CASE STUDIES IN RURAL CO-OPERATIVES

Three Studies of the Organisation and Management of Rural Co-operatives Providing Post-Harvest Facilities in the Kiwifruit Industry

A Research Report Presented in Partial Fulfilment of the Requirements for the Degree of Master of Agricultural Business and Administration at Massey University

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ABSTRACT

The co-operative ownership structure is one that is commonly encountered in New Zealand's agricultural industry. This type of organisation would appear to have a number of natural advantages that should make it very competitive in modern agri-business. However it is apparent at least some co-operatives have not lived up to their members' expectations. This research project has been undertaken to identify some of the problems of co-operative enterprise and to provide some possible strategies to improve their operation.

This report examines the management and organisational practices of three co-operative enterprises providing post-harvest facilities in the Kiwifruit industry. The research follows a longitudinal case study approach, with each co-operative described in terms of the six dimensions of history, facilities, shareholding, direction, operation and finance. The material generated by the study is discussed within a framework of central issues, established from evidence of other co-operative activity, both in New Zealand and overseas.

The report concludes with a description of some 14 common problems, and a discussion concerning the effectiveness of management and organisational measures

that have been implemented as possible solutions. It then goes on to outline 10 general strategies that could be of significance in the improved operation of rural co-operatives.

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INTRODUCTION

1.1 Background to the Horticultural Industry in New Zealand

The horticultural industry has traditionally made a small but significant contribution to New Zealands total agricultural production. Production from this sector of the farming industry has remained relatively steady, representing about 5% of New Zealands total farm production, in dollar terms. (Table One). Specific regions with favourable combinations of climate, soils and marketing opportunities are well established, growing a wide range of fruit and vegetable crops. (Table Two, Figure One). The New Zealand horticulturist has generally demonstrated considerable competence, working with scientific and advisory personnel, to grow a range of horticultural crops that have adapted well to local conditions.

For many years this horticultural industry has remained relatively static. The produce has largely been sold on the domestic market and opportunities for growth have been limited to the increasing local population. However over the last 20 years, and particularly over the last decade, this whole scene has changed dramatically. The horticultural industry has experienced tremendous

TABLE ONE - GROSS PRODUCTION FROM SEVERAL SECTORS OF NEW ZEALAND FARMING ($M)

Farming Sector	1972 $M	1972 % Total Farm Production	1975 $M	1975 % Total Farm Production	1978 $M	1978 % Total Farm Production	1980 $M	1980 % Total Farm Production
Wool	167	13	216	15	502	18	851	19
Dairy Production	315	25	375	27	513	19	688	15
Crops and Seeds	87	7	107	8	164	6	184	4
Fruit and Vegetables	74	6	102	7	152	5	251	6
Total these sectors	663		800		1331		1974	
Total Farm Production	1247		1394		2768		4489	

Sources - Economic Review of New Zealand Agriculture
1976 and 1979
New Zealand Agricultural Statistics 1981
(Bollard 1981 p. 6)

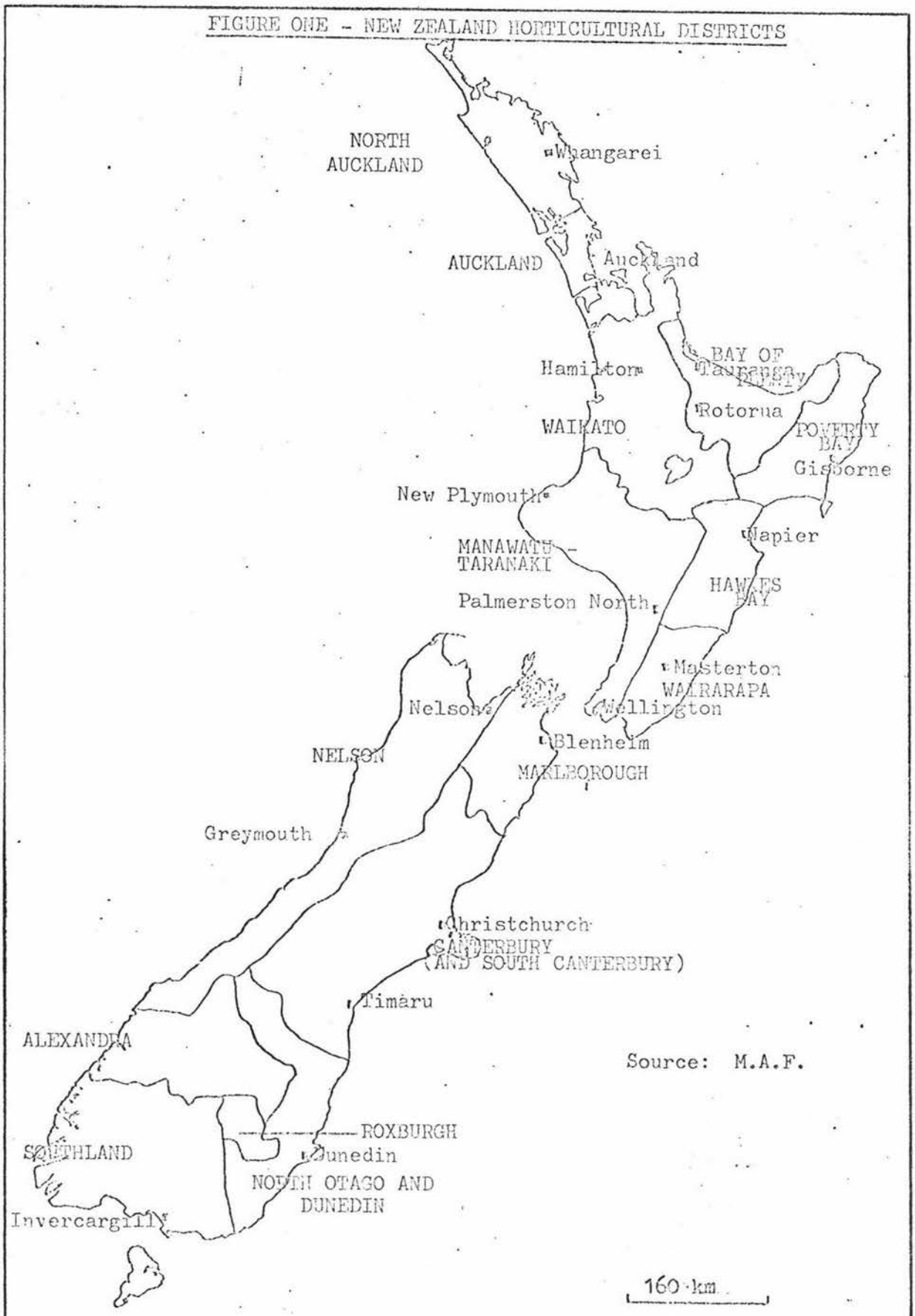
TABLE TWO - AREAS IN TREE FRUITS AND VINES, BY M.A.F. HORTICULTURAL DISTRICT - 1980

REGION	Pipfruit Area (ha)	%	Stonefruit Area (ha)	%	Citrus Area (ha)	%	Subtropical Area (ha)	%	Grapes Area (ha)	%	Nuts Area (ha)	%	Berryfruit Area (ha)	%
Northland	23	*	24	*	621	31	620	10	18	*	40	42	17	*
Auckland	640	10	313	12	165	8	238	4	603	13	2	2	123	4
Waikato	247	4	74	3	16	*	48	*	326	7	1	1	163	6
Bay of Plenty	96	1.5	68	3	857	43	4107	67	9	*	9	9	109	4
Manawatu/Taranaki	85	1	13	*	9	*	193	3	7	*	7	7	178	6
Poverty Bay	51	*	48	2	286	14	425	7	1572	33	2	2	3	-
Hawkes Bay	2279	36	925	36	38	2	146	2	1484	31	5	5	199	7
Wairarapa	42	*	8	*	-		-		6	*	1	1	63	2
Nelson	1859	29	99	4	11	*	385	6	39	*	1	1	426	16
Marlborough	168	3	116	4	-		5	*	706	15	4	4	15	*
Canterbury	357	6	90	3	-		-		12	*	21	22	801	29
N. Otago/Dunedin	30	*	53	2	-		-		-		1	1	102	4
Roxburgh	309	5	238	9	-		-		-		-		48	2
Alexandra	171	3	525	20	-		-		-		1	1	1	*
Southland	-		-		-		-		-		-		497	18
Total	6357		2594		2003		6167		4782		95		2745	

* Indicates less than 1%

Source: Agricultural Statistics 1979-80
New Zealand Department of Statistics

FIGURE ONE - NEW ZEALAND HORTICULTURAL DISTRICTS



growth as a result of the many international markets that have been successfully developed. Horticultural exports have increased in value more than six-fold over the last decade. In comparison, as an example, the dollar value of meat product exports has little more than trebled over the same period (Table Three).

