made. Business accounts must be supplied.

A return of income is not required from any taxpayer who receives not more than $11,500 combined total from salary, wages, pensions, and/or national superannuation (but see below), or not more than $4,900 total if withholding payments are involved. These taxpayers, known as pay-period taxpayers, may elect to furnish a return in order to get the benefit of any rebate, special exemption or deduction not taken into account in their tax code. Where a return is not furnished the tax already deducted under the PAYE system is not adjusted; where a return is furnished, the amount of tax payable is the true liability of the taxpayer.

It should be noted that shearers, shed hands, absentees, taxpayers who are eligible for the family rebate, and national superannuitants who receive other income in excess of $5,300 are excluded from treatment as pay-period taxpayers.

Return forms are provided by the Inland Revenue Department as follows:

IR 3 - Individual return for self-employed and persons with (net) investment income over $500.

IR 3B - Supplementary return of business income.

IR 3F - Supplementary return of farming income.

IR 4 - Company and club returns.

IR 5 - Individual return for persons who receive income from salary, wages or superannuation, with or without net investment income (i.e. interest and dividends after exemptions, and net rents) of $500 or less.

IR 6 - Estate or Trust return.

IR 7 - Partnership return.

Due Dates for Annual Returns

Annual returns for IR 5 taxpayers are due 7 June each year. Annual returns for all other taxpayers are due as follows:

(a) Balance dates between 1 October and the following 7 June (inclusive) - return is due 7 August.

(b) Balance dates between 8 June and the following 30 September (inclusive) - return is due two months after balance date.

5.2.5 Assessment

The return of income requires the taxpayer to calculate his actual tax liability and then deduct the tax already paid during the income year (either as PAYE or provisional tax). The return of income (tax return) is checked by the Inland Revenue Department, who then notify the result to the taxpayer. Possible results are:

1. A refund of tax overpaid.
   N.B. A provisional taxpayer may use this credit against amounts due to the IRD.

or 2. More tax to pay (terminal tax). Normally due by 7 March in the following year. Refer to Appendix I.

or 3. No adjustment required.

or 4. Confirmation of the tax loss which can be carried forward to be offset against future income.

5.3 CALCULATING TAXABLE INCOME

Taxable income is calculated in the following way:

	Income from all sources
less	Exempt Income
less	Allowable deductions

=	Assessable Income
less	Special Exemptions

=	TAXABLE INCOME
	==========

(a) Income is generally accepted to mean a gain in money or money's worth derived by a person as a reward for services rendered, the profits of a business or a profit-making enterprise, or from property.

(b) Exempt Income is income specified by the Income Tax Act to be wholly exempt from tax.

(c) Allowable deductions are items which can be deducted from income, e.g. business-related expenditures, depreciation, past years' losses, employment-related expenditure, etc.

(d) Special Exemptions are specified types of expenditure which may be deducted from the assessable income of individuals. (See also the taxation of "Other" Trusts in section 5.7.)

(e) Taxable Income is therefore the residue of assessable income after deducting the taxpayer's special exemptions.

5.4 TAXATION OF INDIVIDUALS

5.4.1 Overview

Individuals are required to file IR 5 or IR 3 returns (depending on their sources of income - see section 5.2.4 Returns of Income), and to pay tax at the rates specified by the Income Tax Act. These rates vary according to the level of income on the basis that the higher the income, the higher the marginal rate of tax. The rates of tax are detailed in Appendix II.

Taxable income is calculated as:

	Income
less	Deductions

=	Assessable Income
less	Special Exemptions

=	TAXABLE INCOME

Tax is calculated as:

	Tax (on Taxable Income)
less	Rebates and Adjustments

=	Tax Liability for year

less Tax paid during year
(PAYE/or Provisional Tax)

= FINAL ADJUSTMENT

Income, excluding exempt income, can be reduced by the deductions allowed to salary and wage earners and/or by appropriate special exemptions in order to obtain the taxable income. Tax is assessed using the appropriate rates and the allowable tax rebates deducted to obtain the actual tax liability. Tax paid during the income year is then credited to ascertain whether more tax is payable (i.e. terminal tax), a refund is due for tax overpaid, or the assessment is correct.

5.4.2 Exempt Income

The following items, amongst others, may be applicable to individuals and regarded as exempt income:

1. 50% of interest from Farm Vendor Finance Bonds or from money left in approved farms as Farm Vendor Mortgages. Such interest does not qualify for the general interest exemption. N.B. No new farm vendor finance bonds or mortgages will be approved after 8 November 1984.

2. Premiums on redemption of Inflation Adjusted Savings Bonds.

3. Up to $500 accumulated interest from Post Office National Development Bonds and/or New Zealand Savings Certificates. This interest does not qualify for the general interest exemption.

4. Up to $200 interest and dividends from all sources.

5. Any educational scholarship or bursary.

6. Prize money from horse or dog racing, or trotting.

7. Prizes from Post Office Bonus Bonds.

It should be noted that gifts, legacies, capital gains and monies derived by chance, i.e. gambling, are not regarded as income unless it can be fairly said to be the taxpayer's business.

5.4.3 Assessable Income

Includes, amongst others:

1. Profits or gains derived from any business.

2. Employment income, such as salary and wages, including allowances which benefit the individual e.g. food, board or lodgings supplied to employee. Allowances which reimburse the employee for work related expenditure are not assessable.

3. Earnings related Accident Compensation receipts.

4. National Superannuation receipts. N.B. As from 1 April 1985, a special tax surcharge of 25 cents in the dollar will be imposed on superannuitants' other incomes which exceed $5,200 per annum for a married couple and $6,240 for a single person. The income received by a married couple may be split into equal shares before being taxed. The amount of other income whereby the effective amount of National Superannuation received will be zero is $23,383 (single rate) or $23,445 (married rate).

5. Profits or gains derived from the sale or disposition of property if it is the business of the taxpayer to deal in such property, or if the property was acquired for the purpose or intention of selling or otherwise disposing of it. Property refers to all personal property as well as land.

6. Revenues from land e.g. net rents received; profits from extraction, removal or sale of minerals, timber etc.

7. Royalties and know how payments.

8. Interests, dividends, annuities and pensions. (See also Exempt Income.)

9. Unemployment benefits received by persons without dependent children.

10. As from 1 October 1980 travelling allowances received by an employee will be taxable except those amounts which represent a reimbursement of:

    (i) expenditure incurred by the employee in gaining or producing his assessable income: and/or

(ii) additional transport costs incurred by the employee in travelling between home and his place of work. "Additional transport costs" are defined to mean:-

(a) The excess above normal travel costs where these have been incurred because of:

- the time of day or day of the week the employee works;

- the necessity to carry any work related equipment;

- the fulfilling of any statutory obligation;

- a temporary change in the place of work;

- any other condition of work applying to that employee; or

(b) the excess costs above $1 per day incurred because of the absence of public transport serving the place of work. Except in special circumstances, the costs incurred in travelling more than 70 km per day must be excluded from this calculation.

5.4.4 Deduction for Employment Related Expenses

Recipients of salary, wages and/or national superannuation, and casual agricultural employees, are permitted to deduct employment related expenses from this income. The allowable deduction is the greater of:

(a) $52 or 2% of employment income, whichever is the smaller; or

(b) The actual amount of employment related expenditure or loss incurred in gaining assessable income. Details of the claim together with supporting evidence for payments in excess of $20 should be included in the taxpayer's return of income. Allowable expenditures include:

(i) Union fees and subscriptions.

(ii) Reference books, journals and periodicals.

(Maximum of $50 for any one volume or issue.)

(iii) Special or protective clothing.

(iv) Tools of trade and equipment.
(Maximum of $250 for any one item.)

(v) Self-education expenses where they relate to promotion; costs of attending refresher courses, conferences, or undertaking employment related research (including travel and accommodation). (Maximum of $1,000 in any income year. The maximum cost for reference books, journals, periodicals, etc. is $50 for any one volume or issue.)

(vi) Travelling expenses incurred in the course of employment, but not between home and work.

(vii) Use of a private dwelling, where a room or defined area is set aside wholly or principally for employment related purposes. Allowable expenditures are limited to:

* repairs and maintenance of the room's interior;

* heating or lighting of that room;

* insurance on the contents of that room.

(viii) Other expenditure incurred for purposes of, and as a condition of employment.

These expenses should be reduced by the amount of reimbursement received from the employer, if any, before any of the limits are applied.

5.4.5 Special Exemptions

Certain types of personal expenditures are allowed to be deducted from assessable income by way of special exemption, subject to a maximum amount. The allowable expenditures are:

(1) Insurance premiums on:

* Life insurance policies entered into prior to 9 November 1984.

* Pension insurance.
* Personal accident or sickness insurance.

Policies must be for the benefit of the taxpayer, spouse and/or children of the taxpayer.

(2) Superannuation contributions to:

* Approved superannuation schemes joined before 9 November 1984.
* Employee pension schemes (whether subsidised or not).
* Personal pension schemes.
* Subsidised employee lump sum superannuation scheme.
* Government Superannuation Fund.
* Funds which provide benefits payable on personal accident, disease, sickness or expenses arising upon death.

Maximum amounts allowable are:

(1) Where the taxpayer is a member of the Government Superannuation fund or an employer-subsidised superannuation scheme, the special exemption is the lesser of:

- the amounts paid; or
- $1,200.

(2) For all other qualifying expenditures, the special exemption is the lesser of:

- the amount paid; or
- $1,400.

5.4.6 Personal Tax Rebates

Rebates are deducted from the actual tax assessed, and give equal benefit to all taxpayers irrespective of their level of income. The total rebates claimed cannot exceed the assessed amount of tax payable.

Principal rebates available to individuals for the 1984/85 year are as follows:

1. PERSONAL REBATE FOR CHILD TAXPAYERS
$156 per year
Applies to a child taxpayer who during the income year was under 15 years old or attended a primary, secondary, or special school, and for whom a family benefit

was payable in that tax year.

This rebate allows a child to effectively earn $780 net income before becoming liable to income tax.

2. PRINCIPAL INCOME EARNER REBATE
The amount of rebate is determined by the individual's assessment income, as follows:

Income	Rebate
Up to $ 5,672	6.5% of assessable income.
$ 5,673 to $ 6,094	$368.68 plus 3 cents for every $1 above $5,672.
$ 6,095 to $12,000	$381.34
$12,001 to $14,600	$381.34 less 13.5 cents for every $1 above $12,000.
Above $14,600	$30.36 less 5.5 cents for every $1 above $14,600.

This rebate therefore reduces to nil when assessable income reaches $15,153.

Available to taxpayers other than children, spouses of principal income earners, national superannuitants, principal income earners eligible for the family rebate and spouses of such persons. It should be noted that spouse includes a de facto relationship.

3. FAMILY REBATE
For the 1984/85 income year, the Family Rebate is $1,924 reduced by (a) 15 cents for each $1 of family income in excess of $9,800 up to $14,000; and (b) 20 cents for each $1 of income in excess of $14,000. The rebate reduces to nil when the family income reaches $20,470.

Available to families who have at least one child who is eligible for the family benefit during the income year. However, only one rebate per family is allowed and should be claimed by the principal income earner.

N.B. Taxpayers who are eligible for both the Principal Income Earner Rebate and the Family Rebate may only claim one of these.

4. DEPENDENT RELATIVE REBATE
The lesser of $60 or 32% of contributions made towards the support of each dependent relative. The rebate can be claimed for a maximum of two relatives.

The rebate is not available if the relative can support his or herself (generally regarded as receiving an income of $4,500 p.a.). Also excluded are children for whom family benefit is payable.

5. HOUSEKEEPER/CHILD CARE REBATE
The lesser of $310 or 32% of payments made.

This rebate is allowable for the care of a dependent child (at or away from home) provided the services are deemed necessary or a housekeeper is required because of the taxpayer's disability.

6. RESIDENTIAL RATES REBATE
The lesser of $25 or the amount of rates paid.

This rebate is available to individuals for rates paid on an owner-occupied home which is the principal residence of the taxpayer.

7. DONATIONS AND SCHOOL FEES
The lesser of $200 or 32% of payments made.

Donations must be for a minimum of $5 and made to approved charities. School fees applies to fees paid for children aged under 18 at the start of the income year, and covers fees for private schools, activity fees paid to State schools, fees paid to schools for the handicapped or disabled, or fees paid to registered pre-school organisations.

Receipts must be furnished in support of the rebate claimed.

8. FIRST HOME MORTGAGE INTEREST REBATE
The lesser of $1,000 or 31% of mortgage interest paid.

The rebate will be allowable for the first five years of ownership by owner-occupiers who have purchased their first home prior to 9 November 1984.

9. HOME, FARM AND FISHING VESSEL OWNERSHIP SAVINGS
45 cents for every dollar saved during the year in special home/farm/fishing vessel ownership accounts.

Maximum rebates per year are:

(a) Home account : $1,350 ($3,000 savings)
(b) Farm account : $2,250 ($5,000 savings)
(c) Fishing vessel account : $2,250 ($5,000 savings)

Maximum savings in any one account are:

(a) Home account : $10,250
(b) Farm account : $60,000
(c) Fishing vessel account : $60,000

If savings are withdrawn and used for purposes other than that specified, the tax rebate must be repaid. This effectively imposes a withdrawl tax of 45% under these circumstances.

10. Visitors from overseas who work for part of the income year in New Zealand are allowed a proportion (based on time worked here) of the following rebates:

Child taxpayers
Dependent relative
Housekeeper

It should be noted that the Principal Income Earner and Family Rebate entitlements are, however, determined by reference to the equivalent annual income which would have been earned if the taxpayer worked for a full year.

Principal rebates available to individuals for the 1985/86 income year are as above, with the following exceptions:

1) Principal income earner rebate.
The amount of rebate is determined by the individual's assessable income, as follows:

Income	Rebate
Up to $ 6,118	8.5% of taxable income.
$ 6,119 to $12,000	$520
$12,001 to $15,152	$520 less 16.5 cents for every $1 above $12,000
Above $15,152	Nil

2) Dependent relative rebate.
The lesser of $310 or 33% of contributions made.

3) Housekeeper rebate.
The lesser of $310 or 33% of payments made.

4) Residential rates rebate.
Abolished as from 1 April 1985.

5) Donations and school fees.

The lesser of $200 or 33% of payments made.

5.4.7 Example

A married man with 2 children aged 4 and 6 derived the following income during the year ended 31 March 1985.

Salary	$13,600
Mortgage interest	260
Savings Bank interest	220
Dividends received	300

His wife earned $600 in the same year.

Throughout the year he paid the following amounts:

Life assurance premiums (since 1980)	$ 730
Superannuation (subsidised scheme)	540
Donations to Red Cross	30
Activity fees to school	70
Rates on own home	152
Interest on mortgage over first home (Since 1983)	2,800

Tax deductions from his salary as per his IR 12 were $1,712 and provisional tax paid on other income was $40.

His income tax assessment would be as follows:

Salary	$13,600	
less Standard Deduction	52	
		$13,548
Mortgage interest	260	
Savings Bank Interest	220	
Dividends	300	
	780	
less exemption	200	
		580
TOTAL ASSESSABLE INCOME		14,128
less Special Exemptions:		
Life assurance premiums	730	
Superannuation contributions	540	
	$ 1,270	
Special exemption allowable		1,200
TAXABLE INCOME		$12,928

INCOME TAX on $12,928			$ 3,416.96
less REBATES and ADJUSTMENTS:			
(a) Family rebate			
Family income (14,128 + 600)	= 14,728		
Rebate allowable is $1,924.00 - (630.00 + 145.60) i.e.			$ 1,148.40
(b) Residential Rates			
Lesser of:			
(i) $25, or			
(ii) $152 paid		25.00	
(c) Donations and school fees			
Lesser of:			
(i) $200, or			
(ii) 32% of ($30 + 70)		32.00	
(d) Mortgage interest on first home.			
Lesser of:			
(i) $1,000, or			
(ii) 32% of $2,800		896.00	
Total Rebates			$ 2,101.40
INCOME TAX PAYABLE			$ 1,315.56
less tax already paid:			
PAYE tax deductions		1,712.00	
Provisional tax paid		40.00	
			1,752.00
REFUND DUE			$ 436.44

5 TAXATION OF COMPANIES

A limited liability company pays tax in its own right (i.e. it is separate and distinct from its shareholders), and the basic rate of tax on income derived by New Zealand resident companies is 45 cents for every dollar. The basic rate for non-resident companies is 50 cents for every dollar of income. Taxable income generally means business profits (in the normal accounting sense), less any taxation incentives applicable to that company. Dividends received by a company are generally regarded as exempt income, and companies are not entitled to tax rebates or special exemptions.

Companies are provisional taxpayers; they generally pay provisional tax in two instalments, and may be required to pay terminal tax. (For further details refer to section 5.2.3 - The Provisional Tax System, and Appendix I - Dates for payment of provisional and terminal tax.)

The IR 4 Company Return of Income is usually due by 7 September following the company balance date, although if the company balances between 8 June and the following 30 September (inclusive), the return is due two months after balance date. Returns must be filed, including accounts, irrespective of whether a profit or loss is disclosed for the year.

Losses can be carried forward and deducted from the first available assessable incomes until extinguished provided 40% of the shareholding in the loss company remaind constant through the period of loss to eventual offset. This requirement is relaxed in the case of public companies listed on the Stock Exchange but not where one person or group of "associated" persons acquires more than 10% of the shareholding.

Special considerations apply where relatives (i.e. associated persons) of the shareholders or directors receive remuneration from the company. These may affect arrangements to split income between family members, and it would be advisable to seek professional advice under these circumstances.

5.6 TAXATION OF PARTNERSHIPS

5.6.1 Overview

A partnership is not a taxpaying entity and is not itself liable to pay tax. However, the partners must file a separate "partnership" return of income (IR 7) covering their joint income (irrespective of profit or loss) and detailing the distribution amongst the various partners. The partnership accounts or the supplementary return forms IR 3B or IR 3F should also be furnished.

Each partner is liable for tax as an individual and must add their share of the net partnership income to their income from other sources. Income from a partnership does preserve its identity in the hands of the recipient partners as interest and dividends (up to $200 exempt), and ordinary assessable income. (Refer to section 5.4 Taxation of Individuals). Partnership losses should always be allocated to the constituent partners and cannot be carried forward by the partnership itself.

As from 16 December 1982, payments of salary or wages made by a partnership to a working partner under a written contract of service will be tax-deductible to the partnership. Normal PAYE procedures will apply to these payments.

5.6.2 Family Partnerships

The use of family partnerships, often including trusts for infants, has long been a common device for splitting income among family members, thereby avoiding the high tax brackets. To counteract loss of revenue through this type of income splitting, the Income Tax Act lays down five requirements before a family partnership is deemed to be acceptable for taxation purposes:

a) There must be a contract of partnership in writing or by deed signed by all parties;

(b) No partner can be under 20 years of age when the agreement is signed;

(c) The agreement must bind the partners for at least three years;

(d) Each partner must have real and effective control of their remuneration; and

(e) No part of the income payable to a "relative" would be regarded as a gift and thereby subject to Gift Duty. In determining whether a gift exists, consideration would be given to the following factors, amongst others:

(i) The nature and amount of the capital contributions or the value of the services performed.

(ii) The proportions of such contributions to the remuneration or share of profit between partners.

(iii) Whether the arrangement would be acceptable under normal commercial standards; etc.

Where the above five requirements are not satisfied and the Commissioner of Inland Revenue believes that the remuneration or share of profits paid to the relative is excessive, he has the power to reallocate the partnership income for taxation purposes between the partners in such shares as he considers reasonable, having regard to the capital and services contributed by the partners and other

relevant matters.

It should be noted that it is no longer necessary for a husband and wife to have a written partnership agreement if they are in business together, but it is still necessary to have an agreement if the parties are not sharing everything on an equal basis.

5.7 TAXATION OF TRUSTS

A trust is an equitable obligation binding on a person (who is called a trustee) to deal with property over which he has control (which is called the trust property), for the benefit of persons (who are called the beneficiaries) of whom he may himself be one, and any one of whom may enforce the obligation.

It is not necessary that a trust be in writing, as a valid trust can be created by an oral agreement or by the conduct of the parties concerned. It must be emphasised, however, that it is desirable to evidence a trust in writing by a Deed of Trust, or inclusion in a will, or by some other trust instrument.

5.7.1 Classification of Trusts

The Income Tax Act distinguishes between two types of trust:

(a) Specified Trusts

Generally speaking, these are trusts created during the lifetime of the settlor (i.e. an inter vivos trust) on or after 19 July 1968; and

(b) Other Trusts.

5.7.2 Liability for Income Tax

A trust is a separate legal entity, and as such all the income of a trust is liable for income tax in the hands of the trustee, either as "Trustees' Income" or as "Beneficiaries' Income" where the trustee acts as the agent of the beneficiary although the primary liability remains with the beneficiary.

In the case of "Beneficiaries' Income" (see section 5.7.3 below), the taxation liability is determined by providing for the special exemptions and rebates which the bene-

ficiary himself is eligible for. Obviously, if the beneficiary derives additional income a personal return of income should be filed incorporating his trust income and the tax already paid by the trustee on his behalf.

"Trustees' Income" is any income other than Beneficiaries' Income and the trustee is assessed for tax on the income in one sum as follows:

(i) Specified Trusts:
Taxed at 35 cents per dollar of taxable income or at the basic rates applicable to individuals, whichever is the greater. No special exemptions are granted.

(ii) Other Trusts:
Taxed at the basic rates applicable to individuals after deducting a special exemption of $100.

Tax on the income of a trust will normally be paid on a provisional basis, the return of income for the trust (IR 6) being filed by the trustee(s). Trust income is taxed once only so that a distribution to a beneficiary is not taxed if the trustee has paid tax on the income previously.

5.7.3 Classification of Income

Income derived by a trustee during an income year is classified as Beneficiaries Income for the same year under any of the following conditions:

(a) Where an adult beneficiary of any trust is entitled to income under a specific provision of the trust deed or by the discretionary act of the trustee; or

(b) Where an under-age beneficiary of an 'other' trust is entitled to income under a specific provision of the trust: or

(c) Where the trustee pays or applies income to or on behalf of the beneficiary of a trust during or within six months after the income year by a genuine transaction which places the income beyond the possession and control of the trustee in his capacity as trustee of that trust, provided that if the beneficiary of a specified trust is under-age, the income must remain out of the trust or any business in which the trust is interested whilst the beneficiary is under-age.

Any other income not coming within the above is then

Trustees' Income.

It should be noted that the test for Beneficiaries' Income stresses the physical parting of possession and/or control over the funds.

5.8 FARMERS

5.8.1 Liability for Income Tax

All farmers are liable for income tax as provisional taxpayers. The appropriate return form depends on the entity involved:

Individual	-	IR 3 plus either completed accounts or the supplementary return from IR 3F.
Companies	-	IR 4 plus accounts.
Trusts	-	IR 6 plus accounts.
Partnership	-	IR 7 plus accounts. Each partner must also file an IR 3 return.

Generally, provisional tax is paid in two instalments (for payment dates see Appendix I), although a farmer may pay in three equal instalments, the last days for payment being 7 September, 7 March and 7 June, in that order, provided all the following conditions are met:

(i) Balance date is between 1 April and 30 September (inclusive);

(ii) More than half of the assessable income regularly comes from farming or an agricultural business; and

(iii) Half or more of the gross cash income is regularly received after 7 February.

Certain features of the taxation system apply specifically to agriculture because of its place in the economy. These provisions are intended to encourage capital investment, development, increased stock numbers, etc. as well as providing facilities to smooth the large fluctuations in income which are inherent in the agricultural industry.

The department accepts that any of the following are carrying on their activities for farming or agricultural purposes:

- livestock farmers (e.g. sheep, cattle, deer, pigs, goats, horses).
- dairy farmers including sharemilkers.
- grain and seed growers.

- apiarists.
- poultry farmers.
- orchardists.
- horticulturists (e.g. market gardeners, tomato growers, berry fruit growers, flower growers).
- viticulturists.

The Department does not regard dealing in farming stock as an agricultural or farming business.

