

FINANCING NEW ZEALAND HORTICULTURE

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THE AGRICULTURAL ECONOMICS RESEARCH UNIT
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The Agricultural Economics Research Unit (AERU) was established in 1962 at Lincoln College, University of Canterbury. The aims of the Unit are to assist by way of economic research those groups involved in the many aspects of New Zealand primary production and product processing, distribution and marketing.

Major sources of funding have been annual grants from the Department of Scientific and Industrial Research and the College. However, a substantial proportion of the Unit's budget is derived from specific project research under contract to government departments, producer boards, farmer organisations and to commercial and industrial groups.

The Unit is involved in a wide spectrum of agricultural economics and management research, with some concentration on production economics, natural resource economics, marketing, processing and transportation. The results of research projects are published as Research Reports or Discussion Papers. (For further information regarding the Unit's publications see the inside back cover). The Unit also sponsors periodic conferences and seminars on topics of regional and national interest, often in conjunction with other organisations.

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PREFACE

This Discussion Paper complements a previous publication by the Agricultural Economics Research Unit (Pryde, J.G. and Bain, L.B. (1984); The State of Agricultural Credit in New Zealand, Discussion Paper No. 82) which examined the credit situation of the farming portion of the agricultural sector. The horticultural sector has now been examined and the results of that examination are presented in this Discussion Paper.

As there is little published information on the financial situation within the horticultural sector, much of the material presented in this publication represents the collection of informed opinion from a wide range of sources. Where possible, these opinions have been supported by factual evidence using individual cases considered to be representative of a particular group. However, due to the confidential nature of individual proprietor records, this material cannot be published.

It is hoped that this Discussion Paper will provide a starting point for those involved in policy decisions regarding the horticultural sector, highlighting the various issues that should be resolved.

J.B. Dent
Acting Director

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The authors wish to express their appreciation to the institutions, companies and individuals who contributed information and opinions on the financing of horticulture.

Without their considerable contribution this paper would not have been possible due to the lack of published information on horticultural finance.

SECTION 1

INTRODUCTION

Some of the limelight has shifted in the past decade from the pastoral industry to the horticultural industry. But a far more substantial contribution to overseas earnings is still made by the pastoral sector (Table 1).

TABLE 1

Contribution to Overseas Earnings

Source	Exports - Year to June 1983 \$m
Pastoral Sector	4795
Arable Sector	69
Horticultural Sector	237
Other Exporters	2230

Source: Ministry of Agriculture and Fisheries.

Profitability, from both the individual's and country's viewpoint, appears to be the main reason for the new glamour of horticulture. This profitability is not yet reflected in national statistics. Department of Statistics survey results (see Appendix) show an average net farm income of only \$5,878. The reader should not deduce from this that horticulture is unprofitable as a large proportion of the farms surveyed were still in the process of development and had not reached full production.

The publicity given to the profitability of some crops has led to rapid expansion in the area planted. Kiwifruit is a prime example. In 1983 the average sheep and beef farm was showing a return on total capital (after providing for the owner-operator's salary) of less than 1 per cent. By comparison, mature kiwifruit orchards provided a return of more than 5 per cent (these returns ignore capital gains). This higher profitability led to a near seven-fold increase in the area planted in kiwifruit between 1977 and 1983.

Traditionally horticulture did not attract a great deal of interest from investors of equity or loan capital because of horticulture's "low status" in comparison to agriculture. However attitudes began to change and as the industry gained credibility,

capital sources (both equity and loan) formerly uncommitted or lightly involved, became heavily committed.

Evidence of the growing confidence of farmers in horticulture can be found in a recent Survey of New Zealand Farmer Intentions and Opinions (Pryde and McCartin, 1984). In this survey farmers were asked (irrespective of the product they produced) their opinion of the future market prospects of various primary products. Overall the results show more optimism in horticultural produce than any of the other major product types (Table 2).

TABLE 2

Farmer Opinion on Future Market Prospects
for Agricultural Produce

	Optimistic (per cent)	Reasonably Satisfied (per cent)	Pessimistic (per cent)
SHORT TERM:			
Sheep meat	13	36	51
Beef	50	43	7
Wool	31	59	10
Dairy Produce	14	48	38
Horticultural Produce	49	45	6
MEDIUM TERM:			
Sheep meat	15	46	39
Beef	32	61	7
Wool	36	57	7
Dairy Produce	13	47	40
Horticultural Produce	40	51	9
LONG TERM:			
Sheep meat	32	34	34
Beef	31	53	16
Wool	45	45	10
Dairy Produce	26	35	39
Horticultural Produce	40	41	19

SOURCE: Pryde and McCartin (1984): Survey of New Zealand Farmer Intentions and Opinions, (Progress result based on 1,050 valid responses).

Although horticulture is developing rapidly into a significant industry, it is still treated, at least insofar as most financial statistics are concerned, as a part of agriculture. This has made it difficult to obtain data relating to the financing of horticulture. As a result, this paper is generally confined to a discussion of the relative importance and the roles of the various sources of capital rather than a quantitative analysis of their contribution to the horticulture sector.

SECTION 2

CHARACTERISTICS OF HORTICULTURE

Diversity is perhaps the most important feature to recognise in horticulture. In broad terms horticultural crops can be classified as either fruit, cut flower, nursery or vegetable crops. But within each of these classifications are scores of different crops each with its own peculiar advantages and needs.