Two products, apples and kiwifruit, have spearheaded this rapid expansion. Kiwifruit in particular has been the glamour product for horticultural exporters, with markets established in North America, Japan, Australia, Scandinavia, United Kingdom and on the Continent (Table Four).

Developing, retaining and expanding these export markets is one of the major considerations for the horticultural industry (Bollard 1981). It is not sufficient to simply grow a quality product. This product must be delivered to the marketplace in similar condition, and in sufficient quantity and appropriate timeliness to attract and retain the best return possible (Berryman 1982). This requires a considerable investment of both capital and expertise in providing adequate post-harvest facilities and developing efficient marketing channels.

One important aspect of this marketing system is the provision of packing and storage facilities immediately post-harvest. This is normally a key area in any

TABLE THREE - REVENUE GENERATED BY THE EXPORT OF FOOD AND LIVE ANIMALS FROM NEW ZEALAND ($M f.o.b.)

Category of Export	1965 $M f.o.b.	%	1970 $M f.o.b.	%	1975 $M f.o.b.	%	1980 $M f.o.b.	%
Meat and Meat Preparations	212.53	51	368.90	60	442.20	54	1192.28	53
Dairy Products and Eggs	180.97	44	188.22	31	277.69	34	687.67	30
Fruit and Vegetables	10.72	3	21.60	4	41.21	5	128.74	6
Fish and Fish Preparations	5.05	1	15.01	2	21.27	3	130.31	6
Live Animals	1.81	*	4.65	*	10.43	1	32.51	1
Feeding Stuff for Animals	1.23	*	4.13	*	12.51	2	30.82	1
Cereals and Cereal Preparations	0.33	*	4.02	*	3.08	*	21.19	*
Sugar and Sugar Preparations	1.31	*	2.69	*	3.13	*	10.43	*
Coffee, Tea, Cocoa, Spices etc	0.05	*	2.22	*	6.07	*	13.74	*
Miscellaneous Food Preparations	0.37	*	3.16	*	2.43	*	19.74	*
Total Value of Food and Live Animal Exports	414.37		614.6		820.02		2267.43	

* Less than 1%

Source - External Trade Export Statistics
New Zealand Department of Statistics

TABLE 4 - FRESH KIWIFRUIT : EXPORT SALES BY VOLUME (TRAYS)

Market	1976	1977	1978	1979	1980	1981
Japan	446,002	480,320	683,960	950,301	954,582	1,552,089
West Germany		481,925	710,066	1,960,284	1,674,394	2,117,786
Holland		26,852	96,837	169,431	72,793	174,100
Canada	48,484	49,263	44,831	48,539	76,231	112,294
U.S.A.	219,578	238,621	141,103	244,091	365,634	549,814
U.K.		14,994	18,268	56,984	111,785	186,417
Scandinavia		144,596	152,397	121,559	136,653	209,497
Belgium		37,027	77,597	156,992	191,314	284,852
Switzerland		17,520	28,947	39,340	56,025	92,420
France		43,246	65,100	74,413	123,401	271,699
Austria		8,496	24,405	59,071	157,101	234,631
Italy					13,410	89,073
Australia	117,896	130,164	113,120	141,458	170,816	256,395
UK, Europe and Scandinavia	550,781				30,711	82,834
Total	1,382,741	1,673,024	2,156,631	4,022,463	4,134,850	6,213,901

Source - New Zealand Kiwifruit Authority

horticultural operation, as the handling of the perishable produce must be done quickly and efficiently to avoid excess deterioration. Also it is here that the decisive quality inspection is normally carried out. Then once the produce is packed ready for export it has to be held in a suitable storage chamber that will maintain its quality until delivery.

The question of who should provide these facilities excites considerable controversy. On the one hand there is the argument that independent and profit-orientated commercial investment would secure the most efficient post-harvest operation (Hendley 1982). Alternatively, many growers feel that they must invest in the post-harvest operation themselves in order to retain control of their crops through to the final market destination (Honeybone 1981). It is not proposed here to discuss the various merits of each argument except to say it is the writers opinion that a balance of ownership would have most benefit for the industry. Also it would be wrong of the growers to relinquish all control of their livelihood once it left the orchard gate. This view is obviously shared by many others as the phenomena of growers investing together to provide co-operative facilities of sufficient scale to handle a number of growers crops is one that is becoming increasingly common in developing horticultural regions.

1.2 The Importance of Producer Co-operatives in New Zealand Horticulture

The principle of producer co-operatives funding their own post-harvest facilities is well established, especially in New Zealand. Dairy co-operatives in this country date from the 1880's and now handle virtually all dairy produce, admittedly with strong statutory support. While such organisations are not true co-operatives in the sense that one or other of the essential features of co-operative enterprise are disregarded, they are closely allied as producer groups, providing their own agribusiness requirements. Co-operatives of this type are active in many other industries within the primary sector - meat, wool, pigmeat and fertiliser as well as horticulture (Stephens and Clark 1971, Storey 1980).

However producer co-operatives are not a predominant force in this country's agriculture. Despite their long history, obvious attractions and wide range of activities they have been described as inconspicuous, low in profile and on the defensive (Ward 1979).

In this respect the horticultural industry is typical of many other primary industries. In a growth sector like kiwifruit where the facilities required would appear to lend themselves to co-operative investment, there is still only 35-40% of the crop packed by co-operatives.

The balance is packed in private on-orchard facilities (Honeybone 1981).

Co-operatives have an important contribution to make to the functioning of New Zealand's agriculture. Their role at present is considerably under-rated but interest and awareness in their activities is growing (Storey 1980). However their position in the industry is unlikely to improve much further unless they can demonstrate practical advantages and long-term stability to the farmers themselves.

1.3 Research Problems and Objectives

1.3.1 Research Problem

The co-operative enterprise would appear to have a number of natural advantages that should make it very competitive in modern agri-business. In practice this is not always borne out, as evidenced by the only moderate level of co-operative involvement in some sectors. The problems that have occurred in the practical operation and management of such enterprises have made farmers reluctant to participate in them. Certainly it is apparent that at least some co-operatives have not always been as successful as their members had hoped (Manwaring 1980).

A co-operative enterprise is unique, both in its structure and its motivation. The management

of such an organisation encounters problems of a different kind to those encountered in managing a proprietory company (Morley 1975). This research project has been initiated to identify some of these management problems and the strategies adopted to surmount them.

1.3.2 Objectives of this Study

This research study sought to undertake several case studies in co-operatively owned packhouse and coolstore ventures, with attention focused on the management of these facilities. Specifically the objectives were:

(i) To review managerial problems of producer-owned marketing and processing co-operatives.

(ii) To identify specific management problems of the packhouses and coolstores that comprised the case study co-operatives.

(iii) To identify and evaluate managerial strategies in the selected co-operatives.

1.4 Research Method

To achieve these objectives the research study followed the procedures outlined below:

(i) Preliminary interview of one packhouse/coolstore co-operative.

(ii) Selection of three co-operatives case studies.

(iii) Detailed study of each case study co-operative.

(iv) Identification of specific management problems and the subsequent strategies adopted by the individual co-operatives.

(v) Evaluation of these management strategies.

The longitudinal case study approach was considered the most effective method of identifying the problems of the rural co-operatives, and exposing the management strategies developed to counter them.

1.4.1 Preliminary Case Study Co-operative

With very little literature available on the subject of co-operatives in New Zealand's agriculture, the bounds of the study were somewhat difficult to define. It was necessary to first undertake a preliminary case study to identify areas of general concern to co-operatives. From this a "checklist" questionaire was designed, to act as a guide to the interviewer during the formal case study investigations (Appendix One). Selection of this co-operative was critical only to the extent that it should be operating a similar facility as the main study. Considerations of practical access and willing management were of more importance.

1.4.2 Selection of Case Studies

The selection of the three case study co-operatives was governed by several criteria:

(i) Horticultural crop

A single homogeneous crop type was considered most appropriate in that it would limit the variations between the co-operatives which might act to mask management problems that become evident. It was necessary that this crop should be sufficiently established in New Zealand to have already developed a substantial post-harvest operation. It was desired that this crop should be involved with at least some export production. Further it was desirable that this crop exhibited potential for growth in the export field. This would place the crop in a position which other developing horticultural crops would hope to emulate. Logically, then, these subsequent crops would go through similar stages of development, including the provision of post-harvest facilities.