5.8.2 Farm Income

The assessable income of a farmer will include the following:

(i) Business profits from trading operations - i.e. the generally accepted accounting definition of profit, being SALES less PURCHASES, plus or minus CHANGES IN VALUE OF STOCK ON HAND at the end of the year (increases are added, decreases are subtracted).

(ii) The value of meat and produce consumed domestically.

(iii) Income from contracting.

(iv) Rents received from leasing farm property, including grazing fees.

(v) Receipts from the hire of livestock and plant, including stud fees.

(vi) Insurance proceeds in respect of the loss of crops or stock.

(vii) Prize money from A & P shows, less entrance fees and other related expenses.

(viii) Compensation for stock condemned.

(ix) Refunds from Income Equalisation scheme.

(x) Decreases in the number of livestock held at Nil Value (see section 5.8.4 Valuation of Livestock).

(xi) Income from the sale of timber.
As from 9 November 1984 income from the sale of timber, including standing timber and trees planted for agricultural purposes, is assessable but may be spread over the year of sale and up to 3 preceding

years. (The previous provisions allowed farmers to spread income over the year of sale and up to 4 succeeding years). (See also Section 5.8.10)

(xii) Income from dealings on the "futures" market, e.g. wool futures.

5.8.3 Farm Expenses

Private expenses in the nature of household stores, domestic wages, repairs to household equipment etc. are to be treated as private drawings, and must not be charged against farm income. Similarly, the private portion of domestic expenses, electricity and car depreciation should also be regarded as drawings.

In addition to the appropriate business expenses, farm expenses will include the following:

(i) Legal expenses incurred in arranging finance for the purchase of, or in arranging for the lease or renewal of a lease of, income producing assets.

(ii) Legal expenses incurred in borrowing or renewing loan moneys employed as capital in the production of assessable income.

(iii) Telephone (excluding personal toll calls).

(iv) Proportion of car expenses (including depreciation) applicable to business use, on the basis of:

(a) Half, where farmer has both car and truck. (It should be noted that the costs associated with the truck are deductible in full.)

(b) Three-quarters, where farmer has a car only.

(v) Stores and rations provided to employees.

(a) Supplied to an outside employee (including a partner with less than 20% interest): the farmer can claim the actual cost if accurate records are kept, otherwise the deduction is limited to $10 per employee per week. This applies where these costs have not already been claimed as a tax deductible farm expense.

(b) Supplied to related married employees or part proprietor employees: the actual cost of stores and rations supplied is tax deductible.

(vi) Accommodation supplied to employees.

(a) Supplied to all employees except a partner-manager: depreciation at appropriate rate(s) and all expenses (e.g. mortgage interest, repairs, maintenance, etc.) are deductible in full.

(b) Supplied to a partner/manager: the partnership can claim 25% of the costs of the dwelling (refer paragraph (viii), below).

(vii) Depreciation - see section 5.8.5 below.

(viii) One quarter of total expenditure on the farm dwelling if situated on the farm - e.g. repairs and maintenance, depreciation, domestic power etc.

(ix) Repairs and Maintenance costs on sheep yards, sheep dips and fencing. Depreciation may NOT be claimed on these assets, but the outlay costs on these items are usually claimed as development expenditure.

(x) Cost of papers and magazines containing farming information.

(xi) Wages paid to wife.

(a) Payments for cooking duties in respect of permanent employees (including adult members of the farmer's family employed full-time) will be allowed on the basis of:

1 permanent employee - $18 per week.
2 permanent employees - $27 per week
3 permanent employees - $33 per week
and thereafter an additional $4.50 per employee per week.

It is necessary that the requirements for the payment of wages from husband to wife are met i.e. declaration that the wages are genuine services, IR 12 completed, regular cash payments, tax and Accident Compensation levy deducted and accounted for.

This payment is in addition to any special arrangements made in respect of seasonal or part-time employees, e.g. shearers.

(b) Payments for work performed on, or on behalf of, the farm may be deductible if the Commissioner of Inland Revenue has given his prior consent to such payments. Before consent is granted, the Commissioner must be satisfied that the payment is for genuine services rendered in producing assessable income for the year.

An application for approval must contain certain details (the Inland Revenue Department provides appropriate declaration forms), but subsequent to approval only written confirmation that wages are still being paid on the agreed basis is required. The declaration should be filed before (or at least as soon as possible after) the wife's employment commences.

(xii) Cost of transporting employees' children to school. The cost of transporting the farmer's own children is regarded as private and therefore not deductible.

(xiii) Accident Compensation Levy

All persons who suffer injury by accident in New Zealand (and in certain cases, outside New Zealand) and who are employees or self-employed at the time of the accident, have cover under the Earners' Scheme of the Accident Compensation Act.
The scheme is funded by a levy paid by employers and self-employed persons. These levies are a tax-deductible expense.

LEVIES ON EMPLOYERS

Every employer, whether an individual, a partnership, trust, company or club, must pay an annual levy by 30 June each year, based on the amount of leviable earnings paid to employees during the year ended 31 March. Levy rates vary according to the industrial activity of the employer.

For example:

Industrial Activity	Class No.	Levy Per $100
Agricultural Contracting (Fencing, sheep dipping, spraying, harvesting, hay-making, baling, hedge cutting)	104	1.70
Agricultural Contracting (Scrub cutting, grubbing, burning, stumping and clearing)	124	3.15
Shearing	105	1.75
Cereal growing	101	1.20
Drainage or Sewer System	104	1.70
Construction on agricultural land		
Non-mechanised	104	1.70
Mechanised	507	1.90
Eel farming	130	1.75
Fencing-erecting and repairing	104	1.70
General farming	100	1.70
Fish farming	130	1.75
Hop growing	101	1.20
Market gardening	101	1.20
Orchards - including berry fruit	101	1.20
Poultry farming	101	1.20
Spraying - agricultural excluding aircraft	104	1.70
Stock buying	831	0.60
Tobacco growing	101	1.20
Aerial work - fixed wing aircraft	702	1.65
- helicopters	703	4.20

LEVIES ON THE SELF-EMPLOYED

Generally, owner-operators, partnerships and share-milkers are all regarded as self-employed for accident compensation purposes. The levy payable is 0.8% of the year's taxable farm (business) income, with a maximum levy of $312.00 and a minimum levy of $41.60 (based on the assumption that farm income is at least $5,200). If his leviable earnings are less than $14,248 he may elect to join the optional levy scheme in which case his minimum levy will be $113.98 (based on 0.8% of assumed earnings of $14,248). The minimum

levy for a part-time self-employed person is $8.00. Further considerations apply where dual earnings are received (i.e. a person is both self-employed and also receives wages). This levy must be paid by 7 March each year.

The above is a general introduction only, and queries regarding levies should be directed to the Inland Revenue Department. Queries regarding compensation claims should be directed to the State Insurance offices except in Dunedin where queries should be directed to the Accident Compensation Commission itself.

(xiv) Energy Conservation Expenditure

The total cost of acquiring and installing new plant, machinery or equipment for the purpose of energy conservation may be written off in the year the expenditure is incurred. (This excludes expenditure of a private nature such as to the family residence.) In addition, the cost of improving or altering plant, as insulating such assets or buildings for the purposes of energy conservation will also qualify for the 100% first year write-off. This deduction has been replaced by a loans scheme as from 1 April 1982. Binding contracts made before that date will continue to qualify for the deduction.

(xv) Costs of planting and growing timber which have been incurred since 9 November 1984 are fully tax-deductible. These costs include the costs of planting the trees, and depreciation on plant and machinery used in the forestry operation. Development expenditures may also be claimed - see section 5.8.7.

(xvi) Various incentives, income levelling schemes etc (see below).

5.8.4 Valuation of Trading Stock

1. General Principles

Trading stock includes anything produced or manufactured; anything acquired or purchased for purposes of manufacture, sale or exchange; live-

stock; but excludes land.

In the case of any business owned or carried on by the taxpayer, the value of the trading stock at the beginning and at the end of every income year must be detailed in the taxpayer's accounts (or tax return). The value on hand at the end of the year is included in assessable income; the value on hand at the beginning of the year is deducted from assessable income.

In general, the taxpayer has the option of valuing his trading stock at:

(i) cost price; or
(ii) market selling value; or
(iii) replacement price.

However, the Commissioner of Inland Revenue may approve a lower valuation for trading stock other than livestock where obsolescence or other special considerations materially affect its value.

2. Consumable Aids

Items consumed in the production of trading stock but which do not form part of the final product are regarded as consumable aids and not as trading stock. Therefore, expenditure on items such as fuel, farm chemicals, fertiliser held for spreading and hay held for winter use would be fully deductible in the year the expenditure is incurred, even although some unconsumed stocks may be held at the end of the year.

3. Growing Crops, Fruit and Vegetables

Crops, fruit and vegetables, standing timber and other products which grow from the land and are attached to the land are regarded as part of the land itself, i.e. a capital asset. Growing crops are not regarded as trading stock unless and until they are harvested or severed from the land.

4. Valuation of Livestock

Livestock is regarded as ordinary trading stock and the taxpayer has the following options:

1. Cost price, market selling value, or replacement price.

2. Standard Value.

A "standard value" is the value selected by the farmer and approved by the Inland Revenue Department, for each particular class of livestock. This value is maintained over time, irrespective of actual cost or subsequent market value. Generally the market value will greatly exceed standard value, but the farmer does not have to revalue or adopt market value where he continues his farming operation.

Standard values may be altered with the approval of the Commissioner. In practice, prior approval is not necessary when standard values are increased to amounts less than current market values.

However, it is desirable to attach a note to the accounts drawing attention to and reasons for the change.

It should be noted that the Inland Revenue Department has now established minimum standard values as follows:

- Sheep, mixed	$ 6	
- Cattle, dairy and beef		
- rising one year	$ 30	
- others	$ 70	
- Deer		
	Red/Wapiti	Fallow/Sika
All female animals	$200	$100
All male animals	$150	$ 75
- Goats		
Angora does	$ 30	
Milking does	$ 30	
Others	$ 6	
- Pigs		
Weaners	$ 20	
Sows	$ 40	
Boars	$ 60	

These values apply to persons who commenced farming on or after 1 July 1980 for sheep and cattle, 25 October 1979 for deer and 1 April 1981 for goats. It is proposed to review these standard values on a regular basis.

It should be noted that a farmer is not bound to adopt standard values: there is no reason why he cannot use either cost, market value, or replacement value for his livestock until such time as he elects to adopt standard values. There are, however, significant tax concessions in using standard values.

Standard values are not available to dealers in livestock or for high priced stud stock (which should be valued at purchase price, with annual revaluations downwards over its useful life).

In addition:

(a) New farmers, and existing farmers who develop or purchase additional land, will be required to write down the value of new or additional (i.e. excluding replacement) livestock purchased in that year or the subsequent 3 years from cost price to standard value in instalments over a period of 3 years. The legislation envisages equal instalments, but does allow some variation.

    Prior to the 1983 income year, the farmer could adopt standard value(s), but maintain cost price (or market or replacement value) for up to three years and then write down to standard value over no more than three further years.

(b) Reliefs are available by allowing the spreading of resultant large incomes either forward or backward over three years in the event of a sale occasioned by death, retirement, adverse events, expiry of lease etc.

(c) For income tax purposes, gifts of livestock to children who are at least 18 years old and who use those stock in a farming operation, may be made at a reasonable standard value, i.e. not unduly low. Note, however, that if gift duty is payable it is assessed on market value less consideration paid (if any). It should be noted that transfers of livestock from one spouse to another under a matrimonial agreement would generally not be a "gift". Refer to Section 5.12.

3. Nil Value Scheme

The nil value scheme is an incentive scheme aimed at deferring the tax liability on increases in certain livestock numbers over a basic number until the stock is sold or otherwise disposed of, or revalued. The scheme is optional and applies to any taxpayer carrying on a farming business on land in New Zealand. Investors are not eligible for the scheme.

Main features of the scheme are as follows:

(a) Applies only to cattle, sheep, pigs, deer and goats.

(b) The "basic number" of the herd or flock is the greatest number of a particular class of stock held in the four income years prior to the year when the farmer elects to join the scheme. (Prior to the 1983 income year, the period for determining basic livestock numbers was two years.)

(c) At the end of each income year, all or part of the excess over the basic number in respect of each class may be valued at nil.

(d) Any decrease in livestock numbers below the basic number of one class can be offset against any increase over the basic number in the other classes on the basis of "specified equivalents".

Where 1 head of cattle is equivalent to 6 sheep or 6 goats or 4 pigs or 4 deer.

All categories within each class of livestock are regarded as equal, e.g. ewes, lambs, wethers etc. all have the same equivalent rating.

(e) The Commissioner has power to make an equitable adjustment where there is a change in the basic nature of the farming operation, or an adverse event effects the farm, or other special circumstance.

Example:

A sheep and cattle farmer with a balance date of 30 June, elects to join the scheme at 1 July 1982. His year of first election is therefore the year ended 30 June 1983.

His basic number is calculated as follows:

	Stock on Hand			
	30/6/79	30/6/80	30/6/81	30/6/82
Sheep	3,100	4,000	3,905	3,975
Cattle	160	140	151	148

His basic number is the greatest of the numbers for each class of livestock.

i.e. Sheep 4,000 at $ 5 Std. Value
Cattle 160 at $50 Std. Value

Year Ended 30/6/83

Closing Stock: Sheep 4,300, Cattle 160
Valued as:

Sheep -	basic number at s.v.	4,000 at $5
	increase over basic no.	300 at Nil
Cattle -	basic number at s.v.	160 at $50

Year Ended 30/6/84

Closing Stock: Sheep 4,500, Cattle 120

The decrease in cattle below the basic number in this year will necessitate a reduction to the 'increase' in sheep numbers closing stock, the reduction being made at the specified equivalent of 1 head of cattle = 6 sheep.

Sheep numbers	4,500	
less decrease in cattle at specified equivalent 40 cattle x 6	240	Valued at s.v.
	4,260	
less basic number	4,000	Valued at s.v.
Net Increase over basic number	260	Valued at Nil

Valued as:

Sheep -	number at s.v.	4,240 at $ 5
	increase over basic no.	260 at Nil
Cattle -	number at s.v.	120 at $50

Year Ended 30/6/85

Closing Stock: Sheep 5,000, Cattle 240

Valued as:

Sheep -	basic number at s.v.	4,000 at $ 5
	increase over basic no.	1,000 at Nil
Cattle -	basic number at s.v.	160 at $50
	increase over basic no.	80 at Nil

If the farmer wished to value part of the increase over basic number at nil value, the number valued at standard value is the basic number plus the additional stock not valued at nil. The basic number, however, is not altered.

.8.5 Depreciation

Depreciation is an allowance for loss in value of a fixed asset due to fair wear and tear, obsolescence, etc. Not all assets are depreciable - for example, assets which are not used to produce assessable income, or assets which are not subject to wear and tear (such as land), and under no circumstances can depreciation extend beyond cost. Where an asset has a part business and part private use, depreciation is calculated at the schedule rate and then apportioned between business and private (e.g. car depreciation).

There are two basic types of depreciation:

1. FIRST YEAR DEPRECIATION ALLOWANCES

   A single first year allowance will be deductible in the year in which certain assets are first used in the production of assessable income, and include:

(a)	New or used plant and machinery	25%
(b)	New farm buildings, extensions and capital alterations (not dwellings) (40% prior to 22 June 1979)	20%
(c)	Employee accommodation (22% prior to 22 June 1979)	20%

2. ORDINARY DEPRECIATION ALLOWANCES

   In the second and subsequent years, ordinary depreciation will be allowed as a deduction from assessable income provided adequate records are maintained. Depreciation is usually calculated as a fixed percentage of either the cost price of the asset (CP method) or the diminishing book value (DV method), and the Inland Revenue Department specifies both the rate and method of depreciation. These schedule rates are the maximum allowable for income tax purposes, although a lesser rate may be claimed if desired.

   Selected examples of Schedule Rates of Ordinary Depreciation.

ITEM	%	
Barns - loafing and wintering	10	CP
Bridges - wooden	2.5	CP
- other	2	CP

Buildings - reinforced concrete	1	CP
- brick, stone, concrete	2	CP
- wooden	2.5	CP
- "temporary buildings"	10	DV
Chainsaws	50	DV
Crates - sheep and cattle	15	DV
Dams and Reservoirs - reinforced concrete	1	CP
- other	Maintenance	
Dips - shower type	10	DV
Effluent disposal units on farms	10	DV
	or Development	
Electric Fences	10	DV
Ensilage Pits - concrete walls with sliding roof	10	DV
Feeding out units for cattle	4	CP
Freezers - for dog meat	10	DV
Glasshouses - wooden framed	5	CP
- metal framed	3	CP
- P.V.C. Tunnel House	7.5	CP
	and Maintenance	
Irrigation plant	10	DV
	or Development	
Milking Sheds - built before 1/4/66	4	CP
- built after 1/4/66	10	CP
- conversion to herringtone	10	CP
- herringbone or rotary	10	CP
Motor Vehicles, trucks, bikes and scooters	20	DV
Pig Houses - all types	10	CP
Plant and machinery - motorised	20	DV
- non-motorised	10	DV
Poultry		
Battery type cages	10	DV
Colony houses with wooden frames, iron roofs and netting sides and bases	10	DV
Fowl Houses		
Steel framed	2.5	CP
Wooden framed	5	CP
Silos - erected on farm	10	DV
Slaughterhouses on farms -		
concrete	5	CP
timber and concrete	6	CP
timber	10	CP
Tractor Safety Frames	100	CP
Trailers	At the rate of the towing vehicle.	

(i) Depreciation of Cars

For tax purposes, the depreciable cost of motorcars and station-wagons (excluding utility vehicles, e.g. land-rover, and vehicles of a "specialised nature", e.g. hearse) has been limited to:

$11,000 if purchased after 31 March 1981.
$8,000 if purchased between 31 March 1978 and 31 March 1981.
$7,000 if purchased between 31 March 1977 and 31 March 1977.
$6,000 if purchased between 23 October 1974 and 31 March 1977.
Actual cost if purchased before 23 October 1974.

(ii) Beekeepers

The cost of frames for supers and hives of a new apiarist or for additional supers and hives of an established apiarist is capital expenditure and not deductible. Ordinary depreciation is not allowable, but first year depreciation may be claimed. However, the full cost of repairs and the cost of replacement frames is a tax-deductible expense.

(iii) Assets Acquired During the Income Year

If first year depreciation is not claimed, then ordinary depreciation may be claimed as follows:

(a) BUILDINGS - Depreciation is allowable on the cost of the building only (excluding land) for each whole or part month used.

(b) OTHER ASSETS - A full year's depreciation is allowable if the asset was used for more than 6 months of the year or more than half a season if used for seasonal work; otherwise half of the year's depreciation is allowable.

(iv) Assets Sold During the Income Year

(a) AT A LOSS (i.e. sales price is less than book value).

(i) Buildings: Any loss on sale is not tax deductible. However, if no depreciation has been previously claimed, then accumulated deprec-

iation at schedule rates can be claimed in the year of sale.

(ii) Other Assets: Any loss on sale is deductible in the year of sale. If no depreciation has been previously claimed, the total loss (i.e. cost less sales price) can be claimed when the asset is sold.

(b) AT A PROFIT (i.e. sales price exceeds book value).

(i) Buildings: Ordinary depreciation recovered is not assessable, but if owned for less than 10 years, any write-back for tax purposes is merely to the extent that the disposal proceeds over and above book value represents a recovery of special, additional, or first year depreciation.

(ii) Other Assets: Any depreciation recovered is assessable in the year of sale, although it can be used to offset (i.e. reduce) the depreciable cost of a replacement asset. If the depreciation recovered exceeds $1,000, the taxpayer may elect to spread the amount recovered over the year of sale and up to three years back.

It should also be remembered that any excess of disposal proceeds above cost price represents a capital gain which is not taxable.

5.8.6 Farming Investment Allowance

20% of the cost of new plant and machinery used for farming or agricultural purposes may be deducted from assessable income in the year the asset is first used. N.B. Terminated on 31 March 1985.

The allowance is available to lessees provided the asset qualifies for the allowance, and is leased under a "specified lease". A specified lease is a lease which has a guaranteed residual value; or the lease term is greater than 3 years and the lessee (i) acquires the leased asset either automatically or at less than market value, or (ii) pays total instalments which exceed cost minus GRV, or (iii) pays all the costs of ownership, e.g. repairs.

The allowance is not available for cars, office equipment or any asset which is secondhand, costs less than $500, has been claimed as development expenditure (see 5.8.7),

or where another investment allowance has been claimed for that asset.

The allowance does not affect first year or ordinary depreciation, and is in addition to depreciation claims. This means that the 20% investment allowance enables 120% of cost to be written off over the working life of the asset.

Where the asset, or an interest or share in the asset, is sold, disposed of, or ceases to be used (which includes the termination of a lease agreement) within 12 months of the date of first use, then that asset, or the portion disposed of, no longer qualifies for the investment allowance. If the allowance has already been claimed, then the tax assessment(s) involved would be amended by the Department.

The provision concerning the disposal of an interest or share in an asset is particularly important in the case of the formation, dissolution, or variation of the membership of a partnership.

.8.7 Development Expenditure

i) Development Expenditure

Certain expenditures incurred during an income year which normally would be regarded as capital expenditures and therefore not deductible, may be treated as a tax-deductible expense.

Such expenditure may be deferred in whole or in part and claimed at the written election of the taxpayer in the year of expenditure and over not more than nine succeeding years. The types of expenditure which qualify are:

(a) Any expenditure incurred in any income year in:

(i) The eradication or extermination of animal or vegetable pests on the land;

(ii) The felling, clearing, destruction, and removal of timber, stumps, scrub, or undergrowth on the land;

(iii) The destruction of weeds or plants detrimental to the land;

(iv) The preparation of the land for farming or agriculture including the cultivation and grassing thereof, but excluding items specified in (b) below.

(b) Any expenditure incurred on or before 31 March 1986, in:

(i) The draining of swamp or low-lying lands;

(ii) The construction of access roads or tracks to or on the land;

(iii) The construction of dams, stopbanks, irrigation or stream diversion channels, or other improvements for the purpose of conveying water for use on the land or for preventing or combating soil erosion;

(iv) The repair of flood or erosion damage;

(v) The sinking of bores or wells for the purpose of supplying water for use on the land;

(vi) The construction of aeroplane landing strips to facilitate aerial topdressing of the land;

(vii) The construction on the land of fences, including the purchase of wire netting for the purpose of making new or existing fences rabbit proof;

(viii) The erection on the land of electric power lines or telephone lines;

(ix) The construction on the land of feeding platforms, feeding yards, plunge sheep dips, or self-feeding ensilage pits;

(x) The construction on the land of supporting frames for growing crops;

(xi) The construction of earthworks, ponds, settling tanks, or other similar improvements primarily for the purpose of the treatment of waste products in order to prevent or combat pollution of the environment.

Such expenditure incurred after the above terminating date may be regarded as development expenditure

provided the necessary steps have been taken before that date to enter into a binding contract involving substantial expenditure as part of a development plan which has been approved by the Commissioner of Inland Revenue.

Where the taxpayer ceases to carry on business before the total amount is deducted, the taxpayer has the option of:

(a) deducting the balance remaining in the year he ceased business, or

(b) reapportioning the amount over the year incurred, and the other years in which he carried on the farming business.

As from 9 November, expenditures incurred in developing the land for timber production will be tax deductible in a manner similar to that provided for farm development expenditure. This measure was introduced in the 1984 Budget to replace the Forestry Encouragement Grants scheme which was abolished with effect from the above date.

(ii) Fertiliser and Lime

Expenditure on the purchase and application of fertiliser and/or lime may be deferred in whole or in part, and claimed at the written election of the taxpayer in the year of expenditure and over not more than four succeeding years.

(iii) Tree Planting

Expenditure on planting or maintaining trees which have been planted to provide shelter or to prevent erosion or otherwise for agricultural or pastoral purposes, or in erecting or maintaining fences to protect any such trees, is tax-deductible in the year the expenditure is incurred. This deduction is not to be allowed in relation to expenditure for which the farmer receives a Forestry Encouragement Grant.