The extreme differences in the profitability of various crops is another factor. Although some crops are very profitable, others can at the same time be making a loss. It is therefore difficult to generalise as to whether the industry has adequate access to finance. Naturally the more profitable crops will allow better access to finance as they can support higher financial charges.

For a number of reasons, risk is a very significant element to be considered in horticultural investment. Unlike the pastoral sector, horticulture has not had a dominant role in the New Zealand economy. As a result horticultural producers have not been able to rely on Government income support in periods of price downturns. Nor are price smoothing schemes generally available to growers (an exception is the Apple and Pear Board's scheme).

Factors contributing to the risks that horticulturists face include climate, pests and diseases, market fluctuations, industrial action, shortages of suitable transport, sudden changes in the economy and Government legislation. Horticultural investors have to make a very careful assessment of the profitability of each crop and give due weight to these risks.

During the present period of relatively high unemployment, the high labour requirement of most horticultural crops to some extent increases the industry's attractiveness from the nation's point of view. This feature may encourage a better balance of Government assistance between agriculture and horticulture if present levels of unemployment continue - almost one half of the unemployed are registered in areas outside the four main centres.

Cash flows on developing orchards, when compared to most other investments, are unusual in that there may be more than five years of negative cash flows. Particularly in small owner-operator units this leads to difficulty in supporting loan repayments and the owners' living expenses. Loan arrangements possibly unique to the horticulture industry, have had to be developed to meet the situation. These usually involve some form of slow start finance in which principal, and sometimes even interest payments, are deferred until crops begin to produce.

Finally, wherever the financing of horticulture is discussed in general terms it is important to keep in mind the diversity of horticulture and the varying risks and problems that are encountered.

SECTION 3

LOAN CAPITAL INPUTS

3.1 Horticulture vs. Agriculture

There are substantial differences in the types and sources of finance available to agriculture and horticulture. These differences are reflected in the proportions of total lending provided from each source. For example, the limited numbers of growers qualifying for some forms of Rural Bank finance results in only 18 per cent of horticultural finance being provided from this source. By comparison, 36 per cent of agricultural finance comes from the Rural Bank (Table 3). Similarly, insurance companies, which are notable lenders in agriculture - supplying 10 per cent of agricultural finance - lend only an estimated 3 per cent of the finance used in horticulture. Demand for long-term funds from insurance companies has been well in excess of supply (Pryde and Bain, 1984). This would appear to be particularly so of long-term funds for horticulture.

This shortage of long-term funds for horticulture is overcome using short-term finance, principally from trading banks, but also from solicitors trust funds, private sources (usually vendors) and finance companies.

TABLE 3

Contribution Made by Various Sources of Finance
(as at March 1983)

Source	Agriculture (%)	Horticulture (%)
Rural Bank	36.27	18.66
Other Government	4.36	3.00
Local Government	0.76	0.62
Trustee Banks	2.90	2.28
Trading Banks	8.47	18.43
Building Societies	0.55	1.11
Insurance Companies	9.94	2.89
Stock and Station Companies	2.70	2.02
Finance Companies	2.33	4.68
Solicitors Trust Funds	6.74	9.02
Family Loans	15.49	17.38
Private Sources	5.11	10.40
Other Sources	4.38	9.51
	<u>100.00</u>	<u>100.00</u>

Sources: Various

3.2 Purchase Finance

3.2.1 General.

Horticultural expansion has been substantial in the past decade in relation to the size of the industry at the beginning of the period. Large numbers of new growers have been encouraged into the industry and have contributed to this growth. But the shortage of experienced horticulturists with the financial means to start their own unit and the lack of established parameters within which new crops and new horticultural areas can be assessed, has raised problems for financiers interested in investing in horticulture.

The risk involved in lending to inexperienced growers or on new crops and locations has to some extent discouraged long-term lenders. In a financial market that has been tightly controlled by Government, the extra risk cannot be offset by higher interest rates.

The alternative for long-term lenders has been to minimise risk. Because agriculture is well established, that sector produces more farm buyers with both experience in farming and substantial equity or family backing. Agriculture also has a higher proportion of assets as land, and incomes are supported by Government. These factors make agriculture less risky than horticulture and as a result agriculture secures a much higher share of the available long-term funds.

Short-term funds have been more readily available for horticultural investment, as higher rates can normally be charged. These short-term funds have been used because of the lack of an alternative.

High returns from some crops meant that short-term finance was at least affordable if not really suitable. However problems are likely to arise as horticultural properties are a long-term investment requiring long-term loans. When downturns in prices occur (which are bound to happen in such a market-sensitive industry) refinancing because of dependence on short-term loans may be difficult if not impossible.

Income tax concessions such as deductions for expenditure on development and interest have helped to make the high cost finance used in horticulture more affordable. In the past, returns from horticulture were also increased because of inflation in land prices. This return, in the form of capital profits, was particularly attractive as capital profits were exempt from tax. Changes to the tax system however mean that the capital gains tax exemptions now benefit only a select few - those who are established in the industry and have owned their property for ten years or more.

3.2.2 Sources.

Long-term lenders are generally not very active in lending to those horticulturists who are purchasing a property. Although the proportion of buyers who qualify for Rural Bank loans is very low, the Rural Bank is still a significant lender of long-term purchase funds

because of the small amount of long-term lending to horticulture from all sources.