(ii) Geographic Region

Again to limit superficial problems as much as possible it was decided to select co-operatives from one particular region only. New Zealands horticulture is still very localised in terms of the crops grown.

It has only been in very recent years that plantings of any significance have been initiated in areas outside a particular crops recognised locality. Consequently the provision of the bulk of post-harvest facilities is still centred in the traditional "home" of any particular crop. Thus, having selected the crop, the choice of geographic region followed automatically.

(iii) Size and Scale of Operations

The choice of suitable case studies was limited to those co-operatives with a shareholding of at least 40-50 growers. There were basically two reasons for this decision. In a larger organisation management problems tend to be more acute - at least the public manifestations of these problems tends to be more noticeable. Secondly, small co-operatives have a tendency to act like large partnerships or private companies, with a much closer association between the shareholders. In a large organisation the service is generally provided, then charged to shareholder "at cost", whereas in small co-operatives the tendency is for shareholders to "pitch in"

and actually operate the jointly owned facility between them. This could effectively nullify some potential problems that may face co-operatives.

The kiwifruit industry met the requirements as the horticultural crop type so the study has been centred on this industry in the Bay of Plenty, its traditional territory. The three co-operatives selected are the largest currently operating in this region and they are each significant forces in their separate localities. All three have been registered as Co-operative Companies under the provisions of the Co-operative Companies Act 1956 and operate to provide packing and storage facilities for grower's produce.

1.4.3 Investigative Method

The personal interview was the main investigation technique used. Individuals from within each case study co-operative were interviewed separately. They included representatives from the board of directors, the management team and from amongst the shareholders. The interviews with directors and management were undertaken on a semi-formal basis but discussions with share-holders were mostly very informal, on their own orchards.

The number of interviews varied between co-operatives, depending on size and consistency amongst respondents as to specific problem areas. This should not introduce any bias into this type of case study investigation.

Interviews were also undertaken with kiwifruit exporters, local advisory staff and management personnel from kiwifruit facilities with other ownership structures.

The investigation also included a study of the company records of each case study co-operative.

Chapter three details the results of the investigation into each co-operative.

1.4.4 Identifying Management Problems and Strategies

Company formation and Management actions were identified under several categories. Comparison was made of each company's action, and compared externally with the literature evidence of co-operative management. Chapter four summarises and discusses the results from evaluation of the case study data.

CHAPTER 2

THE AGRICULTURAL CO-OPERATIVE ENTERPRISE

2.1 Philosophy and Principles of Co-operatives

The Encyclopaedia Britannica defines a co-operative as an "organization owned by and operated for the benefit of those using its services". This succinct definition emphasizes the basic philosophy of a co-operative - that individuals alone are vulnerable and in unity there is strength. The International Labour Organization has provided a more comprehensive definition of co-operatives.

> "A co-operative is an association of persons, usually of limited means, who have voluntarily joined together to achieve a common economic end through the formation of a democratically-controlled business organization, making equitable contributions to the capital required and accepting a fair share of risks and benefits of the undertaking."
>
> (Ward 1979)

The principles which govern the operation of co-operatives were first espoused in Rochdale, England in 1844. A group of workers, dissatisfied with the restrictive practices of the employer-controlled organizations, banded together to form the Rochdale Society of Equitable

Pioneers (Topham and Hough 1944). The organizational and working rules of this consumer co-operative have been widely accepted and four in particular remain as distinctive features of a modern co-operative.

(P.I.C. 1981b, Helm 1968, Knowles 1979, Vining 1980)

These can be summarised as follows:

(i) Open Membership: Membership should be open to all. This is not to say that everyone should have an automatic right to entry, only that no-one should be unjustifiably excluded (for instance by race or political beliefs). It is often acceptable for co-operatives to set minimum entry criteria, provided they are for the economic wellbeing of the organization, and still retain the essential flavour of co-operation.

(ii) Democratic Control: the ultimate power in the co-operative should be retained by the members. They can, and normally do, appoint a committee or board to speak on their behalf, but everyone should be eligible to stand for election to this board. Further, each individual member has only one vote, regardless of size of shareholding or volume of trade with the co-operative. An essential part of this democracy is the education of co-operative members to understand the economic and commercial environment, such that they can make rational

decisions.

(iii) Service provided at cost: a co-operative's function is not to make a profit in trading but rather to provide a service as cheaply as possible for the shareholders. This does not imply an uneconomic operation, rather that any excess in income should be returned to the members as refunds or rebates, pro-rata in relation to patronage.

(iv) Subordinated role of capital: shareholding in a co-operative is effectively an advance payment for future services, not an investment for profit. Returns on shareholding should be regarded, then, as an interest payment not a dividend. Interest rates should be minimal, offset by the value of having the Co-operative in operation.

The co-operative movement spread quickly in the latter part of the nineteenth century. The first areas to be influenced were the industrial areas of northern Britain and Scotland where consumer co-operatives very similar to Rochdale were established. From there the movement spread to Europe and Scandinavia with co-operatives rapidly taking hold in rural areas and amongst the urban working class. Emigrants settling the new lands in the late nineteenth century brought the philosophy and principles of co-operative societies to New Zealand. It is not surprising, then, to find Rochdale-type co-operatives

established in this country. Moreover, given the unpredictability of the primary industry it was understandable that producer co-operatives were quick to become established. In this respect New Zealand's history parallels Australia, America and Canada.

(Vining 1980, French et. al. 1980)

2.2 Business Organization of Co-operatives

Manwaring (1980) identifies three distinct groups who have the potential to control the co-operative organization:

(i) Member shareholders.

(ii) Executive Committee elected from and by member shareholders.

(iii) Professional Management employed by the executive Committee.

The relationship between all three divisions is of utmost importance, as is the chain of command in any business organization.

2.2.1 The Members

In keeping with the fundamental principles of a co-operative, the ultimate power of the organization lies with the assembly of its members. A general meeting of shareholders is the absolute authority in the operation of the organization.

Each member has the right to one vote to influence the co-operative's operation. However it would be very restrictive to require formal

Shareholder approval for every decision required to actually operate the organization. Consequently co-operative constitutions normally limit general meeting decisions to matters of policy, overall direction and some general business planning. The actual functioning of the co-operative is left up to the elected executive.

In larger co-operatives this general meeting becomes impossibly unwieldy to function. Instead a system of wards is operated whereby the members in an area (or ward) select a representative and the regular meetings of these delegates assumes the function of the general meeting.

The extent to which members exercise their rights varies considerably, depending on their personal interest in the co-operative and the importance of the matter in hand. Attitudes of apathy and indifference are as prevalent in New Zealand as elsewhere in the world, and co-operatives, especially rural co-operatives, suffer as much as most. While executives may appreciate the extra freedom this provides, the absence of effective checks and balances may ultimately be to the co-operative's disadvantage.

(P.I.C. 19816)

2.2.2 The Board of Directors

The second division in the co-operative structure is an executive committee, appointed to run the affairs on behalf of the members. In theory this committee should be elected by the members from willing candidates amongst their number. Member directors, it was felt, would remain truer to the original purpose of the co-operative than would independent executives.

In practice boards consisting solely of members are rare. Provision is normally made in the co-operative charter for the appointment of professional directors to the board, with member directors retaining the majority.

The reasoning behind this is straightforward. In some cases it may be necessary to accept a non-member director as a condition of receiving financial assistance. But even without this incentive, external influence on the board has some advantages. Professional directors often have skills and ability quite beyond the experience of most co-operative members, and can bring to the board a broad business expertise. Chief executives appointed to the board, as is often the case in rural co-operatives, can provide a much improved relationship between the board

and management. By retaining the chairman's position for member Directors only, as often happens, the co-operative retains a focus on the original objectives in its leadership.

However there is a possible disadvantage inherent in this situation. Professional experienced executives and competent, forceful management are often held in great respect by Boards of Directors and there is a tendency to defer to their judgement to an excessive degree. (Morley 1975). The relationship between executive and management is often delicate but its workability is fundamental to the operation of the co-operative.

2.2.3 Management

The final division is that of management. In the early days of establishing a co-operative, it normally falls to one or more of the directors to carry out the tasks of management. As the organization grows and the managerial workload expands, it becomes imperative to employ professional management. (Morley 1975).

Management's function is basically to put into practice the policies laid down by the board of directors. (Morley 1975). This division of functions is very important but never works as simply in practice as it can be expressed on paper.

Determining policy is not an overnight occurrance and normally requires close collaberation between executive and management. Further, directors who have run the co-operative in the past are often reluctant to sever this role completely. A successful operation requires a clear expression of responsibilities but then a flexible approach to the reality of co-operative management.