5.8.8 Recovery of Development Expenditure and Interest

When farm land or a marine lease/licence is sold at a

profit within 10 income years of acquisition, any development expenditure and/or interest on money borrowed for purchase or development purposes which was previously allowed as a tax deduction can be recovered. The amount regarded as assessable income is the lesser of the profit made or the tax deductions allowed for development and interest. This amount is assessable in the year of sale or it may be spread over the year of sale and up to 4 years back.

This provision does not apply to a sale where, within 12 months, the taxpayer purchases a replacement farm which is owned until 10 years have elapsed since the original farm was acquired (i.e. the sale of a "stepping stone" farm); land sold under a compulsory acquisition order; disposal upon death of the owner; certain disposals by a spouse who inherits the farm; disposals under a Court order; and certain disposals where the profit on sale would already be regarded as assessable income of that taxpayer.

5.8.9 Limitation of Tax Losses from Farming or Landowning

As from the 1984 or subsequent income years, losses up to $10,000 p.a. from specified activites may be deducted from other income. Losses above this limit must be carried forward and deducted from other income in following year(s) subject to the $10,000 p.a. maximum.

"Specified activites" are animal husbandry (excluding bloodstock); trees or plants grown as a nursery; trees or plants grown for their crop (excluding annual crops where seed to harvest is less than 12 months with the exception of flowers. However, a taxpayer may elect to include his annual crops as a specified activity if it is to his advantage); viticulture; rock oyster farming; mussel farming; scallop farming; freshwater fish farming; sea-cage salmon farming; other livestock activities (i.e not husbandry); and property owning.

The $10,000 limit does not apply to bonafide farmers who:

- carry on an established (as at 11 October 1982) activity, a related activity, or a complementary activity,

- have gained their livelihood from one property for at least 5 years and who diversify into another activity.

Hardship provisions allow the Commissioner to increase the

$10,000 limit where the taxpayer has been compelled to take outside employment in order to continue farming or to support his family. The farming activity must constitute the livelihood of the taxpayer or is being established as the taxpayer's livelihood.

Transitional provisions are available to farmers who were farming on 11 October 1982. These provisions enable any extra tax payable as a result of the $10,000 loss limit arising for the 1984-1986 income years, to be paid in three equal instalments in the following year(s). Interest, at the rate of 1% per month is charged on the tax which is deferred. This interest is itself tax-deductible.

5.8.10 Timber Sales and Farm Forestry

The treatment for income tax purposes of income derived from the sale of timber and for the expenditures associated with that timber was altered in the 1984 budget, with effect from 9 November 1984.

Before 9 November 1984

The net income from the sale of sawn or standing timber is assessable, unless that timber was planted to provide shelter, prevent erosion or for other agricultural purposes on the farm, or that timber was planted or maintained under a forestry encouragement agreement.

The following points should be noted:

1. A sale of land with standing timber on it is deemed to be a sale of timber.

2. The amount assessable is the sale proceeds less the cost of the timber.

3. The cost of timber is usually established by aggregating eligible expenses until the timber is sold. Where the timber sales cover more than one year, the cost of timber may be apportioned over the years concerned.

4. There are qualifications to this general rule:

   (a) forestry companies were permitted to deduct their forest establishment and maintenance costs in the

year incurred;

(b) some forestry expenses are deductible as business expenses in the year incurred;

(c) some expenses may qualify for a forestry encouragement grant, with consequent limits on the deductions which may be claimed on the items to which the grant relates.

5. The cost of timber is often not known with certainty where a farm woodlot is concerned. In this case:

(a) the assessable profit is the value of the timber when sold less the estimated value of the timber when the land was purchased; or

(b) where significant quantities of native timber are involved, the cost may be calculated as the difference in value between the land with the standing timber on it and the residual value after the timber is cleared.

6. The farmer may spread assessable income from timber sales over a five year period beginning with the year in which the income was derived if the timber sold came from trees planted pursuant to a forestry encouragement agreement or for some purpose associated with the farm, e.g. prevention of erosion or provision of shelter.

Forestry Encouragement Grants (see also Section 1.15.1)
N.B. The grants terminated 9 November 1984.

1. The grants are to reimburse qualifying costs incurred in the esatblishment, tending and maintenance of commercial forests.

2. There are two categories of forestry Encouragement Grant:

(a) Production grants:
- for commercial woodlots
- grant is 45% of qualifying costs

(b) Protection/production grants
- for productive woodlots which also have a soil protection role
- grant is 66.6% of qualifying costs during the preparation and establishment phases.

Subsequent work receives a 45% grant.

3. Tax implications are as follows:

   (a) The amount received in respect of labour is regarded as assessable income.

   (b) The amount received in respect of qualifying expenditures and/or qualifying depreciation is not regarded as assessable income.

   (c) Expenditures in excess of a stated amount can be added to the 'cost of timber' calculation. The stated amounts are:

   * Production grant - 2 2/9 times the amount of the expenditure portion or depreciation portion (as appropriate).
   * Protection and production grant - 1 1/2 times the amount of the expenditure portion or depreciation position (as appropriate).

After 8 November 1984

Income from the sale of timber, including standing timber and trees planted for agricultural purposes but excluding ornamental or incidental trees, is assessable but may be spread over the year of sale and up to 3 preceding years.

Expenditures relating to the planting and growing of timber, including depreciation on plant and machinery used in the forestry operation, which have been incurred since 9 November 1984 are fully tax-deductible.

Expenditures incurred since 9 November 1984 in developing the land for timber production, e.g. land clearing, drainage, access tracks, irrigation, fencing, etc.) are tax deductible in a manner similar to that provided for farm development expenditure, i.e. can be apportioned over the year in which the costs were incurred and up to the following 9 years. It should be noted that this expenditure is distinct from that relating to the planting and maintenance of timber referred to in the previous paragraph.

5.8.11 Income Levelling Schemes

Several schemes are available to taxpayers who derive income from agriculture which may serve to dampen the

fluctuations inherent in farm incomes and subsequent taxation payments.

1. Farm Income Equalisation Scheme

This schemes allows a farmer to smooth his income from year to year by permitting him to reduce his assessable income by the amounts which he deposits with the Inland Revenue Department. These deposits are retained in the Farm Income Equalisation Reserve Account in the farmer's name at the Reserve Bank. When amounts are withdrawn at a later date, they become assessable income.

Deposits.

(i) Assessable income is reduced by the amount deposited during a year. Deposits may, however, be used to reduce the income of the immediately preceding year upon the taxpayer's written election, provided the deposit is made with the shorter of:

* 6 months after balance date; or
* 1 month after the due date for filing the return of income.

(ii) The maximum amount of deposits in any one year is the assessable farm income for that year, and each deposit must be a minimum of $200 (except the last deposit to make up the maximum).

(iii) The minimum period of deposit is one year (able to be relaxed under certain circumstances) and the maximum period for any one deposit is five years.

(iv) Generally no deposit can be made in a year when the farmer voluntarily withdraws funds from his reserve account.

(v) 3% interest is paid on deposits held from 1/4/77 (except those withdrawn within one year), and credited to the appropriate deposit.

Refunds.

(i) Compulsory refunds are made if a deposit reaches the maximum term of five years, and voluntary refunds (withdrawals) can be made upon the taxpayers written application.

(ii) All refunds become assessable income in the income

year when the application is made, or the immediately preceding year on the same conditions as for deposits.

(iii) A refund will not attract more tax than the deposit saved.

(iv) Refunds are made from the oldest deposits first.

(v) The minimum refund is $200 unless the account balance is smaller; the maximum is the account balance.

(vi) Special rules apply where the refund is due to the retirement, death, or bankruptcy of the farmer.

2. Deferral of Expenditures on Development and Fertiliser and Lime

- refer to section 5.8.7.

3. Nil Value of Livestock

- refer to section 5.8.4.

4. Livestock Incentive Scheme

The tax option (a deduction of $24 per qualifying stock unit) provides limited flexibility for the smoothing of income.

5. Estimates of Provisional Income

A provisional taxpayer can estimate his provisional income, and pay provisional tax accordingly. Re-estimates can be made up to the due date of the last instalment of provisional tax - refer to section 5.2.

HORTICULTURE

The following provisions relate specifically to horticulture, but readers should also familiarise themselves with the general farming provisions.

1. Purchase of land, including conveyancing fees, is capital expenditure, and is not deductible. However, legal fees incurred in arranging finance to purchase the land, or in arranging to lease the land, will be tax deductible.

2. Buildings are capital expenditure and subject to depreciation allowances as for a farm (refer section 5.8.5).

i.e. New farm buildings and employee accommodation	First year and ordinary depreciation
Taxpayer's dwelling	25% of ordinary depreciation

3. Shelter belts.
The cost of planting and maintaining shelter trees is tax deductible (refer section 5.8.7 (iii)).

4. Development expenditure.

The cost of preparing land for agricultural purposes, including the cost of original fencing, is tax deductible as development expenditure (refer section 5.8.7 (i)). Note that this applies to the preparation of the land only. Thus the cost of fruit trees and of planting them would be capital expenditure of a fruitgrower as it is not regarded as preparation of the land, but rather is part of the operation of fruit growing.

Expenditures on plants and planting for asparagus and berryfruits (e.g. blackcurrants, raspberries, strawberries, etc.) should be treated as follows:

* plant life span of 1 to 5 years: costs either written off in year incurred or over the life span of the plants,

* plant life span of 6 to 20 years: initial costs are not tax deductible, but subsequent replantings are fully deductible in the year of replacement,

* crop rotation programme: cost of replacement crop and its planting is deductible in the year incurred so long as overall area under cultivation does not increase.

5. Recurring annual costs until production.

Where there is a period between establishment and the production of the first crop, the annual recurring expenses would be tax deductible when incurred notwithstanding that they are incurred to earn profits in future years. For example, an orchardist would be entitled to

deduct expenditure on cultivation, pruning, spraying, rates, insurance, depreciation, etc. in the year the expenditure is incurred.

6. Hail Damage - compensation payments received by orchardists for hail damage made to fill a gap in the profits are assessable income in the year received.

7. Growing crops of fruit, vegetables etc. are a capital asset and are only regarded as trading stock when they are harvested or severed from the ground

   i) Valuation of nursery stock

      * immature plants - nil value as not readily saleable. This applies irrespective of whether the plants are grown in the ground, in pots, trays, bags, etc.

      * mature plants - suitable for sale and severed from the land. Valued at cost price, market value or replacement price. "Cost" can be:

        - 50% of selling price for plants propogated and grown in pots, trays, or bags.
        - actual cost for plants bought in from other growers.
        - nil value for plants which are still growing the ground.

      * pots and containers should be valued at cost price, market value or replacement price.

   ii) Valuation of orchid plants

      * immature plants - nil value, irrespective of place grown.

      * mature plants - valued at cost price (i.e. 50% of selling price), market value, or replacement price.

      * plants purchased from other growers should be valued at actual cost.

8. Horticulturists qualify for the Farm Income Equalisation Scheme (refer section 5.8.11 (i)) and the Farming Investment Allowance (refer section 5.8.6).

9. Schedule Rates of Depreciation

ITEM	%	
Agricultural plant, and equipment including tractor drawn implements.	10	DV
Self-propelled equipment	20	DV
Cloches	Replacement or Annual Revaluation or Standard Value	
Irrigation/frost protection plant - i.e. pumps, pumphousing, sprinkler, standards, pipelines.	10 or Development Expenditure	DV
Glass houses - wooden framed	5	CP
- metal framed	3	CP
Hop frames	Replacement or Annual Revaluation or Standard Value or Development	
Hop kilns	15	DV
Plastic pots for tomato growing	Standard Value (20c each)	
P.V.C. Tunnel houses	7.5 plus maintenance	CP
Spray plant (orchardists)		
Self propelled and air-blast units	20	DV
Others	10	DV
Tomatoes-structure for shading plants	5	CP
Trickle irrigation equipment in glasshouses.	25	DV

5.10 FISHING INDUSTRY

The following provisions relate specifically to the fishing industry but readers should also familiarise themselves with the previous sections.

In general 'fish' includes shellfish and crustaceans.

5.10.1 Spreading of Repair Costs on Fishing Boats

Expenditure incurred in making repairs or alterations necessary to obtain a certificate of survey under the 'Shipping and Seamen Act 1952' may be deferred in whole or in part and claimed at the written election of the taxpayer in the year of expenditure and up to four succeeding years. The expenditure covers repairs and alterations to the hull, equipment or machinery, and must be ordinarily deductible as 'repairs and maintenance' (i.e. would not be regarded as capital expenditure).

5.10.2 Depreciation

1. First Year Depreciation

Allowances available to the fishing industry include:

(a)	New or used plant and machinery	25%
(b)	New buildings or building improvements required for fish export hygiene purposes	30%
(c)	Employee Accommodation	20%

2. Ordinary Depreciation

In addition to the relevant items specified in section 5.8.5, the following schedule rates may apply.

ITEM	%	
Cool stores and freezing chambers		
Buildings	3	CP
Plant	10	DV
Fishing Vessels		
Registered Hull, including fixed gear and refrigeration rooms.	10	DV
Deck machinery, winches and motors	15	DV
Main engine	20	DV
Fish Processing Buildings	4	CP
Fish Processing Plant	15	DV
Wooden fish boxes and plastic fish containers	Replacement only or Standard Value or Annual Revaluation	

Radio - Receivers	20	DV
- Telephones	20	DV
- Testing equipment	20	DV
- Transmitters	20	DV

3. Additional Depreciation on Certain Capital Expenditure on Fishing Boats.

Capital expenditure arising from compulsory surveys of fishing boats carried out by the Marine Department may be written off at the rate of 25% of the expenditure in the year incurred and acquiring, installing or extending equipment or machinery for use in a fishing boat.

It is necessary that the taxpayer keeps full and satisfactory accounts.

5.10.3 Fishing Investment Allowance

Terminated on 31 March 1983.

5.10.4 Development Expenditure - Fish Farming

Certain capital expenditure by rock oyster or mussel farmers or freshwater fish farmers may be claimed as a tax deduction if incurred prior to 31 March 1986. Such expenditure may be deferred in whole or in part and claimed at the written election of the taxpayer in the year of expenditure and up to nine succeeding years. The types of expenditure which qualify are:

(a) Rock Oyster Farming

(i) Acquisition and preparation of spatting sticks;

(ii) Construction and erection of posts, rails, or other structures for the holding of spatting stocks during spat catching and maturing;

(iii) Construction of fences (including breakwater fences).

(b) Mussel Farming

(i) Acquisition, preparation and mooring of pontoons, rafts, or other floating structures for collecting spat;

(ii) Acquisition, mooring and outfitting of moored floating platforms from which the collected spat is suspended for subsequent growth;

(iii) Collecting and depositing of shell or other suitable material on the sea bed to create spatting surfaces;

(iv) Acquiring, outfitting and mooring of the special long lines on which mussels are cultivated.

(c) Scallop Farming

(i) Acquisition, preparation and mooring of floating structures for collecting spat.

(ii) Acquisition, mooring and outfitting of long-lines from which the collected spat is suspended for subsequent growth.

(d) Sea-Cage Salmon Farming

(i) Acquisition, preparation and mooring of pontoons, rafts, or other floating structures for securing or protecting cages or other containment vessels;

(ii) Acquisition, preparation, and placing of equipment or structures, including tanks, cages, nets or other vessels, for the containment of live salmon;

(iii) The acquisition and placing of ropes and buoys used in the breeding or maturing of salmon.

(e) Freshwater Fish Farming

(i) Ground testing;

(ii) Drilling of water bores;

(iii) The draining of land and the excavating of sites for ponds, tanks or races;

(iv) The construction of races, sluices, ponds, settling ponds, and tanks of impervious materials to conduct or contain water.

(v) The supply and installation of pipes for water

reticulation;

(vi) The construction of walls, embankments, walkways, service paths, and access paths;

(vii) The supply and installation of baffles or screens for the containing or excluding of fish;

(viii) The construction of fencing on the fish farm;

(ix) The construction of effluent ponds and channels.

All provisions relating to deductibility of farm development expenditure apply similarly to this expenditure, including the position on termination of the qualifying period where the taxpayer has embarked on an approved "development plan" before that date, as well as recovery of development expenditure allowed if the area is sold within ten years (refer section 5.8.7 and 5.8.8).

5.10.5 Income Equalisation Scheme

Taxpayers engaged in the business of fishing are able to make deposits under the farm income equalisation scheme, and for this purpose "fishing" includes rock oyster farming, mussel farming, and freshwater fish farming. For details refer to section 5.8.11(i).

5.11 EXPORT INCENTIVES

This section outlines the major incentives which could apply to primary producers who are involved in exporting. For reasons of brevity, only selected aspects have been included, and care must be exercised when applying these guidelines to any particular circumstance. Your accountant or the appropriate authority should be consulted regarding queries.

The current export incentives aim to reward the taxpayer in proportion to his performance in generating foreign exchange which is remitted back to New Zealand. They take the form of a tax credit (i.e. rebate), or a cash refund in the case of exporters who are in a tax loss situation. These incentives are:-

* Export performance incentive for qualifying goods.

* Export performance incentive for qualifying services and/or overseas projects.

* Export-market development incentive.

* Export-market development incentive for self-employed taxpayers.

5.11.1 Export Performance Incentive for Qualifying Goods

The incentive allowance is given as a refundable tax credit, the rate of which varies according to the local domestic content of the goods exported. The amount of tax credit is calculated by multiplying the total value of f.o.b. export sales for a particular product by the specified rate of tax credit. The specified rate of tax credit is found in a schedule prepared by the Department of Trade and Industry which lists export commodities and their associated value added band and the rate of tax credit. The following table shows the domestic value added bands and rates of incentive allowance:

Band	Domestic Value Added	Rate of Tax Credit
A	80 - 100%	11.9%
B	70 - 80	10.5%
C	60 - 70	9.1%
D	50 - 60	7.7%
E	40 - 50	6.3%
F	20 - 40	4.2%
G	0 - 20	1.4%

The incentive is available to an exporter as export merchant of qualifying goods. The incentive is not available to co-operative dairy, milk marketing or pig marketing companies (unless their export goods give rise to assessable income), to non-resident mineral development companies as to mineral mining companies.

An "exporter" is a manufacturer, producer or processor of qualifying goods who must have:
(a) exported the goods from New Zealand; and
(b) sold or otherwise disposed of the goods to an overseas purchaser; and
(c) been the owner of the goods at the time of the sale or disposal.

The taxpayer can engage a commission agent to export the goods on his behalf so long as he remains the owner of the

goods up to the point of sale to the overseas purchaser; but if the goods are sold or otherwise disposed of to the agent then it is the agent and not the manufacturer who can claim the incentive deduction.

An "export merchant" is the person or firm that:

(a) purchases goods from the manufacturer or other supplier and directly contracts the sale of those goods with an overseas buyer; and

(b) is responsible to the overseas purchaser for the quality, quantity and delivery of the goods sold; and

(c) is entitled to receive payment for the goods from the overseas purchaser; and

(d) is actively engaged in seeking out export opportunities for New Zealand products.

Qualifying goods are those which are specified in the schedule of export goods by the Department of Trade and Industry. Expressly excluded from qualifying as export goods are those goods exported by way of gift, gifts sold in a duty free context, consumable provedore goods and imported goods which are exported without any New Zealand added content.

The export performance incentive for export goods is supplemented by the export programme suspensory loan scheme (See Section 5.11.5).

Example:

Assume qualifying goods exported were:

Band	A	f.o.b. sales	$100,000
	B	f.o.b. sales	$200,000
	C	f.o.b. sales	$300,000

Export Performance Incentive is calculated as:

$100,000	x 11.9%	=	11,900
200,000	x 10.5%	=	21,000
300,000	x 9.1%	=	27,300
Total incentive tax credit			$60,200

The incentive for export goods will terminate as follows:

1985 income year - 100% incentive
1986 income year - 50% incentive
1987 income year - 25% incentive
1988 income year - nil incentive

5.11.2 Export Performance Incentive for Qualifying Services and/or Overseas Projects

Any taxpayer who provided professional or technical services overseas will be entitled to a refundable tax credit of 11.9% of the net foreign currency earnings which are either remitted back to New Zealand or are paid out of funds held in New Zealand. Qualifying services include advisory services relating to the establishment or development of any farming, agricultural, horticultural, fishing, or forestry project.

Example:

Gross fees from qualifying services	$20,000
less overseas expenditure	5,000
Net foreign currency earnings	$15,000
Net foreign currency earnings transferred to New Zealand through the N.Z. banking system	$10,000
Tax Credit is 11.9% of $10,000 i.e.	$ 1,900

The incentive for qualifying services will terminate as follows:

1985 income year - 100% incentive (11.9% tax credit)
1986 income year - 50% incentive (5.95% tax credit)
1987 income year - 25% incentive (2.975% tax credit)
1988 income year - nil incentive

5.11.3 Export-Market Development Expenditure Incentive

Any taxpayer who incurs qualifying export-market development expenditure will be entitled to refundable tax credit of 67.5% of such qualifying expenditure.

To qualify for the incentive, the export promotion expenditure must:

(i) be tax-deductible under general taxation law (i.e. capital expenditure would not qualify); and

(ii) have been incurred primarily and principally for the purposes of seeking markets (including the retention of existing markets) or the obtaining of market information or market research, or creating or increasing demand for the export of goods that have been manufactured, produced, assembled, processed or packed or graded and sorted in New Zealand. "Services" means services in relation to construction projects, courses of educational training or the furnishing of technical advice or assistance.

Qualifying expenditures in general, are only those costs which are incurred outside New Zealand in promoting exports, and include, amongst others:

* Overseas travel and accommodation expenses.

* Salaries and wages paid to New Zealand based employees in respect of the time spent outside New Zealand.

* Expenses (including those incurred in New Zealand) of advertising outside New Zealand.

* Direct costs of providing samples or technical information to persons outside New Zealand, reduced by any consideration received.

* Costs incurred outside New Zealand in the preparation or submission of tenders or quotations, or in sales promotion activities or campaigns.

* Payments to overseas agents for the purposes of activities carried on outside New Zealand.

Expenditures which do not qualify for the incentive include:

* Entertainment expenses.
* Director's fees.

* Salaries and wages paid in respect of employee's time within New Zealand.

* Payments to agents for work carried out within New Zealand.

* Costs of advertising inside New Zealand.

* Commissions on sales.

* Expenditure in respect of which an Export Program Grant has been received. However, the proportion of expenditure not reimbursed by the grant will be allowed as an ordinary deduction from assessable income.

This incentive terminates 31 March 1985.

Where the tax incentive credit is allowed in respect of qualifying expenditure, the same expenditure cannot be deducted from assessable income.

Example:

Assume that the taxpayer has received an export program grant (of $12,800) in respect of qualifying expenditure of $20,000.

Qualifying Expenditure:	
Salaries and Wages	$17,000
Overseas travel and accommodation	5,250
Net cost of samples	750
Advertising overseas	2,000
Total qualifying expenditure	25,000
less Qualifying expenditure in respect of which a grant was made	20,000
Expenditure which qualifies for the tax credit	$ 5,000
Tax Credit is 67.5% of $5,000, i.e.	$ 3,375

5.11.4 Export Market Development Activities Incentive for Self-Employed Taxpayers

Any taxpayer (not being a company) who is in business on his own account or as a member of a partnership who has engaged in market research, securing publicity or soliciting business, or supplying services outside New Zealand in relation to construction projects, education training courses, or technical advice or assistance, will be entitled to a refundable tax credit of 67.5% of the "value of time" spent on these export-market development activities outside New Zealand.

The "value of time" is calculated as:

$$\frac{(a \times b) - (c \times \frac{100}{64})}{2}$$

where:

a is half the minimum hourly rate usually charged by the principal of a New Zealand firm for the particular profession or occupation of the taxpayer. If there is no customary rate, the Commissioner may determine a reasonable rate.

b is the number of complete hours spent on export-market development activities in the income year.

c is the amount of any export program grant or export market development grant received in respect of the time spent by the taxpayer in export market development activities.