The only other lenders of significance, with terms greater than 10 years, are trustee banks and insurance companies.

Some medium-term (5-10 year) funds have been available from trading banks or their saving bank subsidiaries, but these are generally restricted to customers who have had a long and valuable association with their bank.

A relative new-comer to the agricultural-horticultural scene has been the Development Finance Corporation (D.F.C.). It has generally complemented the Rural Bank's lending by assisting syndicates and larger developments which do not qualify for access to Rural Bank funds. Although the D.F.C. is primarily concerned with providing finance for development, they may assist with purchase finance as part of an overall package where they are approached before a property is bought.

Another source of medium-term (5-7 year) loans has been off-shore money markets. As a result of controls on the New Zealand finance market which have restricted the availability of funds, some growers have resorted to off-shore borrowing. Although the numbers of borrowers are small, the large amounts involved in each loan could be contributing to a high aggregate borrowing from off-shore.

The sources of short-term purchase finance are more diverse. Until recently, solicitors' funds were a major source. These were generally for three year terms, but as inflation and uncertainty in the economy and horticulture increased, the terms began to shorten to such an extent that one year loans were not uncommon.

Vendor finance was another but more unreliable source. Vendors will generally wish to withdraw their funds when loans fall due. This leaves purchasers in difficulty as it is harder to refinance when the borrower has to change sources. Solicitors on the other hand usually try to give preference to existing borrowers, allowing them to refinance using solicitors trust funds when alternatives cannot be found.

The profitability of some horticultural crops has also made possible the use of higher cost sources of credit. As a result, some finance companies and merchant banks have made loans for the purchase of horticultural land. Encouraged by high profits, some horticulturists have used "front-end loaded" finance. (Under a "front-end loaded" loan arrangement, the borrower, in order to obtain the loan, accepts a loss of capital when the loan is taken out. As a result he pays interest on a larger sum than he actually received. Thus a loan with a low nominal interest rate has a high real rate of interest).

3.2.3 Regional differences.

The inputs of purchase finance vary both in type and amount between the horticultural regions in New Zealand. The main distinction is that short-term finance is more often used in the developing horticultural regions than in the established horticultural regions. This appears to be because developing regions such as the Bay of Plenty, tend to have a greater proportion of growers unable to qualify for Rural Bank finance. In established regions such as Hawkes Bay, there are more existing growers who qualify for Rural Bank finance to purchase land for expansion. There also tends to be more prospective growers who have had the opportunity to gain experience on local horticultural units. Again this ensures them a much better opportunity to obtain long-term finance, particularly from the Rural Bank.

The extent to which finance is used in each region also appears to vary. In the established horticultural areas, it is more common for growers to have a high level of equity in existing units and the debt incurred in borrowing for the purchase of additional land, tends to be small in relation to the overall value of the property. In developing areas, it has been more common to find growers borrowing heavily and relying on increases in land value to raise their equity (Table 4).

TABLE 4

Horticultural Farmland Price Index

Half-Year Ended	Index
June 1980	1000
December 1980	1065
June 1981	1229
December 1981	1519
June 1982	1755
December 1982	1978
June 1983	1914
December 1983	1936

Source: Valuation Department.

3.3 Finance for Development (including Plant)

3.3.1 General.

In relation to agriculture, horticulture has a much greater proportion of the total capital employed invested in plant and improvements to the land. Firstly a considerable amount of capital may be invested in establishing crops as plant material is expensive and

considerable maintenance expenses can be incurred before crops come into production. Also, in some forms of horticulture, crops require support structures and/or expensive modifications to the natural environment.

The most common improvements are natural or artificial shelter (from wind) and irrigation. Modifications to the land can include drainage and sometimes contouring.

Sensitive crops can require very costly protection measures. For example frost protection in the form of overhead spray irrigation or giant turbines is used for fruit. Greenhouses are necessary for many flower and out-of-season vegetable crops. Shadehouses are required for most forms of nursery propagation. Even large scale roofing systems may be required, for example to protect cherries from rain and hail.

3.3.2 Sources.

Finance for development, in particular long-term finance, is more readily available than for property purchase and at a lower cost. This is because the Rural Bank is more active in this type of lending. Once inexperienced owner-operators have purchased land and demonstrated some horticultural ability, e.g. by making a success of a small area of crop or their shelter establishment, the Rural Bank can often assist with finance for further development.

Although the Rural Bank is the principal lender of medium to long-term funds for development, some medium-term funds are available from other sources. These include the Development Finance Corporation, the trading banks, and, for large amounts, off-shore money markets.

The prime advantage of off-shore funds has been their availability. Although Reserve Bank approvals are required, statistics on the amount of agricultural and horticultural borrowing from off-shore are not available. One "guesstimate" based on opinion obtained from the finance sector is as high as NZ\$200 million. Although off-shore money has been readily available, it has disadvantages. These are the exchange rate risk and the interest rate risk. The exchange rate risk arises as loans have to be repaid in foreign currency. The interest rate risk is due to the fact that the loans are based on the roll-over of 180-day loans, each of which will be likely to be at a different interest rate.

On the short-term market, funds are provided principally by the trading banks, finance companies and solicitors. Sometimes development is carried out using overdraft facilities which are later refinanced with fixed-term loans. These may be from the bank providing the overdraft or an alternative source such as solicitor's funds or finance companies.