2.3 The Attraction of Producer Co-operatives

Producer co-operatives usually owe their existence to a general dissatisfaction with the existing servicing situation. (Anon 1981a). Suppliers are either dissatisfied with the operation of the existing facilities, or they wish to introduce services that do not exist at present. Their possible remedies are many and varied but one possible approach is for the suppliers to undertake the operation themselves, as some type of co-operative enterprise.

There are several factors that the suppliers may consider in justifying the establishment of a co-operative enterprise. Probably foremost in their deliberations will be the capital aspect. Providing post-harvest facilities require considerable financial investment and, as with most enterprises, economies of scale are much in evidence. The large facilities such as a group of growers could contemplate are generally less expensive per individual

than if they each had to provide their own. For example, post harvest facilities for kiwifruit with a 1M tray capacity had a capital cost, in 1981, of $4.00 per tray. Similar facilities for a 60,000 tray capcity had a capital cost at that time of up to $7.00 per tray, depending on the level of facility built. (Honeybone 1981).

There are also advantages in the timing of this capital investment. Co-operative shareholders can stagger their capital investment over a period of years. Normally they do not need to find more than a deposit on shares in the early stages of establishment.

A second factor of considerable significance to potential members is the relative strength inherent in a united approach. By banding together in one enterprise the individual members can become an economic force with considerable muscle, capable of influencing the marketing system to their own advantage. (Anon 1981a).

The vertical integration that producers can attain through co-operative ventures reduces the uncertainty of the economic environment in which they operate. While vertical integration is not the sole province of co-operatives, such companies are the only way the majority of small growers will ever have any influence on the general operation of their industry.

> "Throughout the free world, co-operatives provide the single most effective vehicle in which producers

can unite, take the initiative and assume a degree of control over the marketing of their product."

(Manwaring 1980)

Statutory support provides another attraction for co-operative enterprise. Taxation laws are couched in very favourable terms for co-operatives, in keeping with a general trend in the Western World (French et. al. 1980, Vining 1980). Government finance, while not limited exclusively to co-operatives, tends to encourage the group ownership of facilities. (Anon 1982).

Members perceive an attraction inherent in the principle of service at cost rather than return on capital - no profit motive should imply cheaper service. Economic logic would dispute the validity of this argument but it remains a strong incentive for grower investment.

Another attraction is the societal argument of co-operatives as industry watchdogs forcing competing organizations to maintain a fair and equitable service. However there is little evidence to support this effectiveness of co-operatives in this role.

2.4 The Scope of Agricultural Co-operative Enterprise

Co-operative enterprise is evident in nearly all activities associated with the production and marketing of primary produce. Typically co-operatives have a middle-of-the-road role to play. They are neither dominant

forces in their industry, nor are they dominated by their competitors. There are a few exceptions to this situation, notably in this country the dairy industry. However in most cases, as with the dairy industry, co-operatives dominating an industry enjoy considerable statutory protection. (French et. al. 1980).

2.4.1 Agricultural Marketing Co-operatives

Co-operatives figure heaviest in the marketing aspects of New Zealand's Agricultural Industry. (Stephens and Clark 1971). This includes all activities involved in preparing the product for market, as well as the actual selling function. The main objectives of the marketing co-operative is to assist the grower/members to dispose of their produce at the most advantageous return possible. (Helm 1968).

Probably the most comprehensive marketing co-operative in this country occurs in the pig industry. Members of this co-operative need only grow their stock to the required weights. Thereafter the co-operative, long established in the industry and with considerable influence, will handle their affairs. (Stephens and Clark 1971).

It owns some killing facilities and uses existing freezing works for any surplus, and will undertake, for members, all the necessary handling

and processing as well as securing the market outlets for their produce. (Walton 1979a). A more recently established South Island counterpart offers a similar service but uses proprietory firms to do all its killing and cutting. (Walton 1979b).

The dairy industry is totally co-operative (Storey 1980) with a series of producer co-operatives collecting the farmers supply, processing this into various dairy products then storing it ready for sale. The actual marketing function is then handled by the industries producer board.

However most co-operatives do not aspire to undertake the entire post-production operation. Generally a co-operative is formed to provide some specific link in the whole marketing chain. The kiwifruit industry has grower co-operatives providing some packing and storage facilities only, with proprietory companies handling the actual export and selling operations. (Honeybone 1981). South Island barley growers have recently established their own co-operative expressly to provide a suitable market outlet for growers produce. (Anonymous 1980).

2.4.2 Agricultural Supply Co-operatives

A second area of significant co-operative activity is in the farm supply industry in

New Zealand. (Stephens and Clark 1971). The aim of these co-operatives has been to provide an efficient, economic and reliable supply system, with prices maintained at a reasonable level and type and quality of supply most suited to meet the producer's needs. (Helm 1968).

There are essentially two methods of organizing a co-operative supply facility. The simplest system is to establish a buying ring. These small co-operatives amalgamate a number of growers orders then negotiate the purchase from suppliers, to their best advantage. Their investment in capital is normally minimal with all necessary services contracted out to other businesses. (Helm 1968).

The functions of these co-operatives are usually at a very basic level, involving the acquisition of one key ingredient for their members. The co-operative simply undertakes to purchase and distribute the product, and collect payment. (Helm 1968).

Buying rings are not much in evidence in New Zealand's agriculture, in keeping with the general low profile of the co-operative movement. (Ward 1979). They figure mostly where the item purchased represents a considerable proportion of farmers' annual expendi-

ture, such as meal for pig farmers (Walton 1979c), or where existing supplies can not always be relied on, such as ice for fishermen. (Anon 1982).

The alternative to a buying ring is an agricultural supply society. This is a much larger organization that provides farm inputs and rural services similar to any commercial organization. Its operation has to be on an equally commercial basis, generally with no restrictions on shareholder trading but also no advantages from forward ordering by member shareholders. The investment in assets and stocks is considerable, as is the increase in the risk factor. Such an organization could have its origins in a buying ring, but it is much more likely to be established as a subsidiary function of an existing marketing co-operative. (Helm 1968).

The New Zealand dairy industry has developed in just this way with most co-operative dairy companies operating a trading outlet providing farmers supplies. (Stephens and Clark 1971). The supply of fertilizer in this country is largely in the hands of farmers (Storey 1980), although the development of co-operatively owned fertilizer companies has tended to be independent of existing co-operative activity. (Anon 1980a, 1980b, Stephens and Clark 1971, Ward 1979). Fruit growers have long owned their own outlets for orchard supplies. (Stephens and Clark 1971).

2.4.3 Agricultural Credit Co-operatives

The provision of a central rural financing facility has two aims - to secure an adequate and timely supply of loan capital for agriculture, and to mobilize rural savings. (Helm 1968). In most developing countries the provision of co-operative credit on a large scale is one of the main targets of agricultural reform. (F.A.O. 1965). Centrally-funded co-operative banking organisations are also evident in many advanced countries such as the United States, West Germany and Holland. (Manwaring 1980, Storey 1980, Ward 1979).

However rural credit organizations, as such, do not exist in this country. Some co-operative suppliers such as the dairy companies' trading departments, provide moderate short term credit facilities for their client/members. (Stephens and Clark 1971). However the bulk of rural loan finance, and finance for agribusiness development, is provided from Government sources or by commercial banking organizations. (M.A.F. 1982b). These sources have tended to substitute for agricultural credit co-operatives.

2.4.4 Other Co-operative Enterprises

Machinery co-operatives are becoming more in evidence in this country (McKinnon 1982b). The sharing

of plant and equipment between neighbouring farmers has long been a practice. Some farmers have taken this one step further, by acquiring the machinery in joint ownership. This has the advantage of increasing the mechanization of the farming operation without tying up an excessive amount of capital from any one individual. The type of arrangements can range from a very informal shared purchase, to a formal machinery syndicate, in some cases even employing independent labour to operate it. Consequently the exact level of co-operative machinery participation is very difficult to ascertain.

A special type of machinery syndicate is an aerial topdressing co-operative of which there are several in New Zealand. The licensed nature of this segment of the industry means that while the farmers jointly own the plane they must independently employ the pilot and loader, and purchase their own fertilizer. (McKinnon 1982a).

Farm service groups have also been organized on a co-operative basis. Farm Improvement clubs consist of a number of farmers, jointly organized to retain a consultant for this group and individual benefit. Such clubs, providing farm advisory services, have been an integral part of New Zealand's farming scene since 1952. (Stephens and Clark 1971).

Veterinary Clubs are similarly constituted, employing a vetinarian for their member's benefits, although the service can normally be provided to non-members as well. (Stephens and Clark 1971).