This incentive terminates 31 March 1985.

Example:

Assuming:

(i) the taxpayer spent 1,000 hours on qualifying export-market development activities;

(ii) the minimum charge-out rate for the taxpayer's profession is $20 per hour; and

(iii) during the year, the taxpayer received an Export Program Grant in respect of the value of time of $1,920, then the value of time will be:

$$\frac{(\frac{\$20}{2} \times 1{,}000) - (\$1{,}920 \times \frac{100}{64})}{2}$$

$$= \$3{,}500$$

Tax Credit is 67.5% of $3,500 i.e. $2,362.50

5.11.5 Export Programme Suspensory Loan Scheme

This scheme is to assist substantial and proven exporters of goods and services to generate greater net foreign exchange earnings. The assistance is in the form of a suspensory loan, paid in advance, to cover 40% of the qualifying expenditure to be secured in a target market. The loans will convert to a grant if the sales targets are met. The loan, plus interest, must be repaid if the targets are not met. The balance of the qualifying

expenditure may be claimed as an ordinary tax deduction.

To be eligible for the incentive, the exporters must:-

- be a New Zealand taxpayer;
- own the goods at the time of export or perform the services as appropriate;
- have achieved net foreign exchange earnings of at least $250,000 in one of the 3 years prior to application;
- personally incur the promotional expenditure; and
- be responsible for and retain control over the promotional programme.

Eligible expenditure is the same as for the tax credit incentive for export market development expenditure (Section 6.11.3), subject to limits on salaries and sustenance costs.

The maximum loan is the lesser of $200,000 as 30% of the net foreign exchange earnings for the programme year after making an adjustment for market maintenance where appropriate.

The loan is for 36 months, and is renewable at the end of the 1st and 2nd years upon the exporter showing that he has met the specified sales forecasts.

5.12 DISPOSITIONS OF MATRIMONIAL PROPERTY

Since 28 July 1983, one spouse may transfer matrimonial property to the other spouse under Section 21 of the Matrimonial Property Act 1976 without giving rise to a subsequent liability for income tax. Transfers of matrimonial assets made by Court order under Section 25 of the Matrimonial Property Act 1976 are totally exempt. (For Estate and Gift Duty provisons refer to Section 6). The legislation basically allows assets to be transferred at book values rather than market values.

Legislation of relevance to the agricultural sector regarding matrimonial transfers include the following:

- Transfers of land are deemed to be at the original purchase price which the taxpayer paid for the land, i.e. no profit on sale.

- Transfers of land with growing timber on it shall be regarded as a sale of timber, but may be transferred at cost price.

- Livestock may be transferred at the same standard value (including nil value). The progressive write down provisions apply to the spouse only to the extent that they would apply to the taxpayer.

- Trading stock, including livestock, may be transferred at the higher of the (standard) values adopted by the taxpayer (transferor) and spouse (transferee).

- As a general rule, if a leased asset is acquired and then sold at a profit, such profit is regarded as assessable income (the maximum being the lease payments previously claimed as tax deductions). Matrimonial transfers of this "leased" asset are deemed to be at book value, so that any profit on a subsequent sale will be assessable in the hands of the transferee.

- The rights of ownership of an asset will accompany the asset if it is transferred under a matrimonial agreement. These relate to depreciation, the recovery of depreciation upon disposal of the asset, the claiming of the relevant investment allowances, and the recovery of the investment allowance if it is disposed of within 12 months of the original purchase.

- Interest and development expenditure can be recaptured if land, fish farms, or certain assets are sold within 10 years of acquisition (refer Section 5.8.8). Transfers of land under a matriominal arrangement, however, will not be treated as a disposal for the purposes of the recapture provisions. The legislation deems the transferee to have:

  (i) purchased his/her share at cost price (book value for appropriate assets) on the date the property was acquired by the transferor; and

  (ii) claimed the same development expenditure and interest deductions as the transferor.

  Hence the recapture (drawback) provisions will apply to the transferee if he/she sells the property within 10 years of original acquisition by the transferor.

- The $10,000 loss limitation on specified activities which may be offset against other income (refer Section 5.8.9). Under this legislation, losses from an established activity may be offset without limit. If this established activity is transferred to a spouse under a matrimonial agreement, then it retains its

established activity status in the hands of the transferee. The date of acquisition is deemed to be the date on which it was acquired by the transferor. (This has relevance to the concessional provisions where land has been held continuously for 5 years).

5.13 FRINGE BENEFITS TAX

The 1984 Budget introduced a fringe benefits tax (FBT) to take effect from 1 April 1985. The proposed tax will be levied on all employers, irrespective of whether they are taxable entities or are in a tax loss situation, at the rate of 45% of taxable values. The fringe benefits tax will not be tax deductible to the employer.

The draft legislation identifies the following as fringe benefits (and therefore subject to the tax):

* private use of a vehicle provided by an employer
* low interest loans granted by employers to employees
* free, subsidised or discounted goods and services provided by or purchased through the employer.

Exemptions include, amongst others:

* benefits already subject to income tax
* benefits regarded as exempt income
* reimbursing allowances
* goods and services provided on work premises, e.g. staff canteen.

Self-employed people are not necessarily liable for the tax unless they provide employees with fringe benefits.

Employees who are also shareholders in a proprietary company (i.e. under the control of not more than 4 shareholders) can receive fringe benefits without the company incurring any liability for FBT. the rationale is that such expenditures are not tax-deductible to the company, but are taxable as dividents to the shareholder-employer who receives them.

The draft legislation includes specific formulae for calculating the value of the benefit received. This value should be reduced by the amount paid by the employee (if any) or a prescribed allowance where the vehicle concerned is part owned by the employee. The FBT is levied on the net taxable value of the fringe benefit.

5.14 APPENDICES

5.14.1 Appendix I

Last Days for Payments
By Provisional Taxpayers

Balance Month	Provisional Tax		Terminal Tax	
	1st Instalment	2nd Instalment	Companies	Others
Oct 19A1	7 Mar 19A1	7 Sept 19A1	7 Nov 19A2	7 Mar 19A3
Nov 19A1	7 Mar 19A1	7 Sept 19A1	7 Nov 19A2	7 Mar 19A3
Dec 19A1	7 Apr 19A1	7 Oct 19A1	7 Dec 19A2	7 Mar 19A3
Jan 19A2	7 May 19A1	7 Nov 19A1	7 Jan 19A3	7 Mar 19A3
Feb 19A2	7 Sept 19A1	7 Mar 19A2	7 Feb 19A3	7 Mar 19A3
Mar 19A2	7 Sept 19A1	7 Mar 19A2	7 Mar 19A3	7 Mar 19A3
Apr 19A2	7 Sept 19A1	7 Mar 19A2	7 Mar 19A3	7 Mar 19A3
May 19A2	7 Sept 19A1	7 Mar 19A2	7 Mar 19A3	7 Mar 19A3
June 19A2	7 Sept 19A1	7 Mar 19A2	7 Mar 19A3	7 Mar 19A3
July 19A2	7 Nov 19A1	7 May 19A2	7 Mar 19A3	7 Mar 19A3
Aug 19A2	7 Mar 19A2	7 Sept 19A2	7 Mar 19A3	7 Mar 19A3
Sept 19A2	7 Mar 19A2	7 Sept 19A2	7 Mar 19A3	7 Mar 19A3

5.14.2 Appendix II

Rates of Income Tax for Individuals
1985 Income Year

Taxable Income		Amount and Rate of Tax		
$ 1 - $ 6,000	$	20.0 % of income		$
6,001 - 24,000	1,200.00 plus	32.0 % of excess over		6,000
24,001 - 25,000	6,960.00 plus	41.06%	"	24,000
25,001 - 30,000	7,370.60 plus	45.10%	"	25,000
30,001 - 38,000	9,625.60 plus	56.10%	"	30,000
Over 38,000	14,113.60 plus	66.0%	"	38,000

N.B. These rates include a temporary surtax of 10% to the tax rates on taxable incomes in excess of $25,000.

1986 Income Year

(a) Excluding the temporary surtax.

Taxable Income		Amount and Rate of Tax	
$	$		$
1 - 6,000		20.0% of income	
6,001 - 25,000	1,200.00 plus	33.0% of excess over	6,000
25,001 - 30,000	7,470.00 plus	41.0% "	24,000
30,001 - 38,000	9,520.00 plus	51.0% "	30,000
Over 38,000	13,600.00 plus	60.0% "	38,000

(b) Including the temporary surtax.

Taxable Income		Amount and Rate of Tax	
$	$		$
1 - 6,000		20.0% of income	
6,001 - 25,000	1,200.00 plus	33.07% of excess over	6,000
25,001 - 30,000	7,470.00 plus	45.1% "	24,000
30,001 - 38,000	9,725.00 plus	56.1% "	30,000
Over 38,000	14,213.00 plus	66.0% "	38,000

SECTION 6

ESTATE AND GIFT DUTIES

Contributed by M.B. CLARK, M.Com. A.C.A.
Senior Lecturer in Agricultural Accounting
LINCOLN COLLEGE

CONTENTS

		Page
6.1	Introduction	6-4
6.2	Estate Duty	6-4
6.2.1	Introduction	6-4
6.2.2	Property Liable to Estate Duty	6-4
6.2.3	Exemptions	6-6
6.2.4	Allowable Debts	6-6
6.2.5	Matrimonial Home Allowance	6-7
6.2.6	Charitable Allowance	6-7
6.2.7	Valuation of Estate	6-8
6.2.8	Valuation of Successions	6-8
6.2.9	Calculation of Estate Duty	6-10
6.2.10	Reliefs	6-10
6.2.11	Assessment and Collection	6-11
6.2.12	Example of Estate Duty Assessment	6-12
6.3	Gift Duty	6-15
6.3.1	Definitions	6-15
6.3.2	Valuation of Gift	6-16
	Date of Valuation	6-16
6.3.3	Exemptions from Gift Duty	6-17
6.3.4	Dispositions of Matrimonial Property	6-17
6.3.5	Calculation of Gift Duty	6-18
6.3.5	Aggregation of Gifts	6-18
6.3.6	Assessment and Collection	6-20
6.3.7	Example of Gift Duty Assessment	6-21
6.4	Appendices	6-23
I	Rates of Estate Duty	6-23
II	Tables for Valuation of Pensions etc	6-24
III	Rates of Gift Duty	6-35

6. ESTATE AND GIFT DUTIES

6.1 INTRODUCTION

Both estate duty and gift duty are levied under the Estate and Gift Duties Act 1968 as amended. Both are administered by the Inland Revenue Department.

6.2 ESTATE DUTY

6.2.1 Introduction

In broad terms, estate duty is a tax on the total value of property that was owned by a person who has died as that passes from one person to another because of his death.

The final balance of the estate is calculated as:

	Estate Assets
plus	Notional Estate
less	Exempt Assets
	Dutiable Estate
less	Allowable Debts
less	Matrimonial Home Allowance
less	Charitable Allowance
	FINAL BALANCE
	Estate Duty is calculated as
	Estate Duty (on final balance)
less	Reliefs
	NET DUTY

6.2.2 Property Liable to Estate Duty

1. All property situated in New Zealand. (Property is used in the widest sense to cover all assets including land, cash, proceeds of life insurance policies, etc.)

2. All property outside New Zealand if the deceased was domiciled in New Zealand at the date of death. A credit is allowed in respect of estate duty paid overseas.

3. "Notional Estate", being:

   (a) Dutiable gifts (i.e. gifts which are or may be liable to gift duty) made within 3 years of

death. Gifts which are exempt from gift duty are also exempt from estate duty - refer section 6.3.3. Disposition of matrimonial property may also be exempt from gift duty - refer Section 6.3.4.

(b) Gifts made before death where the donor has reserved an interest for his lifetime (i.e. gifts with strings attached).

(c) Property disposed of before death where a benefit passes back to the estate upon his death.

(d) The deceased's share or interest in any property held jointly, other than a joint family home.

(e) Where all or part of the deceased's interest in a policy of life insurance on his life has been disposed of to a relative by the deceased within 3 years of death, a proportion of the gross benefits payable at death is included in the dutiable estate. This provision does not apply to a genuine disposition for full consideration to non-relatives.

The value to be included in the dutiable estate is calculated according to the following formula.

$$\frac{\text{Premiums up to disposition to death}}{\text{Total Premiums}} \times \text{Gross Proceeds} \times \text{Proportion of interest disposed of}$$

Allowance is then made for any consideration paid to the deceased when the policy was assigned.

Example:

Policy taken out by deceased in 1974. Annual premium $200. Assigned by way of sale to his wife in 1982 for the surrender value of $2,000. Deceased dies in 1984, and the policy realises $5,500.

Amount to be included in the dutiable estate is:

$$\frac{\text{Premiums to date of assignment}}{\text{Total premiums during term}} \times \text{Proceeds}$$

$$= \frac{(8 \times \$200)}{(10 \times \$200)} \times \$5,500 = \$4,400$$

less consideration paid on assignment 2,000

Amount to be included $2,400

If the deceased has continued to pay the premiums after assignment, then the annual premiums so paid would be treated as gifts within three years of death and included in the notional estate - see (a) above.

(f) The value of any pensions payable to a survivor on the death of the deceased.

6.2.3 Exemptions

1. Non-dutiable gifts made absolutely.

2. The first $2,000 p.a. of any pension or annuity payable to the surviving spouse of the deceased from a group superannuation scheme.

3. The total of any such annuity payable to a child of the deceased until the child attains the age of twenty years.

4. Accrued War Pensions and Social Security benefits.

5. Personal chattels.

The following exemptions apply to estates of all persons dying on or after 1 June 1978.

(a) The total value of personal chattels which pass to the surviving spouse.

(b) Up to $6,000 for personal chattels which pass to other beneficiaries.

(Between 30 May 1974 and 1 June 1978, the maximum exemption for all personal chattels was $4,000.)

6. The deceased's share of a residence registered as a joint family home. (Applies to the estate of the first spouse to die.)

6.2.4 Allowable Debts

Debts which are owing by the deceased at the time of his death may be deducted from his estate. It does not

matter whether the debt was incurred in New Zealand, or overseas.

Reasonable funeral expenses and income tax on income to date of death are regarded as allowable debts. However, no allowance should be made for any expenses of administering the estate or remuneration of the executor(s).

The amount of any debt owing under any mortgage, charge, or other encumbrance over the joint family home is not an allowable debt.

6.2.5 Matrimonial Home Allowance

In the case of a matrimonial home, the allowance is in respect of the value of the family residence (i.e. the matrimonial home), or other property if the home does not pass to the surviving spouse. The allowance is restricted to one home only, and does not apply to a joint family home.

Value of the Allowance:

(a) Where the matrimonial home passes to the surviving spouse, the value of the home is the matrimonial home allowance.

(b) Where property other than the matrimonial home passes to the surviving spouse, the allowance is the lesser of:

(i) the value of the matrimonial home; or

(ii) the value of the other property passing.

NOTE: Debts secured over the matrimonial home or equivalent property reduce the value of the allowance.

As from 9 December 1982 all debts incurred in order to purchase the matrimonial home or equivalent property, irrespective of whether or not they are secured over that home or property will reduce the value of the matrimonial home allowance.

6.2.6 Charitable Allowance

Allowance is given for any bequest or bequests made to charitable organisations.

The charitable allowance is the lesser of:

(i) The sum of all charitable successions, or
(ii) $25,000.

6.2.7 Valuation of Estate

All property included in the dutiable estate will be valued as at the date of death, except that gifts will be valued as at the date of gift. In general, the same principals apply to valuations for both estate duty and gift duty purposes. (Refer to section 6.3.2 - Valuation of Gift).

The value of land and buildings is determined by a special Government valuation, and specifically excludes the timber value of any growing trees. All other property should be valued by persons competent to value the assets concerned. However, it is not necessary to value personal chattels where they have all been exempted from duty. (Refer section 6.2.3.).

Special provisions apply regarding the valuation of annuities, pensions etc. for estate duty purposes, and care should be exercised in assessing such values. Calculation is necessary to establish the value of pensions etc. and reference must be made to the tables contained in the Second Schedule to the Estate and Gift Duty Act. There are four tables in all, and these refer to life expectancies for males and females, expectancy of widowhood for females of various ages, and financial factors for specific time periods. These are reproduced as Tables A,B,C, and D, respectively, in Appendix II (section 6.4). Reference should be made to the Valuation of Succession (section 6.2.8) and to the Example of Estate Duty Assessment (section 6.2.12).

6.2.8 Valuation of Successions

The whole of the estate is divided into various successions (i.e. inheritances) as at the date of death, and each succession, whether it be property, an annuity, or some other future interest, must be valued. The general rules of valuation are outlined in section 6.2.7 (above). In calculating the value of each succession no deduction should be made for administration expenses, the administrators' commission or remuneration, the estate duty payable, or any mortgage or encumbrance where the beneficiary has a right to be reimbursed in respect of such

charge. Also, it should be noted that where a matrimonial home allowance has been made, the succession of the surviving spouse is reduced by the amount of that allowance.

Valuation of Annuities, Life Interests, etc.

Where an annuity or some other form of future interest is involved, the value of each inheritance is calculated using the tables in Appendix II and the total estate then apportioned between the beneficiaries. Thus if a widow is to receive an annuity for the rest of her life, the value of that annuity is calculated (based on her life expectancy), and this value is the widow's succession; the balance goes to the remainderman. The combined total of the two equals the value of the estate.

An annuity is a fixed sum of money payable each year for a number of years or for life. An annuity may commence as at date of death, or some time thereafter, such as after a certain number of years or upon the happening of some specific event.

Example:

> Son aged 45 is left an annuity of $2,000 for life. Value of his succession would be:
> Present value of $1 per annum for life of a male aged 45 (from Table A) is $14.92971.
> Present value of $2,000 pa = $2,000 x 14.92971
> = $29,859

A life interest is the right to receive the income for life from a certain fund, or specified assets, or to have the use of an asset for life. The successor entitled to this is the life tenant.

Example:

> A dies on 18 November 19A3 leaving a final balance of $100,000. Under his will his widow (age 63) receives income for life and on her death estate assets pass to surviving children.
>
> Successions
>
> Widows: Present value of income on capital of $1 for life of a female age 63 (from Table B) is $0.54800.
> Present value of income on $100,000 is $54,800

Remainderman:	Present value of interest	$45,200
		$100,000

Interests may terminate otherwise than on death. Common examples would include:

(1) Income from residue of estate during her widowhood. Table C should be used.

(2) Income from estate's farming activities to widow until the youngest child attains the age of 21. Table D should be used.

(3) Annuity of $1,040 to son until he attains age of 25. Table D should be used.

Life interests under an estate must be valued in accordance with the deceased's entitlement as set out in the provisions of the will of the head estate. Where the entitlement of the life tenant is not ascertainable from that will, any unpaid income plus any surplus livestock at standard values should be added to the estate of the life tenant at his or her death.

6.2.9 Calculation of Estate Duty

Estate duty is assessed on the final balance of the estate at the rate set out in Appendix I (section 6.4). The allowance reliefs are then deducted in order to obtain the actual estate duty payable.

6.2.10 Reliefs

Reliefs are deducted from the estate duty assessed, where applicable. Available reliefs include the following:

1. Relief from Successive Estate Duties (i.e. Quick Succession)

   If the estate of a deceased person includes property which was inherited within 5 years of death, relief from duty may be given in the second estate in order to reduce the effect of a double impact of estate duty.

The reduction is applied to the lesser of the duty payable on the particular property in the first and second estates. The reduction is graduated according to the period which has passed between the two dates of death, as shown in the following table.

Period between Death of Successor and Predecessor	Duty Reduced by
0 - 4 months	75%
4 - 8 months	60%
8 - 12 months	50%
1 - 2 years	40%
2 - 3 years	30%
3 - 4 years	20%
4 - 5 years	10%

2. Relief for Gift Duty Paid

Where gifts have been included in the notional estate, the gift duty paid plus interest at 3% p.a. from the date the gift duty was paid to the date of death, will be refunded to the person who paid it. If the donor (i.e. the deceased) paid the gift duty, the amount of gift duty refunded (excluding any interest) is included in his dutiable estate. The total refund under these circumstances is first applied towards the payment of any estate duty and then any excess is refunded to the administrator of the deceased donor's estate.

6.2.11 Assessment and Collection

The administrator must file an Administrators' Statement together with various supporting forms within six months after the grant of administration. The forms prescribed for filing are available from the Inland Revenue Department.

An assessment is issued immediately after the accounts are filed, but this assessment may be amended as a result of the Department's examination or from further information received. After any queries have been satisfied, the Department then certifies the final balance and that duty is, or is not, payable.

Once this notice of assessment has been issued, any estate duty payable should be paid within three months after which a penalty of 5% of the unpaid duty is imposed.

Interest at 5% p.a. is charged on the amount of duty unpaid after six months from the date of death. Interest at 5% p.a. is also charged on any unpaid penalty on estate duty calculated from the date the penalty became payable.

6.2.12 Example of Estate Duty Assessment

Mr Green died on 30 October 1982 and his estate included the following property (at market value):

Matrimonial home	$ 65,000
Investments	54,000
Personal chattels	7,000
Cash at P.O.S.B.	3,250
Interest accrued at P.O.S.B.	50
Car and boat	20,000
Mortgage over son's farm	120,000
Interest accrued on mortgage	2,000

His liabilities were:

Mortgage over matrimonial home	15,000
Accounts payable	1,300
Income tax assessed to date of death	1,400
Funeral expenses	1,200

In May 1959, Green took out a policy of life assurance which has annual premiums of $300. In June 1979 he sold a half interest in the policy to his wife for $7,000 which was half the then surrender value. Green continued to pay the premium until his death. The gross proceeds of this policy at death were $20,000. Green also had a second insurance policy which had a death cover of $50,000.

Green had also contributed to a superannuation scheme which, on his death, would provide his widow with $5,000 per annum for the remainder of her life.

In addition, Green had forgiven debts to his son as follows:

1 January 1977	$10,000	1 January 1978	$10,000
1 January 1979	$10,000	1 January 1980	$20,000
1 January 1981	$10,000	1 January 1982	$10,000

Gift duty of $180, $180, $180, $250, Nil and Nil respectively, had been paid by Green's son. (Refer to section 6.3.4, Calculation of Gift Duty.)

In his will, Green made the following bequests:

To son John, aged 25, debt forgiven	$25,000
To daughter Sue, aged 19, cash	$50,000
To St John Ambulance Association	$ 5,000

To wife Alice, aged 65 - the residue of the estate.

The final balance on which duty would be assessed is calculated as follows:

	$		$
Estate Assets:			
Matrimonial home	65,000		
Investments	54,000		
Personal chattels	7,000	(1)	
P.O.S.B. - cash plus accrued interest	3,300		
Car and boat	20,000		
Mortgage and accrued interest	122,000		
Proceeds of insurance policy - no. 1	10,000	(2)	
- no. 2	50,000		
			331,300
plus Notional Estate:			
Dutiable gifts to son	40,000	(3)	
Interest in life policy disposed of	1,696	(4)	
Superannuation payable to widow	30,908	(5)	
			72,604
			403,904
less Exempt Assets:			
Personal chattels to widow		(1)	7,000
			396,904
less Allowable Debts:			
Mortgage over home	15,000		
Accounts payable	1,300		
Income tax	1,400		
Funeral expenses	1,200		
	18,900		

Matrimonial Home Allowance	
Matrimonial Home	65,000
less Mortgage	15,000
	50,000

Charitable Allowance		
Value of bequest	5,000	
		73,900
FINAL BALANCE		$323,004
Value of Successions:		
Final balance of estate		$323,004
Matrimonial Home Allowance		50,000
Charitable Allowance		5,000
Net Value of the Estate		$378,004
Successions:		
Son (John)		
Gifts	40,000 (3)	
Bequest	25,000	
		65,000
Daughter (Sue)		
Bequest		50,000
St John Ambulance Association		5,000
Widow (Mrs Alice Green)		258,004
Net Value of the Estate		$378,004

ESTATE DUTY CALCULATION:

Estate duty on final balance		$ 9,201.60
less Reliefs:		
Credit for gift duty paid: (6)		
(i) Duty on gift dated 1.1.80	250.00	
plus interest @ 3% on $250 for 2 years 302 days	21.19	
		271.19
NET ESTATE DUTY PAYABLE		$ 8,930.41

NOTES:

1. The value of personal chattels passing to the widow is totally exempt from estate duty. Thus the $7,000 could be omitted from the calculation.