3.3.3 Regional differences.

As with purchase finance, the sources and amount of development finance used varies between regions. In established horticultural areas, a greater proportion of development is done out of income and

less is done with borrowed capital. The reasons may be that established growers who are responsible for a high proportion of development in these areas have incomes from which the development expenses may be fully deducted for tax purposes. Furthermore their cash outlay for development is lower as their existing staff and facilities can be utilised.

In these areas, there is also a slight tendency to use more medium and long-term finance rather than short-term finance perhaps because more growers have established borrowing and farming credentials with the Rural Bank and trading banks.

In developing areas, a greater proportion of growers borrow to finance development. This is probably because most growers are starting from scratch and have to use cash rather than existing spare resources in order to develop. Also many do not have an income while developing and for those that do, there is a limit of \$10,000 that can be offset against development expenses in order to reduce tax.

3.4 Seasonal Finance

3.4.1 General.

Due to the high costs of production of most horticultural crops, there is a very heavy demand for seasonal finance from horticulturists. Where a completely new unit is being set up, seasonal finance may also be used to meet living expenses and for debt servicing until crops come into production.

3.4.2 Sources.

Trading banks play by far the greatest role in supplying seasonal finance, although since trustee banks were given Government approval to operate overdraft facilities in 1981 they have become a significant source. A problem some trading banks have encountered has been undisciplined borrowers who exceed overdraft limits. This causes funding problems for banks and has encouraged a gradual move towards term loans in substitution for overdraft facilities.

As yet there appears to have been little integration of purchase, development, and seasonal lending within each organisation - each source tends to lend either short or long-term funds and it is uncommon for a borrower to obtain an integrated finance package from one organisation. Important exceptions are the Development Finance Corporation and to a very limited extent, the Rural Bank. The latter appears to be phasing out its limited involvement in seasonal financing. For example, in Nelson, tobacco growers' seasonal accounts which the Rural Bank took over from the tobacco companies, are being transferred to trading banks.

The trading banks' traditional competitors in the provision of seasonal finance to the pastoral sector, the stock and station agents, have not, at least up until recently, been competing with banks for clients in the horticultural sector.

Some horticultural suppliers, although not providing full seasonal finance are offering extended credit to clients to assist their cash flow. An example is the N.Z. Fruitgrowers Federation.

3.4.3 Regional differences.

These are not as marked in the field of seasonal finance as in term lending. The major difference is that in established areas growers generally use less seasonal finance and some conservative growers use none at all. In developing regions, growers depend more heavily on seasonal finance as most of their equity and term finance goes into development.

3.5 Refinancing

This is an area of great concern for many in the horticultural sector. Because of stringent controls on the allocation of long-term funds from some sources and the scarcity of funds in others, much of the horticultural expansion has been carried out using short-term finance. In recent years the scarcity of funds and uncertainty in the economy has resulted in the term available being progressively reduced, in some cases to only one year.

The measures taken by the Government in the 1982-84 period contributed to the scarcity of funds. They included the issue of high interest Government stock, the extension of interest rate controls on private financial institutions, increases in reserve asset and Government security investment ratios and the introduction of limits on the expansion of credit supplied by financial institutions.

This squeeze on credit by Government was accompanied by some uncertainty on the part of lenders as to the profitability of several crops - due to tax changes and falling prices. The result was extreme difficulty for many growers in refinancing existing debt. Although it can be said that finance is generally found eventually, it can be at great cost financially and also the strain of the uncertainty can have serious repercussions on the health and welfare of the borrower and his family.

The recent removal of interest rate controls by the Government may help financial institutions to respond to the needs of the market again. The limiting factor will be the high level of funds which the Government is still likely to draw from the market to finance the Budget deficit.

The problem associated with refinancing is not restricted to those growers wishing to replace term loans originally used for purchase or development. Because of the long lead time before some crops come into full production, growers may have to find considerable amounts of finance to cover farm working expenses, interest on term debts and drawings. These costs are usually financed initially from overdraft facilities to maintain flexibility in farming operations. Then as the hard core debt accumulates it is refinanced with term loans. However, the difficulties in refinancing may in turn make these overdraft facilities more difficult to obtain.

If such seasonal finance cannot be obtained the result is likely to be poor future production as crops fail to recover from lack of essential maintenance during the establishment period.

3.6 Financing the Infrastructure

This is likely to be one of the major concerns of the horticultural industry over the next decade. It will be of particular concern in the Bay of Plenty. In this region the kiwifruit industry has limited opportunity to share packing, coolstore and other infrastructure costs because of the lack of complementary crops or industries. The capital required by 1990 for coolstore and packing facilities alone could be as high as \$150 million in 1984 dollars.

The capital costs of setting up and equipping packhouses for kiwifruit range from approximately \$100,000 for 30,000 trays/season capacity (\$3.50/tray) to \$1,600,000 for 1,000,000 trays/season capacity (\$1.60/tray).

Similarly for coolstores, costs range from approximately \$220,000 for 60,000 trays/season capacity (\$3.70/tray) to \$780,000 for 300,000 trays/season capacity (\$2.60/tray).¹

Regions such as Hawkes Bay and Nelson are in a better position as facilities for handling crops can to some extent be shared. Even in the developing horticultural region of Marlborough, because there is a range of horticultural crops being established it has been possible to design and establish facilities with multiple uses.