Virtually any function required in the agricultural sector is open to involvement of co-operative enterprise. Storey (1980) estimates that up to two-thirds of New Zealand's agri-business is in the hands of farmer-owned co-operatives and more than 80% of farmers belong to at least one co-operative. With this present level of involvement, and agricultural production becoming increasingly capital intensive, there is an important role for co-operative enterprise in New Zealand's agricultural future.

2.5 Critical Aspects of Agricultural Co-operative Enterprise

Experience both in New Zealand and overseas has highlighted specific deficiencies in co-operative operation that have commonly contributed to their demise. Some areas that require close attention have been identified in marketing co-operatives (Manwaring 1980) and the literature would indicate these observations are generally capable of extension to other co-operative activities.

2.5.1 The Role of Producer-Directors

One important aspect contributing to the success of the co-operative is the direction and control emanating from the board of directors. (Berge 1980). Frequently, co-operative failure can be traced back to directors who did not understand or carry out their responsibilities to the organization. (Manwaring 1980). Supplier-directors have failed to divorce their twin roles of client as well as officer of the company, allowing their vested interest to cloud their judgement. (P.I.C. 1981b).

There must be a clear distinction between the functions of directors and the functions of management. (Anon 1981c, Berge 1980, Manwaring 1980, Morley 1975). Supplier-directors are often tempted to make management decisions in areas where they have little or no experience (P.I.C. 1981b), and to interfere in the day-to-day running of the co-operative. (Ward 1979). The company's officials, if unsure of their responsibilities and authority, are likely to hesitate where rapid and decisive action is needed. (Morley 1975).

2.5.2 The Standard of Management

As with any commercial company, sound, capable and experienced management is essential to

the success of a co-operative enterprise. (Manwaring 1980). However growers often relate management remuneration to their own incomes and working hours, and are unwilling to pay competitive salaries for top management ability. (P.I.C. 1981b). The management team consequently assembled is often deficient in one or more skills and this has contributed significantly to the demise of some co-operative companies. (P.I.C. 1981a, Sum 1978).

> "Co-operatives that are successful more often reflect the calibre of the management rather than any inherent advantages in the co-operative structure".
>
> (Ward 1979)

2.5.3 The Level of Commitment of Members

Members must be totally committed to the co-operative venture. (P.I.C. 1981c). Uncertainties of patronage will place excessive strain on the co-operative and those members who remain loyal, and the venture will collapse.

> "Members must be willing to accept that a co-operative is essentially a long-term venture and that the economic benefits come from long-term involvement and one hundred percent commitment".
>
> (Manwaring 1980)

It is important, then, that the rules of entry contain provisions relating to member patronage, and that the co-operative enforces these rules with significant penalties for abuse. However there are two weaknesses with forced patronage:

(i) Members may be unwilling to join in the first place.

(ii) If the co-operative is not operating as successfully as its competition, contracts will only delay its inevitable demise. (P.I.C. 1981b).

The co-operative must not use enforced patronage as and excuse for inefficient management or poor shareholder relations.

2.5.4 The Level of Financing

It is a basic principle of co-operatives to subjugate the role of capital. However an immediate dilemma arises in that the acquisition of assets requires a certain level of capital input. How and where the co-operative raises this money will have considerable bearing on its future activities. Inadequate financial resources have led to the demise of several co-operatives. (Manwaring 1980).

Co-operatives suffer because of their inherent inability to mobilise large sums of money at short notice. In a co-operative, where the main benefit to the member accrues in relation to patronage,

there is usually a corresponding limitation on interest on shareholding, and almost invariable no capital appreciation on shares. As a consequence of these limited returns and the lack of relevance of capital in distributing operating surpluses, members are normally reluctant to invest large sums of money in the co-operative. (P.I.C. 1981b).

Retaining income in reserves is often equally unpopular with shareholders. They will tend to resist any retention of funds if they feel they have a greater need for the money. (Ward 1979). Also the problem arises as to how to compensate producers foregoing income now for possible future benefits. (Walton 1979a).

Loan capital sources are often equally reluctant to become involved in co-operative ventures. The limited liability nature of the company, and the disappointing history of co-operative companies generally, combine to make financial institutions hesitant to lend in this area. (Storey 1980).

Co-operatives will need to build up cash reserves as part of their income generation for each year. Members must expect to forego some benefits now, in order to secure the required additional facilities in the future. This foregone

benefit should be assessed in the same manner as the benefit itself, according to patronage. (Morley 1975). Further, members will have to be prepared to undertake some contractual liability in order to attract the loan finance necessary. (Ward 1979).

2.5.5 The Amount of Forward Planning

Non existent or inadequate planning has been a significant contributing factor to the downfall of producer co-operatives. (Manwaring 1980). A primary function of the board of directors should be to set and control objectives and to supervise the appropriate strategies to achieve them. (Berge 1980). Forward planning gives direction to the organization's progress and often provides some sort of yardstick with which to measure this progress.

2.5.6 Orientation

Through their origins and shareholding, producer co-operatives have a strong production orientation in their operation. Their basic function is to provide the facility or service for which they were created. However an excessive concentration on what is convenient for the producers at the expense of consumers and businesses with which the co-operative is dealing, has been a common factor in their failure. Marketing co-operatives

that are production and not market orientated are unlikely to succeed. (Manwaring 1980).

2.5.7 The Level of Communication

Lack of communications between members and directors can lead to major problems, especially as the co-operative grows in size. (P.I.C. 1981b). Unless the directors and the management can devise an effective information network, the producer-shareholders are likely to feel they no longer belong to the co-operative, their active support will decline and a disenchanted faction will emerge. (Manwaring 1980, Sum 1978).

2.5.8 A Code of Ethics

The co-operative should adopt a code of ethics for the conduct of its directors and management. Any board member or company officer that has, or appears to have, a conflict of interests with the co-operative will only serve to undermine both grower and public confidence in its operation. (Manwaring 1980). There should be an established procedure for maintaining the integrity and independence of the company (Berge 1980).

2.5.9 Education

Co-operative enterprise is very different from other forms of business organization. It is an association of persons and quite unlike a proprietory company which is an association of capital. (Morley 1965).

The motives prompting shareholder investment are reduction in cost or provision of service, rather than return on capital (Ward 1979). Member expectations of the co-operative's operation place equity considerations at least as important as efficiency considerations. (Vinning 1980).

Education of members in the principles and techniques of co-operative enterprise is recognised as an important factor in the success of the organization. (Manwaring 1980). British experience has shown that the democratic control of co-operatives has failed because members have not understood the functions of a co-operative, or what it can hope to achieve. (Morley 1975). Continual attention to member education should be a feature of co-operative enterprise.

2.5.10 Non-Member Co-operative Activities

Co-operatives face a fundamental problem of corporate strategy in deciding how far the company should diversify. The simplest diversification could be the handling of non-members produce. As the post-harvest operation becomes more capital intensive there is a strong argument to support the undertaking of non-member business as a means of ensuring full utilization of facilities, providing management skills are adequate to cope. (Schroder 1982).

The question remains as to how far this diversification should proceed into sideline activities, possibly profitable but not directly related to providing services to members.

CHAPTER THREE

The previous chapter has identified various organisational issues in the management of co-operative companies. These are:-

(i) The role of producer-directors

(ii) The standard of management

(iii) The level of commitment of members

(iv) The level of financing

(v) The amount of forward planning

(vi) Orientation

(vii) The level of communication

(viii) A code of ethics

(ix) Education

(x) Non-member Co-operative Activities

These issues provide a framework for the description of the material that follows. The results of the investigation into each case-study co-operative are discussed separately within this framework, and presented in the following categories:

(i) Introduction and History

(ii) The Facilities - present and future operation

(iii) Shareholding - Size, Costs and Benefits, Voting, Communication Surrender

(iv) Directors - Composition of the Board, Management, control

(v) Physical Factors - Labour, fruit supply, identification and quality, charge-out rates, settling accounts

(vi) Financial Factors - Shareholders funds, share calls, loan capital, seasonal finance, reserves

The final chapter then summarises this information and discusses its implications to the organisation and management of a rural co-operative.

The case studies do not provide a basis for detailed discussion on aspects of the relationship between the board of directors and management personnel. In two cases the functions of management have only recently been divorced from member-director control, and in the third no such separation has yet been accomplished. As a consequence the influence of member directors on the management function is still very strong and there is little evidence of independent action by management personnel.

A second area of some deficiency in the following discussion is that of capital acquisition, especially loan capital. This has arisen because all three co-operatives had satisfied their loan capital requirements from one central government source and to date this has proved adequate for their needs. The problems of raising a minimum level of equity capital has tended to over-shadow any potential problems in loan capital acquisition.