2. Green had sold a half interest in the insurance policy to his wife in 1979, so only half the proceeds belong to the estate.

3. Only dutiable gifts made within 3 years of death are included.

4. Green's interest in the life policy is calculated as:

$\frac{20 \times 300}{23 \times 300}$ x 50% of $20,000	=	$8,696
less consideration received		7,000
Amount included as notional estate		$1,696

5. The value is calculated as:

Superannuation to widow	$5,000 p.a.
less exemption	2,000 p.a.
Dutiable	$3,000 p.a.

Life expectancy for a female aged 65 is 14.84 years, and the present value of $1 p.a. for her life is $10.3027 (from Table B). The value of the superannuation is therefore calculated as $3,000 x 10.3027 = $30,908.

6. The gift duty paid is not included in the notional estate as it was paid by the son. The estate, however, does receive a credit for the gift duty paid to be offset against the estate duty payable. Similarly the interest due by the Crown on the gift duty paid, although strictly payable to the son, will be offset against the estate duty payable. The estate should account to the son, John, for these accounts.

6.3 GIFT DUTY

6.3.1 Definitions

A gift is any disposition of property made otherwise than by will, without fully adequate consideration in money or money's worth passing to the donor (the person making the gift).

"Disposition of property" is used in its widest sense to cover any alienation of property, such as any conveyance,

transfer, settlement or assignment, including transactions which diminish the value of one estate to the betterment of another. It includes all gifts of property in New Zealand and all gifts of foreign property if the owner is domiciled in New Zealand.

"Consideration" is what one party in a transaction gives to the other party. The most common form is money, but it could be a promise to do or not to do something, or another form of property. Whatever form is involved, its value is calculated in monetary terms.

6.3.2 Valuation of Gift

The value of a gift is the monetary value of the property gifted less any consideration paid. The value of land and buildings is determined by agreement between the donor and the Commissioner of Inland Revenue, or by the Valuer-General. All other property is at market value as assessed by a competent valuer.

6.3.2 (i) Date of Valuation

A gift (and any consideration) is valued as at the date the gift is made, which is taken to mean the date at which the donor has put himself in the position where the gift cannot be revoked (i.e. the gift is complete).

The completion dates of some of the more common forms of gift are illustrated in the following chart:

Description of Gift	When Complete
Cash	On delivery to the beneficiary.
Cheques	When the cheque has been cashed. (Until then it can be revoked.)
Land	Except where a valid trust is created, the earlier of the dates on which - (a) the instrument of transfer is registered in the Land Transfer Office; or (b) the beneficiary has possession of all the necessary documents to enable the registration to be effected.

Shares	As for land, except that the instrument of transfer is registered by the company.
Chattels	Where there has been effective delivery of the chattels or there has been a deed of assignment.
Release and forgiveness of debt	Normally the execution of a legally effective deed of release or forgiveness will be required.

6.3.3 Exemptions from Gift Duty

A dutiable gift is any gift which is or may be liable to gift duty. However, certain gifts are specifically excluded from gift duty, and include:

1. Small gifts, not exceeding an aggregate of $2,000 ($1,000 between 1 January 1979 and 1 April 1984; $400 prior to 1 January 1979) to the same beneficiary in the same calendar year, are not taken into account if they are made in good faith as part of the normal expenditure of the donor.

2. Gifts made towards the maintenance or education of a relative provided the gift is not excessive having regard to the obligation of the donor.

3. Gifts made to charitable bodies.

4. Special exemptions including:

   * certain superannuation elections.
   * contributions by an employer to superannuation fund.
   * certain gratuitous payments to employer to employee.
   * settlement of a joint family home.

6.3.4 Dispositions of Matrimonial Property

Since 28 July 1983 one spouse may transfer up to 50% of the matrimonial property to the other spouse under Section 21 of the Matrimonial Property Act 1976, without giving rise to a liability for gift duty or estate duty at the time of transfer. Duty will be payable on the value of property which exceeds a 50% share. Transfers of matrimonial assets made by Court Order under Section 25 of the Matrimonial Property Act 1976 are totally exempt.

A copy of the agreement which involves the disposition of matrimonial property must be delivered to the Commissioner within 3 months of the date of disposition.

Example

Before entering into an agreement to dispose of matrimonial property under Section 21 of the Matrimonial Property Act 1976, property was held as follows:

Husband	- Farm	$300,000
	- Shares	20,000
	- Bank Account	10,000
Wife	- Bank Account	$ 15,000

On 30 November 1983, the couple decided to share ownership of the matrimonial property on a 50:50 basis, and executed an agreement to that effect.

The farm and shared would be regarded as matrimonial property, whereas the two bank accounts would be regarded as separately owned assets.

The end result of the transfers would be:

Husband	- Bank Account	$ 10,000
	- Farm (half share)	150,000
	- Shares (half share)	10,000
Wife	- Bank Account	$ 15,000
	- Farm (half share)	150,000
	- Shares (half share)	10,000

The wife, as transferee, does not hold more than 50% of the matrimonial property after the transfer. Accordingly, there is no liability for gift duty.

It should be noted that this exemption does not apply to transfers of "separate" property. Any such transfers will still be regarded as gifts.

5.3.5 Calculation of Gift Duty

As from 1 April 1984, gift duty does not become payable until the value of any dutiable gifts over any twelve month period exceeds $27,000 in total value. (Between 21 June 1979 and 31 March 1984 (inclusive), gift duty did not become payable until the aggregated value exceeded $15,000). Rates of Gift Duty are detailed in Appendix III (section 6.4).

If more than one dutiable gift is made within a twelve month period, the duty is apportioned to each dutiable gift involved in accordance with the following formula:

$$\frac{a}{b} \times c$$

where - (a) is the value of the dutiable gift.

(b) is the total value of this gift and all other dutiable gifts made within twelve months.

(c) is the amount of gift duty payable on item (b).

It should be noted that the 12 month period is chosen so as to maximise the amount of gift duty payable.

6.3.6 Aggregation of Gifts

It is important to note that although gift duty is charged on each individual dutiable gift, the rate of gift duty charged on any such individual gift depends upon the aggregation of the value of all dutiable gifts made at the same time or within twelve months subsequently or previously by the same donor (not being a gift exempted from duty, e.g. to a charity). The day the gift is made is included in the twelve month period, so that gifts completed on the same day each year cannot be aggregated. Furthermore, all dutiable gifts are aggregated, irrespective of the identity of the recipient (donee).

Example 1:

Gift to A of $12,000 made on 1 August 1980.
Gift to B of $13,000 made on 31 July 1981.

These gifts would be aggregated and be liable to gift dtuy of $750, even though each gift is below the exemption level of $15,000. Note that if the gift to B was made on 1 August 1981, no aggregation would occur as the gifts are not within a twelve month period.

Example 2:

Gift to C of $18,000 made on 1 August 1980 - duty of $150 paid.
Gift to D of $15,000 made on 1 January 1981.

These gifts would be aggregated and duty of $1,850 on the sum of $33,000 would be payable, less the $150 already paid.

Special transitional provisions apply where the twelve month period includes gifts made before 22 June 1979. Where the aggregated figure does not exceed $15,000, the duty on these aggregated gifts will not change. Where the aggregated figure exceeds $15,000, the duty on the gift made prior to 22 June 1979 will be assessed at the rates applying at the time of the gift, i.e. at the old rates.

Example:

Dutiable gift made before 22 June 1979 aggregates with a gift made after that date, together totalling more than $15,000.

Gift of $10,000 made on 6 June 1979 - duty of $180 paid.
Gift of $18,000 made on 24 December 1979.

Total gifts during 12 month period	$28,000	
Duty on $28,000 at old rate is	$ 2,700	
Therefore duty on $10,000 is		
$\frac{\$10,000}{\$28,000}$ x $2,700 =		$ 964.28
Duty on $28,000 at new rates is	$ 1,050	
Therefore duty on $18,000 is		
$\frac{\$18,000}{\$28,000}$ x $1,050 =		$ 675.00
		$1,639.28
less duty paid		$ 180.00
Duty Payable		$1,459.29

5.3.7 Assessment and Collection

If the value of a gift exceeds $12,000 or if the aggregated value of this gift and all other gifts made over the previous twelve months exceeds $12,000, a Gift Statement (form IR 635) must be delivered to the Commissioner by the donor within three months of making the gift.

A gift statement must always be filed where property is

settled under a matrimonial property agreement - refer Section 6.3.4.

If the donor fails to deliver the Gift Statement within the specified time, the donee has an extra month to do so.

If gift duty remains unpaid within six months of making a dutiable gift, a penalty of 5% will be added to the unpaid duty.

Interest at 5% p.a. on the duty payable, and subsequently on any penalty levied, will be added to any duty unpaid within three months of making a dutiable gift.

The donor is primarily liable to pay gift duty, but the Inland Revenue can obtain payment from the donee. Unless the terms of the gift provide otherwise, the donee is entitled to recover such duty paid from the donor.

6.3.8 Example of Gift Duty Assessment:

Gift made to D on 14 August 1979 of $12,000
Gift made to E on 18 November 1979 of $12,000
Gift made to F on 31 October 1980 of $25,000
Duty assessment is as follows:

Gifts to D and E aggregated - $24,000
Gift to E and F aggregated - $37,000

Duty on gift to D is calculated as:

$$\frac{12,000}{24,000} \times 650 = \$325.00$$

Duty on gift to E yields more revenue when aggregated with gift to F, being charged with duty at a higher rate that if aggregated with gift to D.

Therefore, duty on gift to E is

$$\frac{12,000}{37,000} \times 2,650 = \$ 859.46$$

Duty on gift to F is

$$\frac{25,000}{37,000} \times 2,650 = \$1,790.54$$

Total gift duty for gifts to D, E, and F: $2,975.00

This calculation has been performed with hindsight, after all gifts are known. However, it must be realised that Gift Statements would be filed for each gift (as they exceed $8,000), and that gift duty would be assessed on those statements. On a progressive basis, therefore, the duty assessment is as follows:

14 August 1979

Total gifts	$12,000
Gift Duty payable	Nil

18 November 1979

Total gifts for previous 12 months were $24,000		
Gift Duty payable apportioned:	$ 650.00	
Gift to D:		
$\frac{12,000}{24,000}$ x 650.00 =		$ 325.00
Gift to E:		
$\frac{12,000}{24,000}$ x 650.00 =		$ 325.00

31 October 1980

Total gifts for previous 12 months were $37,000		
Gift duty payable apportioned:	$ 2,650	
Gift to E:		
$\frac{12,000}{37,000}$ x 2,650 =	$ 859.46	
less duty already paid =	$ 325.00	
		$ 534.46
Gift to F:		
$\frac{25,000}{37,000}$ x 2,650.00 =		$1,790.54
Total gift duty for gifts to D, E and F:		$2,975.00

As can be seen, the total gift duty is unaltered.

6.4 APPENDICES

APPENDIX I.

Rates of Estate Duty

PART A

PERSONS DYING BETWEEN 1 APRIL 1982
AND 31 MARCH 1983 (inclusive)

Final Balance		Rate of Duty
Up to	$300,000	Nil
Over	$300,000	40% of excess over $300,000

PART B

PERSONS DYING BEFORE 1 APRIL 1983
AND 31 MARCH 1984 (inclusive)

Final Balance		Rate of Duty
Up to	$350,000	Nil
Over	$350,000	40% of excess over $350,000

PART C

PERSONS DYING ON OR AFTER 1 APRIL 1984

Final Balance		Rate of Duty
Up to	$450,000	Nil
Over	$450,000	40% of excess over $450,000

APPENDIX II

TABLES FOR VALUATION OF PENSIONS ETC.

Table A

Present Value of Annuity or Other Interest for Life of MALE or Expectant on Death of MALE

Years of Age	Expectation of Life of Male	Present Value of $1 per Annum	Present Value of $1 Payable on Death	Present Value of Income on Capital of $1 for Life
	Years	$	$	$
0	68.29	19.28531	0.03573	0.96427
1	69.03	19.31080	0.03446	0.96554
2	68.17	19.28117	0.03594	0.96406
3	67.27	19.24885	0.03756	0.96244
4	66.33	19.21357	0.03932	0.96068
5	65.39	19.17665	0.04117	0.95883
6	64.44	19.13758	0.04312	0.95688
7	63.48	19.09622	0.04519	0.95481
8	62.53	19.05334	0.04733	0.95267
9	61.56	19.00747	0.04963	0.95037
10	60.60	18.95988	0.05201	0.94799
11	59.63	18.90948	0.05453	0.94547
12	58.66	18.85664	0.05717	0.94283
13	57.69	18.80124	0.05994	0.94006
14	56.74	18.74441	0.06278	0.93722
15	55.79	18.68488	0.06576	0.93424
16	54.86	18.62391	0.06880	0.93120
17	53.92	18.55941	0.07203	0.92797
18	53.00	18.49340	0.07533	0.92467
19	52.07	18.42335	0.07883	0.92117
20	51.15	18.35084	0.08246	0.91754
21	50.23	18.27503	0.08625	0.91375
22	49.32	18.19663	0.09017	0.90983
23	48.40	18.11378	0.09431	0.90569
24	47.48	18.02716	0.09864	0.90136
25	46.56	17.93660	0.10317	0.89683
26	45.63	17.84085	0.10796	0.89204
27	44.70	17.74068	0.11297	0.88703
28	43.76	17.63473	0.11826	0.88174
29	42.83	17.52505	0.12375	0.87625
30	41.89	17.40904	0.12955	0.87045

Table A - continued

Present Value of Annuity or Other Interest for Life of MALE or Expectant on Death of MALE - continued

Years of Age	Expectation of Life of Male	Present Value of $1 per Annum	Present Value of $1 Payable on Death	Present Value of Income on Capital of $1 for Life
	Years	$	$	$
31	40.96	17.28896	0.13555	0.86445
32	40.03	17.16314	0.14184	0.85816
33	39.10	17.03125	0.14844	0.85156
34	38.17	16.89325	0.15534	0.84466
35	37.24	16.74887	0.16256	0.83744
36	36.32	16.59947	0.17003	0.82997
37	35.40	16.44326	0.17784	0.82216
38	34.48	16.27992	0.18600	0.81400
39	33.57	16.11105	0.19445	0.80555
40	32.65	15.93259	0.20337	0.79663
41	31.74	15.74811	0.21259	0.78741
42	30.83	15.55535	0.22223	0.77777
43	29.92	15.35394	0.23230	0.76770
44	29.02	15.14570	0.24271	0.75729
45	28.13	14.92971	0.25351	0.74649
46	27.25	14.70681	0.26466	0.73534
47	26.38	14.47697	0.27615	0.72385
48	25.52	14.24019	0.28799	0.71201
49	24.67	13.99650	0.30018	0.69982
50	23.83	13.74593	0.31270	0.68730
51	23.00	13.48857	0.32557	0.67443
52	22.18	13.22161	0.33892	0.66108
53	21.38	12.95106	0.35245	0.64755
54	20.59	12.67399	0.36630	0.63370
55	19.82	12.39437	0.38028	0.61972
56	19.06	12.10793	0.39460	0.60540
57	18.32	11.81622	0.40919	0.59081
58	17.60	11.52338	0.42383	0.57617
59	16.89	11.22607	0.43870	0.56130
60	16.19	10.92067	0.45397	0.54603
61	15.50	10.60871	0.46959	0.53044
62	14.82	10.29307	0.48535	0.51465
63	14.16	9.97560	0.50122	0.49878
64	13.52	9.65621	0.51719	0.48281
65	12.90	9.34054	0.53297	0.46703
66	12.29	9.01705	0.54915	0.45085

Table A - continued

Present Value of Annuity or Other Interest for Life of MALE or Expectant on Death of MALE - continued

Years of Age	Expectation of Life of Male	Present Value of $1 per Annum	Present Value of $1 Payable on Death	Present Value of Income on Capital of $1 for Life
	Years	$	$	$
67	11.71	8.70177	0.56491	0.43509
68	11.14	8.38437	0.58078	0.41922
69	10.59	8.06670	0.59666	0.40334
70	10.05	7.75097	0.61245	0.38755
71	9.53	7.43320	0.62834	0.37166
72	9.01	7.11396	0.64430	0.35570
73	8.51	6.79196	0.66040	0.33960
74	8.03	6.48255	0.67587	0.32413
75	7.57	6.17217	0.69139	0.30861
76	7.13	5.87436	0.70628	0.29372
77	6.71	5.58028	0.72099	0.27901
78	6.31	5.29600	0.73520	0.26480
79	5.92	5.01599	0.74920	0.25080
80	5.55	4.73990	0.76300	0.23700
81	5.19	4.47126	0.77644	0.22356
82	4.84	4.20411	0.78979	0.21021
83	4.51	3.94555	0.80272	0.19728
84	4.19	3.69482	0.81526	0.18474
85	3.89	3.45545	0.82723	0.17277
86	3.60	3.21687	0.83916	0.16084
87	3.33	2.99474	0.85026	0.14974
88	3.07	2.78084	0.86096	0.13904
89	2.83	2.57640	0.87118	0.12882
90	2.60	2.37771	0.88111	0.11889
91	2.39	2.19631	0.89018	0.10982
92	2.19	2.02354	0.89882	0.10118
93	2.01	1.86805	0.90660	0.09340
94	1.84	1.71429	0.91429	0.08571
95	1.68	1.56916	0.92154	0.07846
96	1.53	1.43311	0.92834	0.07166
97	1.39	1.30612	0.93469	0.06531
98	1.27	1.19728	0.94014	0.05986
99	1.15	1.08844	0.94558	0.05442
100	1.05	0.99773	0.95011	0.04989

Table B

Present Value of Annuity or Other Interest for Life of FEMALE or Expectant on Death of FEMALE

Years of Age	Expectation of Life of Female	Present Value of $1 per Annum	Present Value of $1 Payable on Death	Present Value of Income on Capital of $1 for Life
	Years	$	$	$
0	72.43	19.41600	0.02920	0.97080
1	72.90	19.42934	0.02853	0.97147
2	72.05	19.40521	0.02974	0.97026
3	71.12	19.37756	0.03112	0.96888
4	70.18	19.34831	0.03258	0.96742
5	69.23	19.31737	0.03413	0.96587
6	68.26	19.28427	0.03579	0.96421
7	67.30	19.24994	0.03750	0.96250
8	66.33	19.21357	0.03932	0.96068
9	65.35	19.17505	0.04125	0.95875
10	64.37	19.13464	0.04327	0.95673
11	63.39	19.09226	0.04539	0.95461
12	62.41	19.04779	0.04761	0.95289
13	61.42	19.00067	0.04997	0.95003
14	60.44	18.95172	0.05241	0.94759
15	59.47	18.90092	0.05495	0.94505
16	58.50	18.84765	0.05762	0.94238
17	57.53	18.79180	0.06041	0.93959
18	56.56	18.73325	0.06334	0.93666
19	55.60	18.67252	0.06637	0.93363
20	54.64	18.60887	0.06956	0.93044
21	53.67	18.54147	0.07293	0.92707
22	52.71	18.47156	0.07642	0.92358
23	51.75	18.39830	0.08008	0.91992
24	50.79	18.32154	0.08392	0.91608
25	49.83	18.24110	0.08795	0.91205
26	48.87	18.15682	0.09216	0.90784
27	47.92	18.06947	0.09653	0.90347
28	46.96	17.97698	0.10115	0.89885
29	46.01	17.88108	0.10595	0.89405
30	45.06	17.78043	0.11098	0.88902
31	44.11	17.67502	0.11625	0.88375
32	43.16	17.56461	0.12177	0.87823
33	42.21	17.44898	0.12755	0.87245
34	41.26	17.32787	0.13361	0.86639
35	40.32	17.20238	0.13988	0.86012

Table B - continued

Present Value of Annuity or Other Interest for Life of FEMALE or Expectant on Death of FEMALE - continued

Years of Age	Expectation of Life of Female	Present Value of $1 per Annum	Present Value of $1 Payable on Death	Present Value of Income on Capital of $1 for Life
	Years	$	$	$
36	39.38	17.07102	0.14645	0.85355
37	38.44	16.93352	0.15332	0.84668
38	37.50	16.78959	0.16052	0.83948
39	36.57	16.64058	0.16797	0.83203
40	35.64	16.48470	0.17576	0.82424
41	34.71	16.32162	0.18392	0.81608
42	33.79	16.15293	0.19235	0.80765
43	32.88	15.97856	0.20107	0.79893
44	31.97	15.79638	0.21018	0.78982
45	31.06	15.60540	0.21973	0.78072
46	30.17	15.40991	0.22950	0.77050
47	29.29	15.20817	0.23959	0.76041
48	28.41	14.99774	0.25011	0.74989
49	27.54	14.78078	0.26096	0.73904
50	26.68	14.55732	0.27213	0.72787
51	25.82	14.32456	0.28377	0.71623
52	24.98	14.08804	0.29560	0.70440
53	24.14	13.83998	0.30800	0.69200
54	23.31	13.58470	0.32077	0.67923
55	22.49	13.32253	0.33387	0.66613
56	21.67	13.05019	0.34749	0.65251
57	20.87	12.77449	0.36128	0.63872
58	20.08	12.49093	0.37545	0.62455
59	19.30	12.19839	0.39008	0.60992
60	18.53	11.89933	0.40503	0.59497
61	17.77	11.59402	0.42030	0.57970
62	17.02	11.28238	0.43588	0.56412
63	16.28	10.95993	0.45200	0.54800
64	15.56	10.63620	0.46819	0.53181
65	14.84	10.30270	0.48487	0.51513
66	14.14	9.96598	0.50170	0.49830
67	13.45	9.62085	0.51896	0.48104
68	12.77	9.27160	0.53642	0.46358
69	12.11	8.92159	0.55392	0.44608
70	11.46	8.56256	0.57187	0.42813

Table B - continued

Present Value of Annuity or Other Interest for Life
of FEMALE or Expectant on Death of FEMALE - continued

Years of Age	Expectation of Life of Female	Present Value of $1 per Annum	Present Value of $1 Payable on Death	Present Value of Income on Capital of $1 for Life
	Years	$	$	$
71	10.83	8.20702	0.58965	0.41035
72	10.22	7.85036	0.60748	0.39252
73	9.63	7.49459	0.62527	0.37473
74	9.07	7.15080	0.64246	0.35754
75	8.53	6.80486	0.65976	0.34024
76	8.01	6.46966	0.67652	0.32348
77	7.52	6.13833	0.69308	0.30692
78	7.05	5.82022	0.70899	0.29101
79	6.59	5.49499	0.72525	0.27475
80	6.16	5.18940	0.74053	0.25947
81	5.74	4.88168	0.75592	0.24408
82	5.34	4.58319	0.77084	0.22916
83	4.96	4.29814	0.78509	0.21491
84	4.59	4.00823	0.79959	0.20041
85	4.24	3.73400	0.81330	0.18670
86	3.91	3.47191	0.82640	0.17360
87	3.60	3.21687	0.83916	0.16084
88	3.31	2.97829	0.85109	0.14891
89	3.04	2.75616	0.86219	0.13781
90	2.78	2.53320	0.87334	0.12666
91	2.54	2.32588	0.88371	0.11629
92	2.32	2.13584	0.89321	0.10679
93	2.12	1.96307	0.90185	0.09815
94	1.93	1.79592	0.91020	0.08980
95	1.75	1.63265	0.91837	0.08163
96	1.59	1.48753	0.92562	0.07438
97	1.45	1.36054	0.93197	0.06803
98	1.31	1.23356	0.93832	0.06168
99	1.19	1.12472	0.94376	0.05624
100	1.07	1.01587	0.94921	0.05079

Table C

Present Value of Annuity or Other Interest for Widowhood or Expectant on Termination of Widowhood

Years of Age	Expectation of Widowhood	Present Value of $1 per Annum For Widowhood	Present Value of $1 Payable on Termination of Widowhood	Present Value of Income on Capital of $1 for Widowhood
	Years	$	$	$
Up to 20	7.5	6.12479	0.69376	0.30624
21	8.2	6.59213	0.67039	0.32961
22	8.9	7.04336	0.64783	0.35217
23	9.8	7.59895	0.62005	0.37995
24	10.7	8.13101	0.59344	0.40656
25	11.5	8.58483	0.57076	0.42924
26	12.2	8.96931	0.55153	0.44847
27	12.8	9.28751	0.53562	0.46438
28	13.3	9.54509	0.52275	0.47725
29	13.7	9.74712	0.51264	0.48736
30	14.1	9.94674	0.50266	0.49734
31	14.4	10.09104	0.49545	0.50455
32	14.9	10.33156	0.48342	0.51658
33	15.3	10.51709	0.47415	0.52585
34	15.8	10.74614	0.46269	0.53731
35	16.3	10.96866	0.45157	0.54843
36	16.9	11.23044	0.43848	0.56152
37	17.6	11.52338	0.42383	0.57617
38	18.2	11.76874	0.41156	0.58844
39	18.8	12.00617	0.39969	0.60031
40	19.5	12.27376	0.38631	0.61369
41	20.3	12.56989	0.37151	0.62849
42	20.9	12.78526	0.36074	0.63926
43	21.4	12.95789	0.35211	0.64789
44	21.8	13.09463	0.34527	0.65473
45	22.0	13.16300	0.34185	0.65815
46	22.1	13.19556	0.34022	0.65978
47	22.2	13.22811	0.33859	0.66141
48	22.2	13.22811	0.33859	0.66141
49	22.1	13.19556	0.34022	0.65978
50	22.0	13.16300	0.34185	0.65815
51	21.8	13.09463	0.34527	0.65473
52	21.6	13.02626	0.34869	0.65131
53	21.3	12.92370	0.35381	0.64619
54	20.9	12.78526	0.36074	0.63926
55	20.5	12.64168	0.36792	0.63208
56	20.0	12.46221	0.37689	0.62311
57	19.6	12.31145	0.38443	0.61557

Table C - continued

Present Value of Annuity or Other Interest for Widowhood or Expectant on Termination of Widowhood - continued

Years of Age	Expectation of Widowhood	Present Value of $1 per Annum For Widowhood	Present Value of $1 Payable on Termination of Widowhood	Present Value of Income on Capital of $1 for Widowhood
	Years	$	$	$
Up to 58	19.1	12.12301	0.39385	0.60615
59	18.5	11.88745	0.40563	0.59437
60	18.0	11.68959	0.41552	0.58448
61	17.4	11.44028	0.42799	0.57201
62	16.8	11.18681	0.44066	0.55934
63	16.1	10.88140	0.45593	0.54407
64	15.4	10.56290	0.47186	0.52814
65	14.6	10.18725	0.49064	0.50936

For widows 66 years of age or over, the expectations of life and widowhood are deemed to be identical, and Table B applies for both purposes.