The Rural Bank does provide some of the capital requirements of individual growers and co-operatives who are building the handling and storage facilities - and even to commercial developments in special circumstances. The Development Finance Corporation can also assist some of the development, in particular the commercial ventures. However, inputs from non-Government sources will also have to be substantial.

Apart from the demands on capital to provide handling and storage facilities as crops come into production, there will be demand on capital to meet the cost of expanding transport facilities, particularly in the developing horticultural regions. There will also be substantial amounts of capital required to house and provide local body services to the increased labour force. Most horticultural units are too small and labour requirements too numerous to expect the owner-operators to provide their own seasonal staff accommodation.

¹ The above are inflation adjusted costs based on data published by the New Zealand Kiwifruit Authority in 1982.

SECTION 4

OTHER FINANCIAL ASPECTS

4.1 Debt Servicing

Generally speaking, horticultural crops are expected to give a fairly high return, although at times there have been poor performers, e.g. blackcurrants and boysenberries. High incomes have encouraged heavy borrowing at high rates of interest, particularly by those not sufficiently aware of the severe fluctuations in income that can occur in such a market and climate-sensitive industry.

When returns are good and particularly while land prices keep ahead of inflation generally, servicing high cost debt is not a major problem. However, in recent years some crops that had high incomes are now experiencing a period of poor returns and debt servicing has become a problem.

To compound the problem, a tax change limiting the deductibility of horticultural losses against outside income has increased many growers' tax liability and reduced their ability to weather the downturn. Previously there was no limit on the amount of losses incurred in horticultural developments which could be used to offset taxable income from other sources. Many horticultural investments were assessed and undertaken on the basis of the cash flows which would occur with these tax deductions. But in the 1982 Budget the deductions were limited to \$10,000. This measure has severely affected the cash flows of many development projects. This shortage of cash has curtailed development in many cases. There is evidence to suggest that some growers have even been forced to sell as a result.

Falling land prices have also created problems in servicing debts. Previously, rising land prices allowed borrowers to service debt by borrowing further funds against the increase in equity. Now borrowing has to be serviced out of income and this may not exist on developing orchards.

Although falling land prices are reducing - and in some cases eliminating - the equity that growers have in their farms, they are of advantage to those still planning to enter the industry. They should be able to purchase farms at prices more related to their income earning capacity, rather than their capital gain potential. This should free cash to maintain a reasonable standard of living and for reinvestment. The alternative up to now has been to borrow for these purposes against inflated land values. Having more cash available should lead to more balanced lifestyles and more flexibility and security during downturns in income.

4.2 Funding the Financial Institutions

In addition to the difficulties following the tax changes and falling incomes from some crops, the horticultural sector has had to contend with some of the effects of severe restraints on the financial institutions. Measures were introduced by the Government in 1983, limiting firstly the interest rates that could be charged and secondly lending growth. This limited the institutions' ability to acquire funds by offering reasonable returns and thus to lend funds as they are required by clients.

The interest rate controls particularly affected the horticultural sector, as the first controls to come on were those on mortgage lending - the most common form of term lending to horticulture. This diverted funds to other sectors where better returns could be obtained at similar or even less risk. More comprehensive controls on all lending reversed this trend to some extent, but the low maximum interest rates still probably diverted funds away from horticulture as lenders needed high returns to offset the risk involved in some crops. With the changes, several financiers became concerned with the degree of exposure they had in the horticultural industry and were reducing the level of their investment in the sector.

The recent flow of capital back into New Zealand as a result of the new Government's devaluation of the N.Z. dollar may ease the funding problems of financial institutions as will the reduction of controls on interest rates and the removal of the limits on the growth rate of financial institution lending. However, this will not necessarily result in a substantial improvement in the loan capital available to horticulture as an increasing proportion of the capital raised by financial institutions is being taken up by Government to finance the internal deficit.

4.3 Finance in the Context of Other Limiting Factors

Finance is an important concern, but there are other factors limiting the development of horticulture.

The cost of land is one of these. Although land prices have generally stabilised, some are still very high in relation to the return on investment that is likely over time, particularly when, in estimating profitability, the risk of low income years is taken into consideration. While capital gains on land transactions continue to remain tax free (subject to limits on the deductibility of some expenses against taxable income), capital will continue to be invested in land to avoid tax. This will help maintain land prices at a high level in relation to the land's productive potential. This deters those investors interested in obtaining an immediate income from production from entering or staying in the industry, leaving only those prepared to accept a low income while they wait for tax free profits on the sale of the property.

Apart from the cost of land, finding enough suitable land is also a problem. Horticultural crops generally require flat or gently sloping land with good quality, well drained soils. The quantity of

this type of land in suitable micro-climates is limited. Even where suitable sites occur availability can be a problem.

Because of the structure of the tax system, there is often no great incentive to use these sites for the most profitable enterprise. Net returns, when tax-free capital gains are included, can be nearly as high under a low income regime such as sheep production, as under a higher income horticultural regime such as apples.