3.1 A DESCRIPTION OF CASE STUDY ONE

3.1.1 The Co-operative

3.1.1.1 Introduction

This Co-operative Company has been in existence only three years, and constructed its first packhouse and coolstore for the 1982 season. It is situated in a developing kiwifruit region in the Bay of Plenty, some 65 km distant from the centre of kiwifruit activity. Its establishment was undertaken after much discussion within the community and consultation with similar operators already well established.

3.1.1.2 History

Up to the mid Seventies it was commonly believed that kiwifruit could only be grown in certain favoured localities in the Bay of Plenty. Then, in response to the remarkable success of the industry, the demand for kiwifruit land overwhelmed these traditional areas. Kiwifruit orchards were successfully established in a number of new localities in the Bay of Plenty and now several thriving kiwifruit centres are apparent. This co-operative is based in one such centre.

The region had been mostly established in pastoral farming prior to the boom in the kiwifruit industry. Up to 1976 there was virtually no kiwifruit interests in the area. Since then, plantings have gone ahead at a tremendous rate and there is an estimated 1297 ha presently in kiwifruit (M.A.F. estimates 12/82). As these vines reach maturity the demand for adequate packing and coolstore facilities will increase enormously.

With very little in the way of orchard development prior to kiwifruit, this area had limited existing post-harvest facilities that the kiwifruit industry could utilise. When the co-operative venture was first mooted in 1978 there were a few private on-orchard packhouses and only 4 small coolstores with capacity for 94,000 trays of export kiwifruit (N.Z.K.E.A. 1982). Basically the kiwifruit interests have had to provide all their requirements themselves, in this area.

The idea of a producers' co-operative was first suggested by one grower whose vines were amongst the earliest grafted in the district. He was searching for alternatives to carting fruit 35 km to the nearest centre and the obvious option

was to get facilities established locally. However his conclusion was that it was too capital intensive for any one grower to contemplate providing his own packhouse and coolstore units.

His discussions with neighbouring growers led to a small group of growers approaching the local Fruitgrowers Association. Their suggestion that a producer co-operative be established to provide a central post-harvest operation found some favour with other local growers. A sub-committee was appointed to investigate the feasibility of the idea and its report, tabled at the end of 1979, recommended that the growers go ahead and establish the co-operative.

A public meeting in January 1980 set the wheels in motion and initial support was such that a private company was formed in March that year. This was subsequently registered as a Co-operative Company 7 months later, in October.

Public support initially was quite strong for the co-operative venture with the public meeting gaining support from some 80 shareholders representing 80,000 female vines. However, when it came to actually taking out shareholding much

support fell away and considerable effort was needed to obtain commitment from even half this number.

Many growers had virtually exhausted their capital resources in developing their orchards. Therefore committing funds to develop post-harvest facilities was very low priority. Also a number of growers were unsure of the commercial success and stability of a co-operative venture and preferred to adopt a "wait and see" attitude.

The Company was eventually started with growers commitment for just over 40,000 female vines. This was a bare minimum for the scale of enterprise envisaged by the founding growers. However since this shaky start, the co-operative has attracted several new growers and is now soundly established in this area.

Essentially the co-operative was established because of the work of a small group of very active growers who saw this as the best method of providing the necessary post-harvest facilities. It was established specifically for the kiwifruit industry and is designed as a joint packhouse and coolstore operation.

3.1.2 Operation of Post-Harvest Facility

3.1.2.1 Present Facilities

The first action of the growers co-operative was to purchase an industrial section of some 6.7 ha on the outskirts of the district town. This section was adjoining the rail link from Hamilton, situated just off State Highway 2. However the Kaimai Tunnel rail link forced the closure of this branchline and transport is now only by road.

Construction on the first packhouse and coolstore was initiated early in 1982 and completed for that packing season. At present the packing facilities consist of one 600 m2 packhouse housing one electronic 4 lane weight grader. No additional packing facilities are envisaged until the 1984 packing season. Throughput is difficult to judge as the unit has only been operating one season and then not at full capacity. However the unit is capable of handling approximately 1,000 trays/hour and should put through 7,000 trays in a day, employing 1 shift of workers. The packhouse is expected to be able to handle the 200,000 export trays estimated for the 1983 season, and this will be capacity for one shift of workers.

The coolstore consists of one large store with capacity for 110,000 trays of kiwifruit, plus a forced air pre-cooling section with capacity of

4,800 trays. Each unit has separate controls and is designed for use solely as a coolstore of kiwifruit or citrus.

A second coolstore is presently under construction and this will have a capacity of 211,000 trays. It is being constructed adjoining the present coolstore and the present machinery room will house both refrigeration plants. As part of this development two bays in the existing coolstore are being converted to forced air pre-cool rooms. Consequently the overall capacity for coolstorage will be 286,000 trays plus 14,400 trays of pre-cool space.

Included on the site is a dwelling, recently moved on and in the process of renovation. This is being prepared as an office for the co-operative, and to provide adequate staff facilities on-site.

3.1.2.2 Throughput

1982 was the first season of operation and it was estimated the shareholders would be providing 80,000 trays of export fruit. However adverse weather in the autumn reduced the actual throughput to 57,600 trays. Estimates for the 1983 season indicate a crop of 200,000 export trays and throughput rising rapidly thereafter.

In addition to the kiwifruit last season the packhouse handled the packing of export citrus, utilising equipment owned by the export firm. This operation consists of washing, waxing and packing for export and is likely to be offered again next season. The co-operative is prepared to handle most products on behalf of growers, to utilise the packhouse in the off season. However there is very little produce available and these operations do not contribute significantly to the co-operatives' income.

As a result of the reduced crop in 1982 the coolstorage facility was grossly under utilised last season. This locality does not have a great demand for coolstorage other than by kiwifruit, so the capacity was never threatened at any stage.

Storage capacity for 1983 will be 286,000 trays. Crop estimates of shareholders will two-thirds fill this and the co-operative is presently negotiating with other coolstores to store 100,000 trays on their behalf. This total of 300,000 trays represents about the capacity of the store, given that early season fruit will be moved on by the exporter before the later harvest is picked and packed.

There is virtually no other demand for coolstorage in this district. Consequently the coolstore was turned off once the last kiwifruit was shipped out.

3.1.2.3 Future Requirements

Future expansion of the post-harvest facilities is very closely tied to the rate at which shareholders' vines reach maturity. A survey of shareholders in 1982 revealed that 52,313 vines had already been grafted and a further 10,786 were to be grafted that year. This left only 3,300 vines to be grafted in 1983 to give a total female vine population for all shareholders of 66,399. (Table Five).

Based on this information projections for future packhouse and coolstorage requirements indicate production in excess of 1M trays in 1987. Thus, given the present level of technology, the packing facilities will have to expand five-fold in throughput capacity to handle the shareholders crops.

The coolstore capacity will have to be expanded as well but, because of the ability to turnover produce in the course of the season, not to the same extent. A realistic throughput factor of 1.2 to 1.3 would reduce coolstore requirements to approximately 800,000 trays, three times the present facility.

TABLE FIVE - SHAREHOLDERS FUTURE REQUIREMENTS FOR POST HARVEST FACILITIES - CASE STUDY ONE

Year	Grafted Vines - Vines to be Grafted (Cumulative)		(Estimated) Production (Trays)	Net Annual Increase (Trays)	Percentage Increase
1978	9,145				
1979	19,645				
1980	42,796				
1981	52,313				
1982	63,099		57,604	57,604	
1983		66,399	200,000	142,396	247%
1984			385,200	185,200	93%
1985			630,000	244,800	64%
1986			880,000	250,000	40%
1987			1,080,000	200,000	23%

Throughput for 1982 was estimated by growers at 87,000 trays but adverse weather conditions in the autumn considerably reduced this. Ultimate capacity of proposed facilities is 1.6m trays.

Source - Company Records

It would be technically feasible to erect facilities capable of handling up to 4M trays on the site presently owned by the co-operative. However considering the present level of shareholding, and the vines this represents, maximum capacity of proposed facilities is likely to peak at 1.6M trays.

3.1.3 Shareholding

3.1.3.1 Size of Shareholding

From a somewhat uncertain start, the shareholding in this co-operative has built up to 57 representing 66,399 female kiwifruit vines. The shareholding is currently closed at this number.

The decision to close the shareholding was made by the directors. It was based on the assessment of ultimate production from the present number of vines, having regard to the standing agreement to handle any production from expanded plantings by the existing shareholders.