Table D

Present Value of Annuity or Other Interest for Period
Other Than Life or Expectant on Event Other Than Death

Years	Present Value of $1 per Annum for Period	Present Value of $1 Payable After Period	Present Value of Income on Capital of $1 for Period
	$	$	$
1	0.95238	0.95238	0.04762
2	1.85941	0.90703	0.09297
3	2.72325	0.86384	0.13616
4	3.54595	0.82270	0.17730
5	4.32948	0.78353	0.21647
6	5.07569	0.74622	0.25378
7	5.78637	0.71068	0.28932
8	6.46321	0.67684	0.32316
9	7.10782	0.64461	0.35539
10	7.72173	0.61391	0.38609
11	8.30641	0.58468	0.41532
12	8.86325	0.55684	0.44316
13	9.39357	0.53032	0.46968
14	9.89964	0.50507	0.49493
15	10.37966	0.48102	0.51898
16	10.83777	0.45811	0.54189
17	11.27407	0.43630	0.56370
18	11.68959	0.41552	0.58448
19	12.08532	0.39573	0.60427
20	12.46221	0.37689	0.62311
21	12.82115	0.35894	0.64106
22	13.16300	0.34185	0.65815
23	13.48857	0.32557	0.67443
24	13.79864	0.31007	0.68993
25	14.09394	0.29530	0.70470
26	14.37518	0.28124	0.71876
27	14.64303	0.26785	0.73215
28	14.89813	0.25509	0.74491
29	15.14107	0.24295	0.75705
30	15.37245	0.23138	0.76862
31	15.59281	0.22036	0.77964
32	15.80268	0.20987	0.79013

Table D - continued

Present Value of Annuity or Other Interest for Period Other Than Life or Expectant on Event Other Than Death - continued

Years	Present Value of $1 per Annum for Period	Present Value of $1 Payable After Period	Present Value of Income on Capital of $1 for Period
	$	$	$
33	16.00255	0.19987	0.80013
34	16.19290	0.19035	0.80965
35	16.37419	0.18129	0.81871
36	16.54685	0.17266	0.82734
37	16.71129	0.16444	0.83556
38	16.86789	0.15661	0.84339
39	17.01704	0.14915	0.85085
40	17.15909	0.14205	0.85795
41	17.29437	0.13528	0.86472
42	17.42321	0.12884	0.87116
43	17.54591	0.12270	0.87730
44	17.66277	0.11686	0.88314
45	17.77407	0.11130	0.88870
46	17.88007	0.10600	0.89400
47	17.98101	0.10095	0.89905
48	18.07716	0.09614	0.90386
49	18.16872	0.09156	0.90844
50	18.25592	0.08720	0.91280
51	18.33898	0.08305	0.91695
52	18.41807	0.07910	0.92090
53	18.49340	0.07533	0.92467
54	18.56514	0.07174	0.92826
55	18.63347	0.06833	0.93167
56	18.69854	0.06507	0.93493
57	18.76052	0.06197	0.93803
58	18.81954	0.05902	0.94098
59	18.87575	0.05621	0.94379
60	18.92929	0.05354	0.94646
61	18.98027	0.05099	0.94901
62	19.02883	0.04856	0.95144
63	19.07508	0.04625	0.95375
64	19.11912	0.04404	0.95596
65	19.16107	0.04195	0.95805

Table D - continued

Present Value of Annuity or Other Interest for Period Other Than Life or Expectant on Event Other Than Death - continued

Years	Present Value of $1 per Annum for Period	Present Value of $1 Payable After Period	Present Value of Income on Capital of $1 for Period
	$	$	$
66	19.20102	0.03995	0.96005
67	19.23907	0.03805	0.96195
68	19.27530	0.03623	0.96377
69	19.30981	0.03451	0.96549
70	19.34268	0.03287	0.96713
71	19.37398	0.03130	0.96870
72	19.40379	0.02981	0.97019
73	19.43218	0.02839	0.97161
74	19.45922	0.02704	0.97296
75	19.48497	0.02575	0.97425
76	19.50949	0.02453	0.97547
77	19.53285	0.02336	0.97664
78	19.55510	0.02225	0.97775
79	19.57628	0.02119	0.97881
80	19.59646	0.02018	0.97982
81	19.61568	0.01922	0.98078
82	19.63398	0.01830	0.98170
83	19.65141	0.01743	0.98257
84	19.66801	0.01660	0.98340
85	19.68382	0.01581	0.98419
86	19.69887	0.01506	0.98494
87	19.71321	0.01434	0.98566
88	19.72687	0.01366	0.98634
89	19.73987	0.01301	0.98699
90	19.75226	0.01239	0.98761
91	19.76406	0.01180	0.98820
92	19.77529	0.01124	0.98876
93	19.78599	0.01070	0.98930
94	19.79618	0.01019	0.98981
95	19.80589	0.00971	0.99029
96	19.81513	0.00924	0.99076
97	19.82394	0.00880	0.99120
98	19.83232	0.00838	0.99162
99	19.84030	0.00798	0.99202
100	19.84791	0.00760	0.99240

Appendix III

RATES OF GIFT DUTY

PART A

GIFTS MADE BETWEEN 22 JUNE 1979 AND 31 MARCH 1983 (inclusive)

Value of Dutiable Gifts Made Within 12 months	Amount and Rate of Duty				
$ 1 - 15,000	Nil				
15,001 - 20,000	$ 0	plus	5%	of excess over	$15,000
20,001 - 30,000	250	"	10%	"	20,000
30,001 - 40,000	1,250	"	20%	"	30,000
Over $40,000	3,250	"	25%	"	40,000

PART B

GIFTS MADE ON OR AFTER 1 APRIL 1984

Value of Dutiable Gifts Made Within 12 months	Amount and Rate of Duty				
$ 1 - 27,000	Nil				
27,001 - 36,000	$ 0	plus	5%	of excess over	$27,000
36,001 - 54,000	450	"	10%	"	36,000
54,001 - 72,000	2,250	"	20%	"	54,000
Over $72,000	5,850	"	25%	"	72,000

SECTION 7

INDEX

Accident Compensation Commission..... 2-120
, levy..... 5-29
, receipts..... 5-12
Accountancy Fees..... 2-128
Addington Stock Sales, beef cattle..... 1-22
, sheep..... 1-5
Administrator of Estates..... 6-11
Administration Expenses..... 2-115
Aerial sowing of seed, cost of..... 2-67
Aerial spraying, costs of..... 2-95
Aerial spreading of fertiliser, cost of..... 2-66
Aerosol markers, cost of.....2-25, 2-75
Aggregation of gifts..... 6-19
Air freight rates..... 2-59
Airstream Anti-dust Helmet..... 2-252
Aluminium irrigation pipe, cost of..... 2-238
Allowable Debts, for Estate Duty..... 6-6
Allowances, Farming Investment..... 5-41
, First Year Depreciation..... 5-38
, Ordinary Depreciation..... 5-38
Alsike clover, seed dressing charge..... 2-32
Amuri Oats, seed cost ex store..... 2-68
Anenomes, bulb cost..... 2-73
Angora mohair, prices paid for..... 1-31
Animal Crushes, cost of..... 2-248
Animal Health, costs of..... 2-16
Annual Return Dates, for taxpayers..... 5-68
Antibiotics, cost of..... 2-22
Antifreeze, cost of..... 2-104
Aotea wheat, price for milling standard..... 1-15
, seed cost ex store..... 2-68
Apanui Cocksfoot, herbage seed levy..... 2-31
, price paid to farmer for seed..... 1-20
, seed cost ex store..... 2-69
Apple Bags, cost of..... 2-253
Apples, and pears - quantities..... 4-26
, prices paid to growers (local)..... 1-35
Apricots, prices paid to growers (local)..... 1-35
Aprons, cost of..... 2-252
Arawa wheat, discount on..... 1-16
, price for milling standard..... 1-15
, seed cost ex store..... 2-68
Architectural Fees..... 2-129
Ariki ryegrass, herbage seed levy..... 2-32
, price paid to farmer for seed..... 1-20
, seed cost ex store..... 2-69
, seed dressing charge..... 2-32
Artificial Breeding, fees..... 2-28
Asparagus, levies..... 2-255

, prices paid to growers..... 1-37
, seed cost..... 2-71
Assessable Income..... 5-5
Assessment of estate duty..... 6-11
, gift duty..... 6-20
, taxation liability..... 5-9
Assets, depreciation of..... 5-38
Aster, seed costs..... 2-73
Auction rates (flowers, fruit and vegetables)..... 2-255
Augers, cost of..... 2-205
Avocados, levies..... 2-255
, prices paid to grower (local)..... 1-135
A.W.A.S.P. (Adjusted Weighted Average Sale Price)
for wool.....1-9, 1-44

B

Backpay, tax rebate..... 5-6
Bag ties, cost of..... 2-254
Bag hooks, cost of..... 2-250
Bag sewer, cost of..... 2-250
Bale hooks, cost of..... 2-250
Bale needles, cost of..... 2-250
Balers (big), cost of..... 2-203
(conventional), cost of..... 2-203
Baling charges, contract..... 2-34
Baling twine, cost of..... 2-48
Bank and Stock Company Charges..... 2-118
Banks, Trading..... 2-125
, Trustee Savings..... 2-127
Barley, prices..... 1-17
, drying charges..... 2-33
, gross margin..... 3-12
, production..... 4-18
, seed cost ex store..... 2-68
, seed dressing charges..... 2-32
Basic Price, for sheepmeats..... 1-42
Battens (Tanalised), cost of..... 2-147
Batteries (electric fencing), cost of..... 2-157
Beans, price paid for process freezing..... 1-18
, price paid for tick beans..... 1-18
, prices paid to growers (vegetables)..... 1-37
, seed costs..... 2-70
, seed dressing charges..... 2-32
Beef cattle, values - local trade..... 1-2
, meat exports schedule..... 1-21
Beef Plan fees..... 2-30
Beekeepers, depreciation allowed..... 6-40
Bees, costs of..... 2-257
, brushes, cost of..... 2-258
, feeders, cost of..... 2-258
, hives, cost of..... 2-256

Beetroot, prices paid to growers..... 1-37
, seed cost..... 2-71
Beneficiaries' Income..... 5-24
Berry Containers, cost of..... 2-254
Berryfruits, cost of plants..... 2-98
, levies..... 2-254
, prices for..... 1-36
Big balers, cost of..... 2-203
Bikes (farm), cost of..... 2-177
Bird netting, cost of..... 2-255
Bird scarers, cost of..... 2-222
Bitter blue lupins, seed cost ex store..... 2-68
Blackcurrants, cost of plants/cutting..... 2-98
, harvester, cost of..... 2-222
, levies..... 2-254
Bloat control..... 2-20
Blue peas, cost..... 2-69
Blueberries, cost of cuttings..... 2-98
, levies..... 2-255
Board and Lodging, payments to farm workers..... 2-5
Bonds, Farm Vendor Finance..... 5-11
, Inflation Adjusted Savings..... 5-11
, Post Office National Development..... 5-11
Booms (spray), cost of..... 2-216
Boom spraying, cost of..... 2-95
Boots, cost of..... 2-253
Borre lupins, seed cash ex store..... 2-68
Box Hire (for peas and small seeds)..... 2-31
Boysenberries, levies..... 2-255
, plant cost..... 2-98
Brambles, plant cost..... 2-98
Branding Outfits, cost of..... 2-25
Brass spray heads (irrigation), cost of..... 2-240
Breeding cows, local prices..... 1-23
Breeding expenses..... 2-28
Breeding stock prices, cattle..... 1-23
, sheep..... 1-6
Broadbean, seed cost..... 2-70
Broccoli (sprouting), price paid to farmer..... 1-37
, seed cost..... 2-70
Broiler chickens..... 1-34
Browntop, herbage seed levy..... 2-32
, price paid to farmer for seed..... 1-20
, seed dressing charges..... 2-32
Brussel Sprouts, price paid for process freezing..... 1-19
, price paid to growers..... 1-37
, seed cost..... 2-71
Budgeting, typical dairy farm expenses..... 2-41
Budgets, dairy..... 2-41
Building Insurance..... 2-118
Building Materials, cost of..... 2-234
Building Societies..... 2-121

Buildings, cost of..... 2-223
Buried mains (irrigation), cost of..... 2-239
Bulbs, air freight rates..... 2-60
, cost of..... 2-73
Bulls, meat export schedule..... 1-22
Butter beans, seed costs..... 2-70

C

Cabbage, prices paid to growers..... 1-37
, seed cost..... 2-70
Calculation of Estate Duty..... 6-10
, of Gift Duty..... 6-18
, of Taxable Income..... 5-10
Calfeteria equipment, cost of..... 2-26
Calving requisites..... 2-25
Cambridge rollers, cost of..... 2-189
Capsicum, prices paid to growers..... 1-37
Car, Expenses, in relation to taxation..... 5-27
, Depreciation..... 5-40
Carnation, seed cost..... 2-73
Carrots, gross margin..... 3-13
, prices paid to growers..... 1-37
, seed cost..... 2-70
Cartage rates, N.Z. Railways..... 2-53
, road..... 2-53
Cash cropping, Area and Production..... 4-17
, expenses..... 4-30
Cash Cropping..... 2-30
Cash Flows for Long Term Crops - Sweet Cherry..... 3-27
Cashmere (Prices)..... 1-32
Casual rates of pay, for dairy farm workers..... 2-3
, for market garden workers..... 2-10
, for orchard and vineyard workers..... 2-12
, for other farm workers..... 2-5
Cattle, bloat control..... 2-20
, cartage rates - road..... 2-53
, dipping costs..... 2-17
, dips, sprays and dressings..... 2-18
, drenching cost..... 2-20
, export meat schedule..... 1-21
, feeds, cost of..... 2-48
, values - dairy cattle..... 1-27
- local beef..... 1-22
- schedule..... 1-21
- store..... 1-23
, yards, cost of..... 2-231
Cauliflower, price paid to farmer, freezing..... 1-19
, fresh..... 1-37
, seed cost..... 2-71
Celery, prices paid to growers..... 1-38

Cellophane, cost of..... 2-254
Cement, cost of..... 2-235
Certification fees, for seeds..... 2-32
Chainsaws, cost of..... 2-211
Charitable Allowance, for Estate Duty..... 6-7
Chattels, as related to Gift Duty..... 6-17
, as exemption from Estate Duty..... 6-6
Cherries, prices paid to growers (local)..... 1-35
Chevon (goat meat), price paid for..... 1-30
Chewings Fescue, herbage seed levy..... 2-32
Chicken, meat, price paid for..... 1-34
Child Taxpayer - tax rebate..... 5-15
Chisel Ploughs and Subsoilers, cost of..... 2-179
Chou Moellier, seed dressing charge..... 2-32
Chrysanthemum, seed costs..... 2-73
Citrus Fruit, levies..... 2-255
Citrus Trees, cost of (retail)..... 2-97
Clearing of land, as Development Expenditure..... 5-42
Clover seed, dressing charges..... 2-32
, levies..... 2-31
, price paid to farmer for seed..... 1-20
, seed coating, cost of..... 2-69
, seed cost ex store..... 2-69
Coating (seed), cost of..... 2-69
Cocksfoot, herbage seed levy..... 2-31
, price paid to farmer for seed..... 1-20
, seed cost ex store..... 2-69
, seed coating, cost of..... 2-69
, seed dressing charges..... 2-32
Combine Harvesters, cost of..... 2-193
, running costs..... 2-114
Commercial Bills..... 2-126
Commercial Lending (R.B.F.C.) policy on..... 2-124
Commissions on Stock Sold..... 2-96
Community Water Supply Schemes..... 2-79
Company, tax systems for a..... 5-20
Concrete posts, cost of..... 2-145
Concrete tanks, cost of..... 2-165
Concrete water troughs, cost of..... 2-165
Concreting Requisites, cost of..... 2-235
Connectors (Irrigation), cost of..... 2-240
Consideration, definition of..... 6-16
Consolidated (seed) dressing and Store Handling Charges..... 2-32
Consultancy Charges..... 2-129
Consumable Aids to Trading Stock Production..... 5-32
Construction plywood, cost of..... 2-234
Contracting Charges for, baling..... 2-34
, cultivation..... 2-35
, dipping..... 2-16
, drilling and direct drilling..... 2-36
, fencing..... 2-160
, heading..... 2-33

, horticultural work..... 2-35
, post driving..... 2-160
, potato harvesting..... 2-36
, tree topping..... 2-36
, windrowing..... 2-34
Control Units (spray), cost of..... 2-217
Controllers (Irrigation), cost of..... 2-240
Cook wage (wool)..... 2-9
Cool Storage, cost of..... 2-228
Corrugated iron, cost of..... 2-234
Costs of Cultivation..... 2-109
County Stock Water Races..... 2-79
Courgettes, price paid to growers..... 1-38
Court Attendance Fees..... 2-130
Covered Yards, cost of..... 2-225
Cow lifter, cost of..... 2-250
Cows, local prices..... 1-22
, meat export schedule..... 1-21
Cradles and Chutes (sheep), cost of..... 2-249
Cranberries, cost of bushes..... 2-98
Crawler tractors, cost of..... 2-175
Crested Dogstail, herbage seed levy..... 2-31
, price paid to farmers for seed..... 1-20
, seed dressing charges..... 2-31
Crocuses, bulb cost..... 2-73
Crop Insurance..... 2-120
Crop Prices..... 1-15
Cropping Expenses..... 2-30
Cross 7-61 Wheat, seed cost..... 2-68
Crown Land, rental rates..... 2-128
Crushes (animal), cost of..... 2-248
Crutching Rates..... 2-8
Cucumbers, prices paid to growers..... 1-38
, seed cost..... 2-72
Cultivation Rates, contract..... 2-109
Cups and Claws (milking machines), cost of..... 2-37
Cultivation Costs..... 2-109
, contract..... 2-35
Cultivators, cost of..... 2-182
, rotary, cost of..... 2-185

D

Daffodils, bulb cost..... 2-73
Daggers' Rates..... 2-9
Dagging plant, cost of..... 2-75
Dahlia, seed costs..... 2-73
Dairy Cattle, Companies..... 2-122
, farm budget..... 2-41
, farm expenses - for budgeting purposes..... 2-41
, farm workers, wages for..... 2-3

, hygiene..... 2-39
, numbers..... 4-8
, ointments, soaps and teat protectants, costs of..... 2-39
, prices..... 1-27
, produce, prices for..... 1-24
, sanitizers, cost of..... 2-40
, sheds, costs of..... 2-231
, shed supplies.....2-36, 2-40
, Total Dairy Factory Production..... 4-11
Debt, Allowable - for Estate Duty purposes..... 6-6
Deductions, for tax purposes..... 5-13
Deer, feeds, cost of..... 2-50
, fencing cost guide..... 2-161
, gross margins..... 3-24
, numbers..... 4-13
, pens, cost of..... 2-250
, stock prices..... 1-33
, velvet prices and grading..... 1-32
, venison..... 1-33
Deferral of Development Expenditure..... 5-42
Dehorners, cost of..... 2-26
Dehorning bail, cost of..... 2-249
Delivery date, final for wheat..... 1-16
Dependant Relative, as tax rebate..... 5-16
Depreciation, in relation to taxation of farmers..... 5-38
Depreciation of, Fishing equipment..... 5-54
, Horticultural equipment..... 5-52
Detergents and Sanitizers (Dairy), cost of..... 2-39
Development Expenditure, for taxation purposes..... 5-42
Development Expenditure and Interest, Recover of..... 5-44
Development, Specific Policies of R.B.F.C..... 2-123
Dipping Charges, sheep..... 2-16
Dips, types, sizes of packs etc. - cattle and sheep..... 2-16
Discounts on wheat price..... 1-16
Discs, cost of..... 2-180
Disinfectants, cost of..... 2-23
Disposition of property..... 6-17
Distance Licences, Motor Vehicle..... 2-101
Dividends, in relation to taxation..... 5-12
Docking Cradles and Pens, cost of..... 2-249
Docking equipment, cost of..... 2-26
Dog, chains, cost of..... 2-250
, feed, cost of..... 2-50
, kennels, cost of..... 2-230
, registration fees..... 2-16
Dogstail, price paid to farmers for..... 1-20
, seed coating, cost of..... 2-69
, seed dressing charges..... 2-32
Donation and School Fees, as tax rebates..... 5-17
Donor, definition of..... 6-16
Drainage, cost of materials..... 2-236

Drenches, cost of - cattle..... 2-20
- sheep..... 2-19
Drenching guide, sheep and cattle..... 2-17
, equipment, cost of..... 2-26
Dressing Charges for Seeds..... 2-32
Drilling, crop seed (direct and precision), contract..... 2-36
Drills and Seed Boxes, cost of..... 2-189
Drying Charges, for grain and seed..... 2-33
Durolite, cost of..... 2-234
Dust Guard Masks, cost of..... 2-252
Dwarf beans, seed cost..... 2-70
Dwellings, cost of..... 2-223
, insurance..... 2-118