Distance from markets is another major problem for New Zealand horticulture. This is not only due to the cost of transport, but also to its seasonal availability and reliability. The problem is particularly acute where airfreight is concerned, as availability of freight space is linked to the number of passengers departing from New Zealand and their destinations. Chartering freight aircraft as an alternative to using space on passenger aircraft is costly as there are only low volumes of airfreight coming into New Zealand. This means that most of the chartering costs would have to be borne by exports.

Lack of people with expertise in growing horticultural crops is also a factor restraining horticultural expansion. This appears to be true both for growers and advisers. Although the numbers of experienced growers are increasing, the turnover of advisers (partly through becoming growers themselves) means that there is a shortage of experienced advisers.

Finally, regulations and licencing may restrain expansion. This applies to measures imposed by overseas Governments and the New Zealand Government as well as to the measures imposed by grower's own "representatives" on the industry. Examples of the latter include the licencing system used in the kiwifruit industry to stop more exporters selling kiwifruit, and moves to stop private marketing of the Asian pear by the N.Z. Apple and Pear Marketing Board.

Perhaps the greatest single step towards regulating the industry will be the establishment of a Horticultural Export Authority. If the current Bill setting up the Authority is passed into law, a majority of growers of any particular crop will be able to control all growers by restricting their method of marketing. These restrictions may ultimately make it uneconomic for many to export e.g. because they cannot obtain a premium by differentiating their produce - so that not only their method but also their ability to export is restricted.

4.4 Allocation of Financial Resources

The methods used in allocating loan finance in New Zealand can place at a disadvantage those businesses showing a high return on investment.

Ideally, to make the most effective use of New Zealand's limited capital resources, priority should be given to enterprises showing the highest returns on investment. Several factors ensure that this does not happen in practice.

Firstly both Government and private lending institutions appear to have no policy giving priority in lending to individual businesses earning or likely to earn the highest return on investment.

Generally as long as there is adequate security and the borrower can demonstrate that the debt can be serviced, new capital will be loaned irrespective of whether the existing capital in the business is earning a high rate of return. More important factors can include the type of business (i.e. whether agricultural, manufacturing, retailing etc.) the type of investment (development, stock, buildings etc.) and the borrower's personality, connections (e.g. family, solicitor, accountant etc. dealing with the lender), and his or her savings/borrowing record.

Consequently businesses which may be making extremely poor use of existing capital, in terms of the return on investment, can obtain further funds without having to improve performance as long as they are prepared to accept even lower returns on existing equity capital in order to service the new loan.

As if this support of businesses showing poor returns is not serious enough, the problem is compounded by the offering of new loans at artificially low interest rates.

The result is that not only are businesses encouraged to maintain investment in projects which are showing poor returns, they are also encouraged to make new investments which earn a low return on investment.

Many businesses established in the horticultural sector earn a high return on investment. More have the potential to do so if provided with suitable finance, even at today's market rates of interest. While capital is in short supply in N.Z. these businesses should be given priority at the expense of those businesses making poor use of the capital they already have.

SECTION 5

CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

The horticultural industry has gained in credibility over the past ten years because of the growth in export earnings from horticultural products. However as an industry it is dwarfed by the agricultural industry and in spite of its profitability, horticulture is still to some extent regarded as the 'poor cousin' of agriculture and as such lacks the strength of the agricultural lobby.

The rapid growth of horticulture has created a shortage of experienced growers. As lending is often based on practical experience rather than management ability, this has placed horticulture at a disadvantage to agriculture in the competition for funds, especially Rural Bank funds.

The horticultural industry has been experiencing serious problems with refinancing growers, particularly in new horticultural regions where because of the lack of long-term funds short-term finance was widely used.

It is difficult to point to one particular cause, as the problem has been the result of a combination of:

- * Falling prices for some horticultural products;
- * Falling land prices;
- * Government restraints on the growth of lending from financial institutions; and
- * Government directed reductions in interest rates.

Since the Government has devalued the New Zealand dollar and reduced the controls on interest rates, the situation has improved to the extent that there has been some increase in the availability of short-term funds. But there has not been the increase that might have been expected. Reasons appear to be lack of confidence in the New Zealand economy and uncertainty - in the light of past year's experience - over how lenders will be treated. Some lenders are also concerned at the level of their exposure in the horticultural industry and have directed new lending elsewhere.

The greatest deficiency in the financing of horticulture is still the lack of long-term funds. Because of the fluctuations that can occur in horticultural incomes and the slow start to production of some crops, growers need the security and lower repayment conditions that

are inherent in longer term loans.

While there are undoubtedly speculators in some parts of the industry for whom short-term funds are adequate, there is a majority, including many investors with off-farm income, who have a longer-term view and are developing their units with the object of obtaining an income from their crop rather than just capital profits on the sale of the land.

5.2 Recommendations

5.2.1 A Change in Attitude Towards Horticulture.

"While shifts at the margin into higher value products such as those of horticulture are taking place, a process which should not be impeded in any way, in the foreseeable future the bulk of the country's export income will continue to be generated by meat, wool and milk products". This quotation from the 1984 Report of the Agricultural Review Committee sums up the general attitude to horticulture - tolerance rather than encouragement.

Not acknowledged in the statement above is the fact that direct and indirect support for producers of wool, meat and dairy products - nearly one billion dollars in 1982-83 (Pryde, Greer and Bain, 1984) - must impede the transfer of capital and effort into higher profit enterprises. Furthermore, arguing that "in the foreseeable future the bulk of the country's export income will continue to be generated by meat, wool and milk products" will also impede the development of horticulture as an export industry. Unless there is sufficient vision to foresee a diversified and profitable export industry, it is unlikely effort and resources will be directed towards achieving it.