However, this decision was by no means unanimous. A body of opinion within the board believe that the proposed scale of facilities could readily cope with the production from 80,000 vines, as was originally envisaged. Therefore shareholding should be allowed to expand to this level. This

would mean more shareholders to contribute to the capital costs, and more throughput to meet the annual overhead expenses.

The closed shareholding is likely to be an interim measure only, to give the directors some time to decide how the co-operative is progressing. However, the upper ceiling, for shareholding, of 80,000 vines, is unlikely to be exceeded.

Shareholders are drawn exclusively from this small locality. The most distant shareholder would be some 10-12 km away from the post-harvest facilities.

3.1.3.2 Cost and Benefits

The growers are expected to take out their shareholding at grafting. This is normal practice and has the twin benefits of matching investment in post-harvest facilities with orchard development as well as providing a guide to growers' requirements.

The rapid development of this region nullified these benefits to some extent. In 1980, when the co-operative was being formed, growers had already grafted nearly two-thirds of the total vines. The development timetable for post-harvest facilities is necessarily short and only the later growers are advantaged by a staggered Share Payment .

Initial share capital is allocated on the basis of six $1 shares per female vine. Payment of 30¢/share is required on application and the balance of the cost is progressively called up each year. However shares issued in respect of vines producing export fruit must be fully paid 6 months before the fruit is packed.

Additional share issues are made at the discretion of the directors, to provide share capital contribution to further development. These issues will be tied to fruit throughput rather than vines grafted. In 1982 an additional issue of 1 share per 4 trays of export kiwifruit was made, effectively collecting 25¢/tray over and above the packing charges.

These issues will be adjusted annually depending on the development work to be undertaken and the inflating cost of this development. At present it is envisaged that each grower will ultimately hold approximately 18 shares per female vine.

There is no provision for a differential for those growers who subsequently join the co-operative. However the issue of shares is at the directors discretion and a premium of some sort is likely to be charged.

A second class of shares has been created at the instigation of the loan capital financier. This issue of "B shares" is equivalent to the amount of loan capital provided and has been distributed pro rata to the growers at the rate of 15 shares per grafted vine. The shares are secured to the financier and will remain uncalled unless the loan capital itself is recalled for some reason.

In return for taking out this shareholding, each grower is guaranteed sufficient facilities to pack and store all his export kiwifruit. The co-operative will also handle sales of reject fruit on the local market or for processing. The agreement extends to all fruit, from plantings now as well as any expansion in the future. Shareholders have a prior right to use the facilities.

The articles of association of the co-operative make it obligatory for shareholders to supply all fruit from registered vines to the co-operative, regardless of quality. This ensures a guaranteed supply to the co-operative, subject only to the vagaries of weather. There is no provision for any level of "dry" shareholders, and any shareholder who does not supply fruit must relinquish his shares.

The power lies with the board of directors as to penalties for breaching this condition, including possible expulsion from the co-operative. In the first season's operation, there were some difficulties in that some shareholders already had made arrangements to pack elsewhere, not knowing how advanced the co-operative's plans would be. The board treated these cases leniently, but for the 1983 season the stated policy is to enforce this rule rigidly.

3.1.3.3 Voting of Members

The voting arrangements on a show of hands are as standard for a co-operative company with each shareholder having the right to one vote. However, this right has been modified to some extent by stipulating that voting on polls will be according to patronage:-

Members holding less than 4,000 shares	- 1 vote
Members holding from 4,000 to 8,000 shares	- 2 votes
Members holding more than 8,000 shares	- 3 votes

(Company Articles)

3.1.3.4 Communication with Shareholders

Communications is a peripheral matter for this co-operative. The board of directors are reluctant to undertake an effective public relations effort with the growers. Management attitude is

to attempt to teach the growers to come to the co-operative for the information they seek.

The co-operative has only been operating a short period and has maintained a somewhat formal communication network over this time. The basis of communication is the annual general meeting, a mass meeting at which all major business is expected to be aired. This is supplemented by an official Newsletter published "as required" to keep shareholders informed of company actions.

A second mass meeting is held before the season starts. It is convened to sort out any problems growers may have, or expect to have, over the coming harvest.

In addition to this, company policy is for directors to be accessible to individual growers as much as possible. Growers are encouraged to approach their directors should they have any matter they feel would affect the co-operative enterprise.

3.1.3.5 Surrender of Shares

The co-operative company retains absolute control over its shares, at all times. The articles of association provide that directors approval be a prerequisite for transfers and repayments of shares. These articles also exclude

any appreciation in share value in determining the appropriate compensation.

Surrendered shares are reimbursed to the level of paid-up capital, with interest payments at the discretion of the directors. Payment would be on a deferred basis up to eight years, again at the directors' discretion. Members are obliged to give one month's notice of their intention to cease supply and hence withdraw from the company.

3.1.4 Directors and Direction

3.1.4.1 Board of Directors

The company's articles of association allow for a minimum of 4 and a maximum of 8 directors. Unlike the traditional co-operative company, these articles do not provide for any share qualification for a director. However directors can only be elected to the board by a general meeting of shareholders.

Compensation for board members for their directors function is nominal. The attitude of the co-operative is that the directors are protecting their own interests in their actions. This will be sufficient spur and there is no need for substantial payments to them.

The present directors are all grower - shareholders

and the composition of the board has not changed a great deal since the company's inception.

3.1.4.2 Ethical Issues

The articles of association have a standard provision relating to ethical issues. Directors must declare any conflict of interest situation and then cannot vote on that issue. However directors can deal normally with the co-operative in an independent capacity.

3.1.4.3 Management

The management of the co-operative is mostly undertaken by the board members. Each board member is given the responsibility for a different aspect of the co-operatives operation, with the chairman taking a key co-ordinating role.

Employing independent professional management is considered low priority at present. The board accepts the need for (and employs) an experienced practical shed manager at harvest time but are confident they can handle all the business decisions themselves. Ultimately the part-time shed manager's position will expand to an overall operations manager, but at present this function is handled by a board member and the part-time manager.

Compensation for board members working on behalf of the co-operative is paid at the basic

rate for orchard workers. This is the rate directors would have to pay to get someone to work on their orchard while they are occupied on co-operative business.

3.1.4.4 Control

Actual control of the company is very much in the hands of the shareholders. The board of directors refer most matters back to the shareholders to gain approval for the actions that are contemplated.

The shareholders have the ultimate authority as well as the actual control of their co-operative. The decision process is initiated by the growers who delegate their power to the board of directors who put the decision into effect.

Company policy is to have the grower: co-operative relationship on a strictly business footing - a commercial enterprise post-harvest facilities to a commercial grower. In practice there tends to be a much closer relationship between the grower, the co-operative management and the individuals in the packhouse.

3.1.4.5 Influence in the Industry and Attitude to Further Functions

The co-operative is new in the district and consequently has not undertaken many activities on behalf of the shareholders, other than the

packing and storage of fruit. Generally the local fruitgrowers association is seen as the representative voice of the growers in this district.

3.1.5 Physical Factors

3.1.5.1 Labour

The labour force for the packhouse and coolstore operation will total about 50, all employed on a casual basis for the brief picking season only. At present it is envisaged that only one shift will be needed to handle the 1983 crop. This number of workers can be drawn from the local populace and no itinerant labour is necessary. However with the proposed expansion offacilities, this situation is only likely to last for a further two years.

The co-operative will fill one key position, that of shed manager. This appointment will be for the duration of the packing season and the appointee will be responsible for the labour force and the smooth packing and storage operation. The rest of the labour will be employed as required. Wage rates are agreed prior to the start of the season and workers employed on this basis. There is minimal union involvement in this operation at present.

3.1.5.2 Supply of Fruit

The requirement for an even flow of fruit is as important with this operation as it is with any processing facility. Once the packing operation begins it should continue uninterrupted, at full capacity, until the season is over. This company's experience of fruit throughput is limited, having operated only one season and then well below capacity.

To ensure this even supply of fruit, the co-operative prepares a picking programme from information supplied by the grower. This information essentially consists of a series of crop estimates as the harvest draws nearer, the proposed export agent and the preferred picking dates.

The programme is then drawn up by the shed manager and the secretary. Their aim is to set a picking pattern as close to desired dates as possible while still ensuring a regular supply of fruit. Company policy is to have a proportion of each growers fruit packed in each week of the season. Once the pattern is set, and the grower has agreed, then this is expected to be followed through the season, although the company is prepared to be flexible to meet any variation.

3.1.5.3 Identification of Fruit

As the field bins arrive from the orchards they are noted on a reception sheet and the bins designated with the growers code number. As the fruit goes over the grader, this code number is stamped on the export boxes and once the fruit is packed in these it can be identified with an individual grower. Packing in the coolstore is according to the exporter chosen and the size of fruit, providing convenient access for the exporter.