E

Ear Muffs, cost of..... 2-252
Eartags, cost of,..... 2-23
Education, exemptions from Gift Duty..... 6-17
Egg Marketing Authority..... 1-34
Egg plants, seed cost..... 2-72
Eggs, Entitlement Levies Licences..... 1-34
, prices paid for..... 1-34
Electrical Fencing Components, cost of..... 2-157
Electricity, cost of..... 2-42
, rates for irrigation..... 2-45
, South Island Concession..... 2-47
, taxation rebates..... 5-28
Electric grinders, cost of..... 2-73
Embedders (honey), cost of..... 2-257
Emery paper, cost of..... 2-75
Employment Related Expenses, permitted deductions for taxation..... 5-13
Employment Scheme, Farm..... 2-15
Employer's Liability..... 2-120
Encouragement, Forestry Grants..... 1-46
Endive, seed costs..... 2-72
Energy Conservation Expenditure..... 5-31
Energisers (Electric Fence), cost of..... 2-157
Enterprise Analysis..... 3-3
Equalisation Scheme, Farm Income..... 5-49
Estate and Gift Duty Act, 1968..... 6-4
Estate Notional - definition..... 6-4
Estate Duty, allowable debts..... 6-6
, assessment and collection of..... 6-11
, calculation of..... 6-10
, charitable allowance..... 6-7
, definition of..... 6-4
, example of..... 6-12
, exemptions from..... 6-6
, introduction..... 6-4

, matrimonial home allowance..... 6-7
, property liable to..... 6-4
, reliefs..... 6-10
, scale rates of..... 6-22
, Valuation of Estate Duty..... 6-8
, Valuation of successions..... 6-8
Estimates of Provisional Income..... 5-50
Ewe prices (see sheep)
Exemptions from Estate Duty..... 6-6
, Gift Duty..... 6-17
, Income Taxation..... 5-11
, Stamp Duty..... 2-132
Exemption of Matrimonial Homes from Estate Duty..... 6-7
Expenses, Dairy Farm - for budgeting purposes..... 2-41
, Farm - for taxation purposes..... 5-27
Export Incentives..... 5-57
Export Market Development, Activities Incentives..... 5-62
, Expenditure..... 5-60
Export Meat Schedules, cattle..... 1-21
, pigs..... 1-28
, sheep and lamb..... 1-3
Export Performance Incentive for Qualifying Goods and Services..... 5-60
Export Program Grants Scheme..... 5-63

F

Family Partnerships, Taxation of..... 5-21
Family Rebate..... 5-15
Fans (grain driers), cost of..... 2-206
Farm, aids, cost of..... 2-248
, bikes, cost of..... 2-178
, debts, Restructuring of..... 2-124
, dwellings expenditure, taxation purposes..... 5-28
, employment scheme..... 2-15
, expenditure..... 2-2
, expenses, Types of (Taxation Purposes)..... 5-27
, forestry..... 5-44
, Income Equalisation Scheme..... 5-48
, income, Types of (Taxation Purposes)..... 5-26
, machinery, accessories, cost of..... 2-220
, cost of..... 2-169
, Ownership Savings, Accounts..... 2-126
, Tax Rebates..... 5-17
, revenue..... 1-3
, settlement, Policies (R.B.F.C.)..... 2-123
, shelter trees, cost of..... 2-96
Farm Employment Scheme..... 2-15
Farmers, Taxation of..... 5-25
Farming Investment Allowance..... 5-41

Feed, (Stock), cost of..... 2-48
, barley, price paid to farmer for..... 1-17
, mixers, cost of..... 2-208
, supplements, cost of..... 2-52
Fees, Registration and Hydatids Control - for dogs..... 2-16
Fees and Commissions, Stock and Station Agencies..... 2-96
Fence Types, pricing..... 2-161
Fencing, materials, cost of..... 2-144
, tools, cost of..... 2-155
Fencing Aids, cost of..... 2-152
Fencing Rates..... 2-160
Fertiliser, Expense Deferral..... 5-44
, Horticultural..... 2-66
, Prices..... 2-61
, Rail cartage rates (bulk)..... 2-53
, Road cartage rates..... 2-54
, Spreaders and topdressers, cost of..... 2-191
, Spreading Charges..... 2-66
, Transport by Air and Sea..... 1-15
Fescue, seed dressing charges..... 2-32
Field Peas, gross margin (ex greenfeed oats)..... 3-7
, price paid to farmer for seed..... 1-18
, seed cost ex store..... 2-69
, seed dressing charges..... 2-32
Field tiles, cost of..... 2-236
Finance, Sources of..... 2-121
First Farms, Stamp Duty Exemptions for..... 2-132
First Home Mortgage Interest - tax rebate on..... 5-17
First Year Depreciation Allowances..... 5-38
Fish Farming - Development expenditure allowable for taxation..... 5-55
Fishing, Boats, spreading of repair costs..... 5-54
, Depreciation..... 5-54
, Industry, Taxation Allowances relating to..... 5-54
, Investment Allowance..... 5-55
, Loans (R.B.F.C.) Specific Loan Policies..... 2-124
, Vessel Ownership Savings Tax Rebates..... 5-17
Fleece weighing trays, cost of..... 2-75
Flowers, air freight rates..... 2-60
Flower seeds, cost of..... 2-73
Foam maker (electric), cost of..... 2-220
Footrotting equipment, cost of..... 2-26
Footrot troughs, cost of..... 2-250
Forage Harvesters, cost of..... 2-194
Forestry, Labour costs..... 2-140
Forestry Encouragement, Grants..... 1-46
Forklifts, cost of..... 2-221
Formalin, cost of..... 2-27
Freesia, bulb cost..... 2-73
, seed cost..... 2-73
Freezer Beans price paid to farmer..... 1-18
Freezer Peas price paid to farmer..... 1-18

Freight and Cartage Rates, Air..... 2-60
, Cooltainers..... 2-61
, N.Z. Railways'..... 2-53
, Road..... 2-53
Frost Alarms, cost of..... 2-223
Fruit, air freight rates..... 2-59
, plants, cost of (retail)..... 2-98
, production, prices for fruit..... 1-35
, trees, cost of (retail)..... 2-97
Fuel, Oil and Grease, cost of..... 2-104
Fumigants, cost of..... 2-91
Fungicides, cost of..... 2-89

G

Galvanised Weatherboard, cost of..... 2-234
Gambrels, cost of..... 2-250
Gamenya wheat, seed cost ex store..... 2-68
Garages, cost of..... 2-224
Garden Peas, price paid to farmers..... 1-18
, seed cost ex store..... 2-69
, seed dressing charges..... 2-32
Garlic, prices paid to grower..... 1-38
Gate Fittings, cost of..... 2-149
Gates, cost of..... 2-147
Generators, Portable, cost of..... 2-212
Geranium, seed cost..... 2-73
Gerbera, seed cost..... 2-73
Giant Kale, price paid to farmer for seed..... 1-20
Gift, aggregation of..... 6-19
, definition of..... 6-15
, statement..... 6-20
Gift Duty, aggregation of gifts..... 6-19
, assessment and collection of..... 6-20
, calculation of..... 6-18
, definition of..... 6-15
, disposition of matrimonial property..... 6-17
, example of..... 6-21
, exemptions from..... 6-17
, scale rates of..... 6-35
, valuation of gift..... 6-16
- date of valuation..... 6-16
Glasshouses, cost of..... 2-227
Gloves, cost of..... 2-252
Goat, chevon production..... 1-30
, milk, prices paid for..... 1-30
, production..... 1-29
, stock prices..... 1-31
Goggles, cost of..... 2-252

Gooseberries, cost of bushes..... 2-98
Gorse-cutting, cost of contract..... 2-36
Grader blades, cost of..... 2-220
Grain, augers, cost of..... 2-205
, cartage rates - Road..... 2-54
, dryers, cost of..... 2-206
, handling equipment, cost of..... 2-205
, silos, cost of..... 2-228
Grain and Seed Drying Charges..... 2-33
Grants, Forestry Encouragement..... 1-46
Grape harvester, cost of..... 2-222
Grapefruit, prices paid to grower (local)..... 1-35
, tree costs..... 2-97
Grapes, prices paid to grower (local)..... 1-35
, wine production and sales..... 4-27
Grass seed, drying charges..... 2-33
, prices paid to farmer..... 1-20
, road cartage rates..... 2-55
Grazing Fees..... 2-52
Grease, cost of..... 2-104
Greenhouses, cost of..... 2-227
Greenkeepers, Sextons wages..... 2-14
Grinder Papers, cost of..... 2-75
Gross Margins, Barley..... 3-12
, Carrots..... 3-13
, Deer..... 3-24
, Field Pea (ex greenfeed oats)..... 3-7
, Lucerne - dryland..... 3-13
, New Grass for Nui Seed (ex peas)..... 3-8
, 2nd year of New Grass for White Clover seed.. 3-10
, Pasture..... 3-11
, Sheep..... 3-17
, Sweet Cherry..... 3-27
, Tomatoes - glasshouse..... 3-15
, Vining Peas..... 3-12
, Wheat - Oroua (ex pasture)..... 3-4
, White Clover (ex wheat)..... 3-5
Gross Margins - A Critical Evaluation..... 3-3
Ground Spraying, cost of..... 2-94
Ground spreading of fertiliser..... 2-60
Grower Retention Levy, Wool..... 1-10
Growing Crops, fruits and vegetables, valuation for taxation..... 5-32
Growth Regulants, cost of..... 2-92
Gudgeons, cost of..... 2-149
Gumboots, cost of..... 2-253
Gun Spraying, cost of..... 2-94
Gypsophyla, seed cost..... 2-73

Hammer Mills, cost of..... 2-207
Hamua Red Clover, price to farmers for seed..... 1-20
, seed cost ex store..... 2-69
Handpieces, Shearing - cost of..... 2-73
Hardware (micro-computer)..... 2-246
Harrows (conventional), cost of..... 2-188
Hats (bee), cost of..... 2-258
Hay, apron, cost of..... 2-252
, barns, cost of..... 2-226
, cargage rates, Road..... 2-56
, conditioners, cost of..... 2-202
, handling Equipment, cost of..... 2-207
, hooks, cost of..... 2-250
, insurance..... 2-120
, rakes, cost of..... 2-202
, sheds, cost of..... 2-226
Header Running Costs..... 2-114
Headers, cost of..... 2-193
Heading Charges, contract..... 2-33
Heading/Harvesting costs..... 2-114
Heavy rollers, cost of..... 2-189
Heifers, breeding, local prices..... 1-23
, meat export schedule..... 1-21
, local prices..... 1-22
Helicopters, cost of (for aerial spraying).....2-93, 2-94
Herbage seed levy..... 2-21
Herbicides, cost of..... 2-79
Herd Testing Fees, dairy cows..... 2-29
, goats..... 2-29
Hilgendorf wheat, price paid to farmer..... 1-15
, seed cost ex store..... 2-68
Hinges, cost of..... 2-149
Hives, cost of..... 2-256
Hoggets, road cartage rates..... 2-56
, schedule prices..... 1-4
Home Ownership Savings Tax Rebates..... 5-17
Home Vendor Mortgage Interest - tax rebate on..... 5-17
Honey, cartons, cost of..... 2-257
, containers, cost of..... 2-257
, embedders, cost of..... 2-257
, extractors, cost of..... 2-257
, tanks, cost of..... 2-257
, pumps, cost of..... 2-257
Hops, production..... 4-28
Hoofcutters, cost of..... 2-26
Horse feed, cost of..... 2-50
Horticultural contracting..... 2-35
, equipment..... 2-255
, Fertilisers, cost of..... 2-66
, irrigation equipment..... 2-245

, levies..... 2-254
, machinery, cost of..... 2-221
, packaging, cost of..... 2-253
, spray Equipment, cost of..... 2-219
Horticulture, Tax Provisions for..... 5-50
Hoses and Hose Reels, cost of..... 2-216
Housekeeper/Child Care, Rebate for tax..... 5-17
Hubodometers, requirement for..... 2-103
Huia White Clover, herbage seed levy..... 2-31
, price paid to farmer for seed..... 1-20
, seed cost ex store..... 2-69
Hunua Red Clover, herbage seed levy..... 2-31
Hurdles, cost of..... 2-147
Hyacinth, bulb cost..... 2-73

I

Impact Sprinklers (Irrigation), cost of..... 2-240
Income, Assessable..... 5-12
, Returns, Dates for the returning of..... 5-9
, IR12, IR13..... 5-68
, IR3, IR3B, IR3F, IR4, IR5, IR5A..... 5-67
, Tax, systems of..... 5-5
, Taxation..... 5-5
Income Equalisation Scheme..... 5-49
Income Levelling Schemes..... 5-48
Income Tax Act, 1976..... 5-5
Increments, Monthly Storage - Barley..... 1-17
- Wheat..... 1-15
Individual, Example of taxation of..... 5-19
, Taxation of..... 5-10
Insecticides, Aerial spraying charges.....2-93, 2-94
, Types and Prices of..... 2-86
Insulators, cost of..... 2-158
Insurance, premiums, as special tax exemptions..... 5-14
, examples of..... 2-118
Interest Rates..... 2-121
Interest, in relation to taxation..... 5-11
Irrigation, Assistance for..... 2-124
, charges..... 2-73
, cost of material..... 2-238
Irrigators, cost of..... 2-241
Irrometers, cost of..... 2-240

K

Kale, price paid to farmer for seed..... 1-20
, seed cost ex store..... 2-69
, seed dressing charges..... 2-32
Karamu wheat, discount on..... 1-16

, price for milling standard..... 1-15
, seed cost ex store..... 2-68
Kiwifruit, levies..... 2-255
, plant prices..... 2-97
, price paid to grower (local)..... 1-35
Kopara wheat, price paid to farmer for milling standard..... 1-15
, seed cost ex store..... 2-68
Kumara, price paid to grower..... 1-38

L

Ladders, cost of..... 2-251
Lambing Requisites, cost of..... 2-25
Lambs, local meat price..... 1-5
, road cartage rates for..... 2-56
, schedule prices..... 1-4
, supplementary minimum price..... 1-41
Land, value for Gift..... 6-16
Land and Settlement Board Finance..... 2-122
Lands and Survey Department..... 2-122
Land Settlement Board..... 2-122
Land Transfer Fees..... 2-140
Lease Finance..... 2-126
Leeks, price paid to grower..... 1-38
, seed cost..... 2-72
Legal Expenses, in relation to farmer taxation..... 5-27
Legal Fees 2-132
Leggings, cost of..... 2-253
Lemons, plant cost..... 2-97
, price paid to growers..... 1-35
Lettuce, price paid to grower..... 1-38
, seed cost..... 2-70
Levies, horticultural..... 2-254
, imposed on lambs grown..... 1-4
, imposed on wheat grower..... 1-16
, imposed on woolgrowers..... 1-10
Licencing Fees for vehicles..... 2-99
Life Assurance, in relation to Estate Duty..... 6-9
Life Insurance Companies..... 2-122
Lime, cost at works..... 2-67
, cartage rates - Road..... 2-56
, spreading cost..... 2-67
Lincoln College Farm Advisory Service..... 2-130
, Property Management Service..... 2-131
Linseed, seed dressing charges..... 2-32
Live pig sales..... 1-29
Livestock, cartage rates - Road..... 2-56
Livestock, Nil Value..... 5-35
, Valuation of..... 5-31
Loaders and Forklifts, cost of..... 2-221
Loading Ramps, cost of..... 2-249

Loans, Development..... 2-123
, Fishing..... 2-124
, Farm Settlement..... 2-132
, Irrigation..... 2-124
, Stock..... 2-123
Lobelia, seed costs..... 2-73
Local Meat Prices, Sheep and Lambs..... 1-5
, Cattle..... 1-22
Lodgings, Farm Employees' - in relation to farmer taxation.. 5-28
Losses by Companies - in relation to taxation..... 5-21
Lotus, herbage seed levy..... 2-31
Low Income Family, Rebate for Tax..... 5-16
Lucerne, gross margin - dryland..... 3-13
, herbage seed levy..... 2-32
, price paid to farmer for seed..... 1-20
, seed coating, cost of..... 2-69
, seed cost ex store..... 2-69
, seed dressing charge..... 2-32
Lupins, price paid to farmer for seed..... 1-19
, seed cost ex store..... 2-68
, seed dressing charges..... 2-32

M

Macadamia Nuts, production..... 4-20
Maize, seed cost ex store..... 2-68
Maku lotus, herbage seed levy..... 2-31
Malting barley, contract price..... 1-17
, storage increment..... 1-17
Manawa ryegrass, herbage seed levy..... 2-32
, price paid to farmer for seed..... 1-20
, seed cost ex store..... 2-69
, seed dressing cost..... 2-32
Mandarins, prices paid to grower..... 1-35
, tree costs..... 2-97
Manure Spreaders, cost of..... 2-192
Maple Peas..... 2-69
Mapua Oats, seed cost ex store..... 2-68
Marigolds, seed cost..... 2-73
Markers (animal), cost of..... 2-25
(spraying), cost of..... 2-92
Market Garden Workers' Wages..... 2-10
Marrows, price paid to grower..... 1-38
, seed cost..... 2-72
Mating Management Aids, cost of..... 2-25
Matrimonial Home, Allowance for Estate Duty..... 6-7
, Exemption from Estate Duty..... 6-6
Matua Prairie Grass, herbage seed levy..... 2-31
, price paid to farmer for seed..... 1-20
, seed dressing charges..... 2-32
Meat Chickens, prices paid for..... 1-34

Meat Prices, Local - cattle..... 1-22
- pigs..... 1-29
- sheep..... 1-4
Meat Schedules, Export - cattle..... 1-21
- pigs..... 1-28
- sheep and lamb..... 1-3
Mechanical Harvesters (horticultural), cost of..... 2-222
Mechanical Protection (crops), cost of..... 2-222
Medium Stemmed Kale, price paid to farmer for seed..... 1-20
Metabolics, cost of..... 2-23
Micro-Computers, available models and cost..... 2-247
, farmers requirements..... 2-245
, general guidelines..... 2-246
, guides for purchase..... 2-245
Milk, Goat..... 1-30
, Prices paid for whole milk..... 1-24
Milking machines, cost of..... 2-36
Milking Shed Equipment, cost of..... 2-37
Milking Sheds, cost of..... 2-231
Mineral supplements (livestock feeds), cost of..... 2-51
Minimum Floor Price, for wool..... 1-8
Minimum Price for Pork, pig schedule..... 1-28
Minimum Price Schemes, N.Z. Government Supplementary Meat... 1-41
, N.Z. Government Supplementary Milkfat 1-41
, N.Z. Wool Board.....1-8, 1-44
Miticides, cost of..... 2-91
Moata Ryegrass, price paid to farmer for seed..... 1-20
Mohair, prices paid for..... 1-31
Mole Drain Ploughs, cost of..... 2-179
Mole Drainage, cost of..... 2-237
Motor Bikes, cost of..... 2-177
Motor Registration and Licensing..... 2-99
Motor Spirits Duty..... 2-103
Motor Vehicle Fuel, Licencing and Road User Charges..... 2-100
Motor Vehicle Fuel Taxes..... 2-103
Mower-Conditioners, cost of..... 2-201
Mowers, cost of..... 2-198
Mowing Charges, contract..... 2-35
Mulchers, cost of..... 2-194
Mushrooms, price paid to growers..... 1-38
Mustard, seed dressing charges..... 2-32
Mutton, schedule prices..... 1-3
, supplementary minimum price..... 1-41

N

Nails, cost of..... 2-234
National Superannuation Receipts..... 5-12
National Water and Soil Conservation Authority Grants..... 1-48
Nectarines, prices paid to growers..... 1-35

Nerines, bulb cost..... 2-73
New Grass for Nui Seed, gross margin..... 3-8
New Zealand Dairy Board..... 1-24
New Zealand Farmer Stock sales
, store and breeding stock prices, cattle..... 1-23
, store and breeding stock prices, dairy cattle..... 1-27
, store and breeding stock prices, sheep..... 1-5
, live pig sales..... 1-29
, live deer prices..... 1-33
New Zealand Meat Exporters' Schedule Prices (Sheep and Lamb)..... 1-3
New Zealand Meat Producers' Board..... 1-3
New Zealand Pork Marketing Board..... 1-27
New Zealand Potato Board..... 1-19
New Zealand Society of Farm Management: Recommendation on Professional Charges..... 2-129
New Zealand Wheat Board..... 1-15
New Zealand Wool Board..... 1-8
Nil Value of Livestock..... 5-35
North Island Wool Prices 1984/85..... 1-11
Notional Estate..... 6-4
Nozzles and Tips, cost of..... 2-218
Nucleus stock (bees), cost of..... 2-257
Nui ryegrass, herbage seed levy..... 2-31
, price paid to farmer for seed..... 1-20
, seed cost ex store..... 2-69
, seed dressing charges..... 2-32
Nurserymen and Gardeners Wages..... 2-13
Nut Trees, cost of (retail)..... 2-97

0

Oats, dressing and clipping charges..... 2-32
, drying charges..... 2-33
, production..... 4-19
, price paid to farmer for..... 1-17
, seed cost ex store..... 2-68
Off Shore Loans..... 2-126
Offal cookers, cost of..... 2-250
Oil, cost of..... 2-104
Oil Sprays, cost of..... 2-89
Onions, prices paid to grower..... 1-38
, production..... 4-24
, seed cost..... 2-70
Oppossum traps, cost of..... 2-252
Oranges, prices paid to grower..... 1-35
Orchard fruit, production..... 4-25
Orchard levies..... 2-252
Orchard and Vineyard Workers - wages..... 2-11
Ordinary Depreciation Allowances..... 5-38
Oroua Wheat, gross margin..... 3-4

, price paid to farmer for milling standard..... 1-15
Outlets (Irrigation), cost of..... 2-239
Overalls, cost of..... 2-253
Overdraft..... 2-126
Overseas Visitors, Tax Rebates..... 5-18
Overtime, Tax Rebate on Payments for..... 5-18
Overtrousers, cost of..... 2-253
Ox, meat export schedule..... 1-21

P

Package bees, cost of..... 2-257
Packaging Materials, cost of..... 2-253
Parkas, cost of..... 2-253
Paroa ryegrass, herbage seed levy..... 2-31
, price paid to farmer for seed..... 1-20
, seed cost ex store..... 2-69
, seed dressing charges..... 2-32
Parsley, price paid to grower..... 1-38
Parsnip, prices paid to grower..... 1-38
, seed cost..... 2-7
Particle Board, Cost of..... 2-234
Partnerships, family..... 5-22
, taxation of..... 5-21
Passionfruit, price paid to growers..... 1-35
Pasture, gross margin..... 3-11
Pawera Red Clover, herbage seed levy..... 2-31
P.A.Y.E. (Pay as you Earn) Taxation System..... 5-5
Peaches, prices paid to grower..... 1-36
Peas, drying charges..... 2-33
, field - gross margin (ex greenfeed oats)..... 3-7
- price paid to farmer for seed..... 1-18
, freezer - price paid to farmer..... 1-18
, garden - fresh market prices..... 1-39
- price paid to farmer..... 1-18
, production..... 4-19
, Road cartage rates (bulk in boxes)..... 2-55
, seed cost ex store.....2-69, 2-71
, seed dressing charges..... 2-32
, Vining, gross margin..... 3-12
Peat, cost of..... 2-56
Penicillin, cost of..... 2-22
Pensions, in relation to taxation..... 5-15
Pepinos, price paid to grower..... 1-36
Personal accident insurance..... 2-120
Personal Loans, Trading Banks..... 2-126
Personal tax rebates..... 5-15
Pest Control..... 2-80
Petrol Tanks, cost of..... 2-230
Petrol, cost of..... 2-104
Petrol Tax, refunds..... 2-103