5.2.2 A Reduction in the Cost of Credit

One method of overcoming the high cost of credit is to supply "soft" loans but the cost is hidden rather than reduced. In the year to March 1983 the estimated cost of interest concessions to agriculture exceeded \$200 million (Pryde, Greer and Bain, 1984). Ultimately this cost has to be carried by someone.

Also the lack of long-term funds could be overcome by increasing Government funds through the Rural Bank or by encouraging greater off-short borrowing.

But we recommend other approaches to solving both the high cost of credit and the shortage of long-term funds. They would include:

(a) Reducing the demand for borrowed capital.

This could be achieved by encouraging more equity investment. As horticultural enterprises generally show a relatively high return on investment, simply removing subsidies from other sectors should encourage a transfer of equity capital into horticulture.

This transfer could be further encouraged through a change in the system of allocating long-term loans. If these loans (particularly Rural Bank loans) were allocated to enterprises earning the highest returns on their equity capital, then, in order to obtain loan capital many borrowers would have to reinvest in areas of higher return on their equity. The present practice of lending on the basis of the viability of specific projects instead of return on equity does not encourage the transfer of capital showing poor returns to higher return areas.

(b) Improving the availability of loan capital.

As a first step the treatment of lenders needs to be improved. While they are being controlled through Government regulations and have to suffer uncertainty in income they are naturally going to make some other form of investment.

The recent Government measures to free interest rates are a step in the right direction and should help to restore confidence and attract more funds into the loan market.

Secondly, greater equity needs to be restored to the tax system. Income taxes need to be reduced or a capital gains or asset tax should be introduced to put equity investment in land and buildings, shares, etc. on an equal footing with loan investments.

A low inflation rate or the alternative of indexation of loans to the consumer price or some other index would also be a means of encouraging more long-term lending.

Finally, a reduction in the Government's internal deficit could reduce the competition for long-term loans and possibly make more funds available to horticulture.

(c) Improving efficiency in the use of capital.

There appears to be considerable scope for improvements in the use of capital assets. In particular increased use could be made of contractors, machinery and buildings could be shared or used for multiple purposes and where underutilised land existed, its sale, lease or use in a sharefarming arrangement could be encouraged.

5.2.3 The Development of More Comprehensive Lending Services

Lending is, or at least should be, a service providing finance tailored to suit the customers' needs.

At present very few institutions provide comprehensive financial packages designed to meet all of a farmer's purchase, development and seasonal finance needs.

The situation could be improved if lenders provided complete packages where they have the resources to do so. Where institutions lack the resources or prefer to specialise, complete financial packages could still be offered if the institutions offering the different forms

of finance were prepared to act together as a syndicate. Extra effort in achieving closer communication between institutions would be required, but the greater security - through knowledge that the client is soundly financed and advised at all levels - and client success achieved through that effort, should more than compensate.

In the case of the Rural Bank, if it is to be a leader in the development of horticulture, changes need to be made in two areas. Firstly the Bank could more often be providing seasonal finance (at market rates of interest) to complement its purchase and development loans. Not only would this provide a better service to clients it would also make it easier for the Bank to keep up to date with how well the borrower is performing and to see how effectively any subsidised finance is being utilised.

Secondly, there is probably a need for more people with horticultural qualifications and/or experience to be involved in the Rural Bank. This is particularly so of appraisers and perhaps even of administrators and directors.

5.2.3 Horticulture Should be Allowed to Continue to Develop in a Free Environment if at all Possible

Entrepreneurial activity is essential in such a dynamic industry as horticulture and should not be restricted through the creation of monopolies and oligopolies. This could be the result if the present Horticultural Export Authority Bill is reintroduced and passed. The Bill effectively places control of each crop into the hands of the majority of its growers and therefore by default into the hands of the few with the spare time and money to devote to committee meetings, submissions etc. In such a market and price-sensitive industry it would only be natural for these growers to want to control marketing for their benefit, even if it is to the disadvantage of those in the minority who may be producing for a particular market niche, e.g. organically grown foods.

The NZ Apple and Pear Board and the Kiwifruit Authority have been used as examples of the benefits of centralised marketing. However only their advantages have been measured. Setbacks to these industries in the form of lost opportunities are not measured. We would therefore caution against any measures that might erode entrepreneurial effort.

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APPENDIX

DEPARTMENT OF STATISTICS

ECONOMIC SURVEY OF FRUIT AND/OR VEGETABLE

FARMS YEAR ENDED JUNE 1983

This is the first economic survey of fruit and/or vegetable farms conducted by the Department of Statistics. It is part of the survey programme to cover all productive activity in the economy.

This survey includes developing as well as developed farms and this is reflected in the low average net farm income. For the year ended June 1983 the average fruit and/or vegetable farm gross income was \$69,651. When expenses were deducted and allowances made for changes in stock value the average net income was \$5,878. As well as covering fruit and vegetable farming activities the results include all other farming activities of the farms surveyed.

The Economic Survey of Fruit and/or Vegetable Farms relates to five categories of the New Zealand Standard Industrial Classification, viz.:

- (a) Market Gardening (NZSIC 11181) - Growing vegetables which are either sent straight to the city market and retailers, or to factories for canning, deep freezing, and other preservation processes;
- (b) Citrus Orchards (NZSIC 11182) - Commercial citrus fruit, e.g. Grapefruit, Lemons and Oranges.
- (c) Orchards other than Citrus (NZSIC 11183) - Commercial fruit other than Citrus, e.g. Apples, Plums etc;
- (d) Berry Fruit Growing (NZSIC 11187) - Growing berry fruit for sale; and
- (e) Other Fruit and Vegetables (NZSIC 11189) - Growing fruit and vegetables not elsewhere classified.

The survey was for the year ended June 1983 or the last accounting year ended within the 12 months to June 1983.

The Survey is based on a statistically representative sample of 4,855 farms engaged principally or predominantly in fruit and/or vegetable farming during the year ended June 1982. The 670 farms ceasing to be engaged principally or predominantly in fruit and vegetable farming in the year June 1983 have been excluded from the estimates. It was not possible to survey a representative sample of

the 1,494 farms entering into principally or predominantly fruit and vegetable farming activity in the year ended June 1983. No estimates have been made for these farms as their average expenditure may differ significantly from those farms which were surveyed. The number of principally and predominantly fruit and vegetable farms represented by the survey is thus 4,185.

Rounding:

The rounding of figures may result in a total disagreeing slightly with the sum of the individual items shown in the tables.

Further information is available from the Agriculture Statistics Section, Department of Statistics, Private Bag, Auckland (Telephone 32-245).

S. Kuzmicich
GOVERNMENT STATISTICIAN

Department of Statistics
WELLINGTON
28 June 1984

INCOME, EXPENDITURE AND NET FARMING INCOME FOR
FRUIT AND/OR VEGETABLE FARMS

	Total \$ (000)	Average Per Farm \$
<u>GROSS INCOME</u>		
Sales, Income from Fruit and Berries	152,715	36,491
Sales or Income from Vegetables	104,288	24,919
Sales, Income from Other Horticultural Products	6,300	1,505
Sales or Income from Other Farming	11,568	2,764
Direct Government Cash Grants and Subsidies	379	90
Interest, Dividends, Royalties, Insurance Claims	6,616	1,581
Other Farming Income	9,622	2,299
	<hr/>	<hr/>
Total Gross Income	291,488	69,651
	<hr/>	<hr/>
PLUS		
Increase in Value of Stocks of Materials, Produce on hand and estimated market value of Livestock during year	2,414	577
	<hr/>	<hr/>
	293,902	70,228
	<hr/>	<hr/>
<u>CURRENT EXPENDITURE</u>		
Fertiliser	23,222	5,549
Weed and Pest Control	11,685	2,792
Packing Material and Cases	24,917	5,954
Purchases of Livestock	3,844	918
Freight and Cartage	7,237	1,729
Repairs and Maintenance	16,327	3,901
Fuel Purchases including Electricity	14,478	3,459
Salaries and Wages paid to Employees (excluding Accident Compensation)	57,283	13,688
Cultivating, Planting Culturing and Harvesting (not elsewhere included)	7,420	1,773
Depreciation on Fixed Assets	21,288	5,087
Rates, Other Local/Central Government Fees	4,960	1,185
Insurance Premiums Paid	3,332	796
Interest, Bad Debts, Donations	33,706	8,054
All Other Expenses	39,604	9,463
	<hr/>	<hr/>
Total Current Expenditure	269,301	64,349
	<hr/>	<hr/>
<u>Net Farming Income</u>	24,601	5,878
	<hr/> <hr/>	<hr/> <hr/>

ECONOMIC SURVEY OF FRUIT AND VEGETABLE FARMING 1982-83
ASSETS AND LIABILITIES (EXCLUDING LAND) FOR FRUIT AND VEGETABLE FARMING

	All Fruit and Vegetable New Zealand	
	Total \$ (000)	Average Per Farm \$
ASSETS		
Current Assets	65,679	15,694
Investments	65,418	15,632
Livestock (at Market Values)	7,710	1,842
Fixed Assets (at Book Value)		
Residential Buildings	109,269	26,110
Other Buildings & Construction	51,662	12,345
Land Development	31,073	7,425
Transport Vehicles	40,074	9,576
Plant, Machinery & Equipment	65,074	15,549
Other Fixed Assets	7,399	1,768
	<hr/>	<hr/>
Total Assets (Excluding Land)	443,360	105,940
	<hr/>	<hr/>
LIABILITIES		
Current Liabilities	79,449	18,984
Term Liabilities:		
Rural Bank Mortgage	63,036	15,062
Government Other than Rural Bank	10,149	2,425
Local Government	2,082	498
Trustee Savings Bank Loan	7,688	1,837
Trading Bank	30,783	7,356
Building Society Mortgage	3,746	895
Insurance Companies - Private	8,617	2,059
Insurance Companies - Government	1,151	275
Stock & Station Companies	1,833	438
Finance Companies	15,808	3,777
Solicitors Trustee Funds	30,491	7,286
Family Loan	58,737	14,035
Private Sources Other Than Family	35,155	8,400
Other Liabilities	16,228	3,878
	<hr/>	<hr/>
Total Liabilities	364,955	87,205
	<hr/>	<hr/>

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