Phalaris, herbage seed levy..... 2-32
Physical and production data per farm..... 4-5
Picking Aprons and Bags, cost of..... 2-253
Picking Platforms, cost of..... 2-222
Pig, feed, cost of..... 2-49
, population..... 4-11
, prices, pork schedule..... 1-27
, live pig sales..... 1-29
, shelters, cost of..... 2-230
, tucker cookers..... 2-250
Piles (concrete), cost of..... 2-236
Pip and Stonefruit levies..... 2-255
Pipfruit Industry, price smoothing..... 1-45
Pipe Bender (manual), cost of..... 2-251
Pipes and couplings (irrigation), cost of..... 2-238
Piping, polythene - cost of..... 2-163
, P.V.C. - cost of..... 2-164
Pitau white clover, herbage seed levy..... 2-31
Plant, insurance of..... 2-119
Planter bags, cost of..... 2-256
Planting/Propagating Material, cost of..... 2-256
Plants, cost of..... 2-96
Plastic, Containers, cost of..... 2-254
, Labels, cost of..... 2-256
Plate Coolers, cost of..... 2-38
Ploughs, (conventional), cost of..... 2-178
, chisel ploughs, cost of..... 2-179
, mole drain, cost of..... 2-179
Plums, prices paid to grower..... 1-36
Plywood, cost of..... 2-234
Polyanthus, seed cost..... 2-73
Polythene Film, cost of..... 2-256
Polythene Piping (water supply), cost of..... 2-163
Pork Marketing Board..... 1-27
Pork, prices..... 1-28
, levies payable..... 1-28
Portable Generators and Welders, cost of..... 2-212
Portable Saw Mill, cost of..... 2-251
Portable Sprayers, cost of..... 2-218
Post and Standard, drivers, cost of..... 2-153
, removers, cost of..... 2-154
Post driving (contract), cost of..... 2-160
Post hole diggers/borers, cost of..... 2-154
Post Office National Development bonds..... 5-11
Post Office Savings Bank, Interest from - taxation on..... 5-11
Postage and Stationery, cost of..... 2-117
Posts, cost of..... 2-144
Potato harvester, cost of..... 2-222
Potato Harvesting, cost of..... 2-36
Potatoes, prices paid to farmers for process potatoes..... 1-19
, prices paid for market sales..... 1-39
, production..... 4-23

, road transport rates..... 2-56
, seed cost..... 2-71
Poultry, feed, cost of..... 2-251
, numbers..... 4-16
, production..... 1-34
, remedies, cost of..... 2-23
Power Discs, cost of..... 2-182
Power Harrows, cost of..... 2-189
Prairie Grass, herbage seed levy..... 2-31
, price paid to farmer for seed..... 1-20
, seed dressing charges..... 2-32
Precision drilling, cost of..... 2-36
Precision drills, cost of..... 2-191
Premier Sire Service Charges (L.I.S.)..... 2-28
Premiums, wheat..... 1-16
Premix, concrete, cost of..... 2-235
Pressers' Wages (wool)..... 2-9
Pressure Guages (Spray Units), cost of..... 2-217
Price and Types of Fences..... 2-160
Price Smoothing and price support schemes..... 1-40
, Dairy Industry..... 1-40
, Meat Industry..... 1-41
, Pipfruit Industry..... 1-45
, Wool Industry.....1-43, 1-45
Principal Income Earners Rebate..... 5-16
Processing Charges, freezing works..... 1-4
Produce Bags, cost of..... 2-253
Productivity Improvers..... 2-27
Professional Fees..... 2-128
Propagating materials, cost of..... 2-256
Property Management Fees..... 2-131
Protective Clothing, Tax Deductions for..... 5-14
Protective Equipment and Clothing, cost of..... 2-252
Provisional Taxation System..... 5-7
Provisional Tax, dates for payment of..... 5-67
Pruners, cost of..... 2-221
Public Liability Insurance..... 2-120
Pulley blocks, cost of..... 2-250
Pumpkins, prices paid to grower..... 1-39
, seed cost..... 2-72
Pumps (Irrigation), cost of..... 2-239
Pumps (Spray), cost of..... 2-166
(Sump), cost of..... 2-237
Punnets, cost of..... 2-254
Purchasing Guide (Micro-computer)..... 2-245
P.V.C. piping, cost of..... 2-164

Q

Qualifying Goods for Export Incentives..... 5-57
Queen bees, cost of..... 2-257

, rearing materials..... 2-258
Quota milk, prices paid to farmer..... 1-25

R

Rabbit feed, cost of..... 2-50
Raddle, cost of..... 2-25
Radish, prices paid to grower..... 1-39
, seed cost..... 2-72
Rahu ryecorn, seed cost ex store..... 2-68
Railway transport rates..... 2-53
Raking, contract charges..... 2-35
Rams, prices of..... 1-8
, schedule prices..... 1-4
Ram Harnesses, cost of..... 2-25
Rape, seed cost ex store..... 2-69
, seed dressing charges..... 2-32
Raspberries, levies..... 2-255
, plant/bush costs..... 2-98
, price paid to grower..... 1-36
Raspberry harvester, cost of..... 2-222
Rat trap, cost of..... 2-252
Rates, Council - as taxation rebates..... 5-17
, Local Body..... 2-121
Rations for employees, as related to taxation..... 5-27
Raven wheat, seed cost..... 2-68
Ready mix concrete, cost of..... 2-235
Real Estate Charges, Letting, Leasing and Assignment..... 2-136
, Miscellaneous..... 2-137
, Property Management..... 2-137
, Sales..... 2-132
Rebates, Taxation..... 5-15
Red Clover, seed coating, cost of..... 2-69
, seed dressing charge..... 2-32
Redcurrants, cost of cuttings..... 2-98
Registration Fees, for Dogs..... 2-16
, for Motor Vehicles..... 2-99
Reliefs, Estate Duty..... 6-10
Rent, payable by farmers..... 2-127
Rents, as Assessable Income..... 5-26
Repairs and Maintenance, of Buildings..... 2-98
, of Vehicles..... 2-104
, related to taxation..... 5-28
Replacement Value of Livestock..... 5-31
Rere, price paid to farmers for seed..... 1-20
, seed cost..... 2-69
Respirators, cost of..... 2-253
Restructuring (R.B.F.C.) specific policies concerning..... 2-124
Returns, Income - to Inland Revenue Department..... 5-7
Rhubarb, prices paid to grower..... 1-39
Ride on Mowers, cost of..... 2-200

Ripening agents, cost of..... 2-192
Road Transport Rates..... 2-53
Road User Licences..... 2-99
Road User Charges..... 2-100
Rockmelon, prices paid to growers..... 1-36
Rollers, cost of..... 2-189
Roof (bees), cost of..... 2-257
Roofing Materials, cost of..... 2-234
Rotary Cultivators, cost of..... 2-185
Rotary Hoe, cultivation contracts..... 2-34
Rotary Hoes, cost of..... 2-223
Rotomow/Pulverizer (horticultural), cost of..... 2-23
Rotors (Irrigation), cost of..... 2-240
Royalties..... 5-12
Ruanui ryegrass, herbage seed levy..... 2-31
, price paid to farmer for seed..... 1-20
, seed cost ex store..... 2-69
, seed dressing cost..... 2-32
Rubber tubing, Milking Shed..... 2-37
Runner beans, seed cost..... 2-70
Rural Banking and Finance Corporation of New Zealand
, policy and interest rates..... 2-123
Ryecorn, seed cost ex store..... 2-68
, seed dressing charges..... 2-32
Ryegrass, levies..... 2-31
, prices paid to farmer for seed..... 1-20
, seed coating, cost of..... 2-69
, seed cost ex store..... 2-69
, seed dressing charge..... 2-32

S

Sack barrows, cost of..... 2-251
Sacks, cost of..... 2-30
, capacities..... 2-30
Safety, helmets, cost of..... 2-52
, spectacles, cost of..... 2-52
Salaries, tax on..... 5-8
Sales, Real Estate charges on..... 2-132
Sand, cost of..... 2-235
Sanitizers (dairy), cost of.....2-39, 2-40
Saranac lucerne, price paid to farmer for seed..... 1-20
Savings Bank, Trustee..... 2-127
, Loans..... 2-126
Sawmill (portable), cost of..... 2-251
Schedules, Export Meat - Beef Cattle..... 1-21
- Pigs..... 1-28
- Sheep..... 1-4
School Children, Rebates on Tax..... 5-15
Secateurs, cost of..... 2-251
Seed, boxes, hiring..... 2-31

, boxes (for drilling equipment), cost of..... 2-189
, certification fees..... 2-31
, coating, cost of..... 2-69
, costs ex store..... 2-68
, drying charges..... 2-33
, levies (herbage)..... 2-31
, sowing charges, aerial..... 2-67
, testing fees..... 2-31
, air freight rates..... 2-60
Self drive mowers, cost of..... 2-201
Selling Charges (stock)..... 2-95
Settlement, Farm S. Finance..... 2-123
, Land S. Board..... 2-122
Shade and Windbreak Cloth, cost of..... 2-156
Shares, valuation of gift..... 6-17
Shearers Moccasins, cost of..... 2-253
Shearers' Wages..... 2-8
Shearing Shed Expenses..... 2-73
Shearing Plant, cost of..... 2-73
Shearing sheds, cost of - see woolsheds
Shed Expenses (wool)..... 2-73
Shedhands Wages..... 2-9
Sheep, cartage rates, road..... 2-56
, cradles and chutes, cost of..... 2-249
, dipping costs..... 2-16
, dips, sprays and dressings..... 2-17
, drenching costs..... 2-18
, feeds, cost of..... 2-49
, gross margins..... 3-17
, loaders, cost of..... 2-249
, numbers..... 4-3
, prices, Local..... 1-5
, Breeding stock..... 1-6
, Rams..... 1-8
, Revenue from..... 1-3
Sheepyards, cost of..... 2-231
Shelter, cost of..... 2-96
Shelterbelt Insurance..... 2-120
Shepherds crook, cost of..... 2-250
Shingle (backfill), cost of..... 2-237
(concreting), cost of..... 2-235
Shrubs, cost of..... 2-96
Silage charges, contract..... 2-34
, feed equipment, cost of..... 2-196
Silos, cost of..... 2-228
Silverbeet, prices paid to grower..... 1-39
, seed cost..... 2-71
Skins, payment for..... 1-14
Sleepouts, cost of..... 4-224
Slurry Treatment of cereals..... 2-32
Small Seeds, cost ex store..... 2-69
, drying charges..... 2-33

, production..... 4-21
, price paid to farmer..... 1-20
, road cartage rates for..... 2-55
Smokers (bee hives), cost of..... 2-258
Societies, Building..... 2-121
Software (Micro-computer)..... 2-246
Soil and Water, incentives and assistance..... 1-48
Soil Fumigants, cost of..... 2-91
Solicitors' Fees..... 2-131
Solicitors and Trust Companies..... 2-125
Sources of Finance..... 2-121
South Island Wool Prices 1984/85..... 1-12
Special Exemptions (for Taxation Purposes)..... 5-14
Specialised Farm Equipment, insurance of..... 2-119
Specified Trust..... 5-23
Spinach, prices paid to grower..... 1-39
, seed cost..... 2-72
Spray booms, cost of..... 2-216
Spray Equipment, cost of..... 2-213
Spray Guns, cost of..... 2-217
Spray Heads (irrigation), cost of..... 2-240
Spray Pumps, cost of..... 2-213
Spraying, costs of Aerial..... 2-93
, costs of ground application..... 2-94
Spreader (fertiliser), cost of..... 2-191
Spreading Agents (sprays), cost of..... 2-92
Spreading Charges, Aerial - Sowing of seeds and prills..... 2-67
- Fertiliser..... 2-66
, Ground - Fertiliser and Seeds..... 2-66
- Lime..... 2-67
Spring Onions, prices paid to grower..... 1-39
Sprinklers (irrigation), cost of..... 2-238
Squash, seed cost..... 2-72
Stabilisation Scheme, Dairy Industry..... 1-40
, Meat Industry..... 1-41
, Wool Industry..... 1-43
Stamp Duty..... 2-132
Stamp Duty Exemption..... 2-132
Stamps and Stationery..... 2-117
Standard Value of Livestock - taxation..... 5-33
Standards (Fencing), cost of..... 2-144
, cost of electricity..... 2-159
Standing Charges..... 2-118
Staples, cost of..... 2-146
Stationery Charges (and Postage)..... 2-117
Stay Blocks, cost of..... 2-146
Stays (fencing), cost of..... 2-146
Steel (concreting), cost of..... 2-236
Steers, meat export schedule..... 1-21
, local prices..... 1-22
Stock, feeds, cost of..... 2-48
, identification, costs of..... 2-23

, Insurance..... 2-121
, Loans..... 2-123
, prices at regional sales throughout year..... 1-6
, Selling Commission..... 2-96
, Water Charges..... 2-79
Stock and Station Agencies..... 2-96
, Commissions..... 2-96
Stock Company charges..... 2-118
Stonefruit, levies..... 2-255
Storage Increments, barley..... 1-17
, wheat..... 1-15
Store Handling Charges, seeds..... 2-32
Store Stock Prices, Beef Cattle..... 1-23
, Lambs..... 1-5
, Sheep..... 1-5
Strainer posts, cost of.....2-145, 2-146
Strainers, cost of..... 2-218
Straining Equipment, fencing, cost of..... 2-152
Strawberries, plant costs..... 2-98
, price paid to growers..... 1-36
Strawchoppers, cost of..... 2-194
Subscriptions, as tax deductions..... 5-13
, cost of..... 2-117
Subsoilers, cost of..... 2-179
Subterranean clover, seed coating cost of..... 2-69
Subtropical trees, cost of (retail)..... 2-97
Succession, valuation of..... 6-8
Suction-Delivery Equipment, cost of..... 2-239
Sump pumps, cost of..... 2-237
Superannuation, as exemption from Gift Duty..... 6-17
, in relation to taxation..... 5-12
Supplementary Minimum Prices for Meat..... 1-41
Milkfat..... 1-40
Wool..... 1-43
Surveyors' Charges..... 2-138
Swandri, cost of..... 2-253
Swedes, seed cost.....2-69, 2-71
Sweet Cherry, cash flow..... 3-27
Sweet Corn, seed cost..... 2-71
Sweet Pea, seed cost..... 2-73

T

Taiko oats, seed cost ex store..... 2-68
Tailing equipment, cost of..... 2-26
Takahe wheat, seed cost..... 2-68
Tall Fescue, herbage seed levy..... 2-32
Tama ryegrass, herbage seed levy..... 2-31
, price paid to farmer for seed..... 1-20
, seed cost ex store..... 2-69
, seed dressing charge..... 2-32

Tamarillos, plant prices..... 2-197
, price paid to growers..... 1-36
Tangellos, price paid to growers..... 1-36
Tanks (spray), cost of..... 2-213
(concrete), cost of..... 2-165
Tattooing Outfits, cost of..... 2-25
Tax, Appendices - Last days for payments by provisional taxpayers..... 5-67
- Rates of income tax for individuals..... 5-68
, Disposition of Matrimonial Property..... 5-64
, Export Incentives..... 5-57
- Export Performance Incentive for qualifying goods.... 5-58
- Export Performance Incentive for qualifying Services and/or Overseas projects..... 5-60
- Export Market Development Expenditure Incentive..... 5-60
- Export Market Development Activities Incentives for self-employed Taxpayers..... 5-62
- Exprt Programme Suspensory Loan..... 5-63
, Fringe Benefit Tax..... 5-66
, Rebates..... 5-15
, Refund on Fuels..... 2-103
, Returns..... 5-7
, Systems, P.A.Y.E..... 5-5
, Provisional..... 5-7
Taxable Income, calculation of..... 5-9
Taxation in New Zealand..... 5-5
, Assessment..... 5-9
, PAYE Tax on Personal Income..... 5-5
, Provisional Tax System..... 5-7
, Returns of Income..... 5-7
Taxation of, Companies..... 5-20
, Farmers..... 5-25
- Development Expenditure..... 5-30
- Depreciation..... 5-38
- Farm Expenses..... 5-27
- Farm Income..... 5-26
- Farming Investment Allowance..... 5-41
- Income Levelling Schemes..... 5-48
- Liability for income tax..... 5-25
- Limitation of Tax Losses from Farming or Land owning..... 5-45
- Recovery of Development Expenditure and interest..... 5-44
- Timber Sales and Farm Forestry..... 5-46
- Valuation of Trading Stock..... 5-31
, Fishing Industry..... 5-53
- Depreciation..... 5-54
- Fishing Investment Allowance..... 5-55
- Income Equalisation Scheme..... 5-57
- Spreading of repair costs on fishing boats... 5-54
, Horticulture..... 5-50
, Individuals..... 5-10

- Assessable Income..... 5-12
- Deduction for employment related expenses.... 5-13
- Example Assessment..... 5-19
- Exempt Income..... 5-10
- Overview..... 5-10
- Special exemptions..... 5-14
- Tax rebates..... 5-15
, Partnerships..... 5-21
- Family partnership..... 5-22
- Overview..... 5-21
, Trusts..... 5-23
- Classification of Income..... 5-24
- Classification of Trusts..... 5-23
- Liability of Income Tax..... 5-23
Tedders, cost of..... 2-202
Telephone and Toll Charges..... 2-115
Telephone expenses, in relation to farmer taxation..... 5-27
Term Loans, trading banks..... 2-125
Tick beans, price paid to farmer..... 1-18
Timothy, herbage seed levy..... 2-32
, seed coating, cost of..... 2-69
, seed dressing charge..... 2-32
Tobacco, Production..... 4-28
Tomatoes, Glasshouse, gross margin..... 3-15
, levies..... 2-252
, prices paid to growers..... 3-12
, seed cost..... 2-71
Tractor, costs of..... 2-169
, running costs..... 2-105
Trading Stock, Valuation of..... 5-13
Trailer sprayers, cost of..... 2-220
Trailers, cost of..... 2-208
Training Incentives.....2-4, 2-6, 2-7
Transplanters, cost of..... 2-191
Transport Allowance for Farm Workers.....2-4, 2-6, 2-8
Transport Licencing, cost of..... 2-99
Transport Rates, Air..... 2-59
, N.Z. Railways..... 2-53
, Road..... 2-53
Travel Allowances.....2-4, 2-6, 2-8
Travelling Expenses..... 2-118
Travelling Irrigators, cost of..... 2-241
Trays (tractor), cost of..... 2-220
Tree Planting, Tax Deferral of Costs of..... 5-44
Treetopping, cost of..... 2-36
Trees, costs of - farm shelter..... 2-96
- fruit and nut..... 2-97
Trenching costs..... 2-237
Trickle irrigation, costs of components..... 2-244
Trigger Prices for Meat..... 1-41
Wool..... 1-9
Triumph barley, seed cost..... 2-68

Troughs, cost of..... 2-165
Trucks, cost of..... 2-175
Trustee Savings Banks..... 2-127
Trustees' Income, classification of..... 5-24
Trusts, Classification of..... 5-23
, liability for income taxation..... 5-23
, taxation of..... 5-23
Tulips, bulb cost..... 2-73
Turkey feeds, cost of..... 2-251
Turnips, price paid to farmer for seed..... 1-20
, seed cost ex store.....2-69, 2-72
, seed dressing charges..... 2-32
Turoa Montgomery red clover, herbage seed levy..... 2-31
, price paid to farmer for seed.. 1-20
, seed cost ex store..... 2-69
Twine, cost of - baling..... 2-48
- shearing..... 2-75
Tyre insurance, tractor..... 2-119

U

Unemployment benefits, in relation to taxation..... 5-12
Union Fees, as tax deductions..... 5-13
Uniharvest Lupins, seed cost ex store..... 2-68
Uniwhite Lupins, seed cost ex store..... 2-68

V

Vaccinating equipment, cost of..... 2-26
Vaccines, cost of..... 2-21
Valuation of annuities, pensions, etc..... 6-8
, estate..... 6-8
, gifts..... 6-16
, land and buildings..... 6-8
, pensions, tables for..... 6-24
, successions..... 6-8
Valuation of livestock - taxation purposes..... 5-31
Valves (Irrigation), cost of..... 2-240
Valves and Floats, cost of..... 2-166
Vegetable, levies..... 2-255
, prices..... 1-37
, production.....1-37, 4-22
, seeds, cost of..... 2-70
Vehicle Expenses..... 2-99
Velvet, Prices for..... 1-32
Venison, Prices for..... 1-33
Veterinary Club membership fees..... 2-28
Veterinary Supplies..... 2-26
Vineyard pruners, cost of..... 2-221
Vining Peas, Gross Margin..... 3-12

, seed cost ex store..... 2-69
Vitamin supplements, cost of..... 2-28

W

Wages of Management..... 2-128
Wages, dairy farm workers..... 2-3
, farm and station workers.....2-5, 2-6
, greenkeepers and sextons..... 2-14
, market garden workers..... 2-10
, nurserymen and gardeners..... 2-13
, orchard and vineyard workers..... 2-11
, paid to farmer's wife - taxation purposes..... 5-28
, pressers..... 2-9
, shearers and shedhands..... 2-8
, tax on..... 5-5
Wairau, price paid to farmers for seed..... 1-20
, seed cost..... 2-69
Wallflower, seed cost..... 2-73
Wana cocksfoot, herbage seed levy..... 2-31
Waratahs, cost of..... 2-127
Water Charges, irrigation..... 2-76
, stock..... 2-79
Watermelon, prices paid to growers..... 1-36
, seed cost..... 2-72
Water Pumps, cost of..... 2-166
Water Rights..... 2-78
Water Supply, costs of materials..... 2-163
Water Tanks, cost of..... 2-165
Water Troughs (concrete), cost of..... 2-165
Weaner pigs, value of..... 1-29
Weed and Pest Control..... 2-79
Weighing Platforms, cost of..... 2-248
Welders (portable), cost of..... 2-212
Welding masks, cost of..... 2-252
Well Drilling, costs of..... 2-237
Wet Weather Gear allowance.....2-4, 2-6
Wetting agents (sprays)..... 2-92
Wheat Gross Margins, Oroua..... 3-4
Wheat Growers Levies..... 1-16
Wheat, category B deductions..... 1-15
, drying charges..... 2-33
, monthly storage increments..... 1-15
, prices for milling standard 1985 season..... 1-15
, production..... 4-18
, seed cost ex store..... 2-68
, seed dressing charges..... 2-32
Wheelbarrow sprayers, cost of..... 2-219
Wheeled Tractor, cultivation contract rates..... 2-34
White Clover Gross Margins - ex wheat..... 3-5
White Clover, dressing charges..... 2-32

, price paid to farmer for seed..... 1-20
, seed coating, cost of..... 2-69
, seed cost ex store..... 2-69
White Peas..... 2-69
Whole Milk, payment system for, Manufacture..... 1-24
, Town Supply..... 1-25
Windbreak cloth, cost of..... 2-156
Windmills, Grants..... 1-49
, types and cost of..... 2-220
Windrowers, cost of..... 2-194
Windrowing charges, contract..... 2-34
Winepress, cost of..... 2-223
Wire (fencing), cost of..... 2-144
, cost of electric..... 2-159
Wire netting, cost of..... 2-150
Wire reel, cost of..... 2-154
Withholding Payments, in relation to taxation..... 5-6
Wool, bale stencils, cost of..... 2-75
, charges..... 2-75
, Grower Retention Levy.....1-10, 1-44
, Income stabilisation arrangements..... 1-8
, insurance.....2-75, 2-120
, packs, cost of..... 2-75
, pack holders, cost of..... 2-74
, press, cost of..... 2-74
, prices, late 1984..... 1-11
, minimum floor price for..... 1-8
, road cartage rates..... 2-57
, seasonal summary - Statistic report..... 4-6
, selling season..... 1-8
, Supplementary Minimum Price for..... 1-43
, tables, cost of..... 2-74
Wool Board Levies.....1-10, 2-75
Woolsheds, cost of..... 2-225

Y

Yams, price paid to growers..... 1-37
Yard Fees..... 2-95
Yards, cost of..... 2-231
Yarrow, herbage seed levy..... 2-32
, seed dressing charge..... 2-32
Yorkshire Fog, herbage seed levy..... 2-32
Young family, tax rebates for..... 5-16

Z

Zinnia, seed cost..... 2-73