3.1.5.4 Quality Control

Quality control in this packhouse is under the supervision of the grower-director appointed by the board to work with the shed manager. He is responsible for the employment and training of the quality control staff and retains an overall authority in this area.

One employee attends the M.A.F. training course at the start of the season and is responsible for the standard quality control inspections of export and reject fruit. This person has nominal control of fruit standards but in practice tends to share this with the board member in charge of the shed.

Officially, complaints procedure for growers is to this board member. However the informal

relationship between most personnel in the packhouse tends to make this situation somewhat flexible.

3.1.5.5 Charge-Out Rates

Charges for packing facilities are calculated on a "user pays" basis. The operation is charged out at a standard rate per tray of export fruit. There is no differential in the charge-out rate between member growers and non-member growers.

The board of directors set the packhouse charge-out rate. It is calculated from the cash flow needed to meet annual costs plus provide for capital works and some surplus. Having established the basic per-tray charge-out rate, the board then decides what portion of this will be levied as a packing charge and what portion will be a call on share capital.

Generally this packhouse charges at a reasonably competitive rate. However there is not a lot of direct competition locally and any alternative involves considerable cartage.

The inclusion of a share payment content with the basic rate for packing tends to set the packing charge, in the eyes of the shareholders, at the sum of the two. Consequently the growers perception of the charges are at some variance with the co-operative directors.

The provision of coolstorage for kiwifruit is now controlled by the industry. The introduction of a licencing system that determines the charge-out rates dependent on the facilities provided at the site has done much to co-ordinate this aspect of the post-harvest operation. This coolstore attracts a better than average rate with its present facilities.

3.1.5.6 Payment of Co-operative Charges

In the first season's operation, exporters payments were generally made direct to the grower. Settlement of the packhouses accounts tended to be very slow, accentuated by the poor harvest which materialised after the advance payments by exporters had been made.

From this season on, all exporters' payments will be channelled through the co-operative. The co-operative will forward money on to growers within a few days but can deduct their charges before doing so. This will require a reasonably sophisticated office system but will eliminate any bad or slowpaying debts.

Coolstorage charges are now subject to licence and paid direct to the coolstore by the exporter from the exporter's pool. The money flow with this operation has been no problem. However because of the reduced crop last season,

coolstorage income was considerably below expected. Being under licence the co-operative was not able to increase its charges to compensate.

3.1.6 Financial Factors

3.1.6.1 Shareholders Funds

The authorised capital of this co-operative company is set at $1,500,000, comprising 1.5M $1 shares, of which 500,000 are ordinary A shares and 1,000,000 are ordinary B shares. Of these shares the company has issued 333,213 A shares and 760,515 B shares, and called up approximately $200,000 to date, all on A shares. The issue and call of these A shares relates to shareholders providing capital for co-operative development, and the B shares provide security for loan capital financiers.

The company is considerably under-capitalised, with shareholders funds representing only 22% of the company's assets and less than 20% has been contributed by the shareholders. (Table Six). Despite this low input, some shareholders have had considerable difficulty in meeting the capital calls on their shares, and several potential members decided not to join for just this reason.

Ultimately it is expected each shareholder will hold 18 A shares per female vine, fully paid up,

TABLE SIX - SUMMARY OF BALANCE SHEET, NOVEMBER 1982

Liabilities	1982	1981	Assets	1982	1981
Unsecured Current Liabilities	12,816	1,381	Current Assets and Investments	41,617	1,939
Secured Current Liabilities	-	-	Land and Buildings	778,529	301,190
Term Liabilities	821,800	133,945	Plant and Equipment	252,695	1,047
Shareholders Funds					
- Paid Up Capital	208,663	86,887			
- Net Reserves and Other	29,562	81,463			
	$1,072,841	304,176		$1,072,841	304,176

This balance has been prepared on an historical cost basis but adjusted for revaluation of assets.

plus an uncalled issued of B shares equivalent to the portion of the term liabilities of the co-operative, for which they are made personally liable. The 18 shares per grower was based on the cost of the full facilities as calculated in 1980. No provision has yet been made for the effects of inflation.

3.1.6.2 Calls on Share Capital

The shares are issued to members at grafting. To ease their financial burden, the co-operative have formulated a staggered programme of share calls, requiring a minimum deposit and annual instalments, with the share fully paid up prior to any harvest off that vine. Additional share issues above this level can be made and called up on the basis of throughput of export fruit. The directors retain the right to operate outside this structure if they deem it necessary.

3.1.6.3 Term Liabilities

Obtaining adequate loan finance on satisfactory terms has been, and still remains, the most essential feature of the establishment and expansion of these facilities. Initially the company borrowed from some potential members, in order to secure the industrial site on which their operation is now situated. However this

money has largely been repaid from share capital raised and the co-operative now has essentially one source of loan capital, the Central Government agency with funds specifically for agri-business development. This finance has been instrumental in providing all facilities to date, to a maximum level of two-thirds cost.

The securities required for this loan capital have consisted of a first mortgage over land and buildings and a debenture of all other company assets. A special requirement has been an additional issue of B shares equivalent to the amount of loan finance. These shares have been issued pro-rata to the grower members and are secured to the loan financier. They remain uncalled unless the company is in default of its mortgage and debenture, and cannot repay the loans from internal sources.

3.1.6.4 Seasonal Finance

The company's seasonal finance arrangements are similar to any proprietory company, by way of overdraft facilities with one of the local trading banks. Its requirement for seasonal finance is significant, especially in this growth phase, and has been up to 50% of its gross income. Much of this is required to provide the packaging materials

on behalf of growers, purchased very early in the season. Difficult seasons such as 1982 place considerable strain on overdraft limits but it is management policy to use such facilities for short-term deficiencies and reserve shareholders' funds for capital work.

The trading bank does provide some longer term finance, mostly medium term money to bridge the gap between loan capital and shareholders' contributions for development work. The terms of such money normally reflect the market position for finance. Security for both seasonal and term finance is subsequent mortgages and debentures to the term financier, with no special share security provisions.

3.1.6.5 Reserves and Returns-to-Shareholders

The company's articles make provision for returns to shareholders by way of rebates or interest. The returns can be by way of cash or goods or services or bonus shares. Rebates are to be calculated according to patronage, and interest according to paid up share capital, or advances for shares.

The decision to make some return to shareholders is entirely that of the board of directors. It is company policy at present to

set the charges such that some revenue reserves can be established and to retain any operating surplus for capital works. However to date the operation has not provided any surpluses and the only benefit to shareholders has been the availability of a suitable post-harvest operation.

3.2 A DESCRIPTION OF CASE STUDY TWO

3.2.1 The Co-operative

3.2.1.1 Introduction

This co-operative company has a large kiwifruit packing and storage operation situated in the heart of the kiwifruit region in the Bay of Plenty. It has been operating successfully for several years and now holds a commanding position in the kiwifruit industry as the largest enterprise of its type, co-operatively or privately owned. However it has undergone considerable change since its original inception, reacting to the twin pressures of shareholders' requirements and commercial necessity.

3.2.1.2 History

The original co-operative company was established to provide cold storage facilities only. Most of the orchardists growing kiwifruit in the early days had planted the crop as an adjunct to their established citrus fruit enterprise, and already had adequate packing facilities for their own fruit. Consequently their requirement was just for suitable storage facilities.

The first company was established as a cool-store co-operative, leasing the local dairy

company's coolstores for periods up to 4 months of the year. This operated reasonably successfully since the kiwifruit harvest in May coincided with the drying off of dairy herds over winter. By the time the dairy industry got underway again in the spring, most of the kiwifruit had gone overseas.

The kiwifruit industry expanded rapidly in response to the tremendous demand for the product, and many new growers were attracted to this region. These new growers, for the most part, developed kiwifruit on unplanted land and consequently had no on-orchard packing facilities ready to hand. At the same time, they had virtually exhausted their capital resources in planting up the kiwifruit. This dilemma of inadequate facilities but also inadequate finance required very urgent attention and many growers turned to the existing coolstore co-operative as an ideal vehicle for resolving it. However the more established growers had adequate facilities and were reluctant to progress in this direction.

In consequence to this demand for packing facilities the local growers formed a second co-operative, in 1972. This company was established solely to provide for the packing of fruit and immediately set about acquiring land, by lease and

purchase, adjoining the dairy company cold stores. Construction was then started on the first of the packhouses.

Once the fruit packing operation got underway it became apparent that the growers had set up a somewhat unwieldy post-harvest operation. While the two operations of packing and storing are completely separate, they needed to be very closely co-ordinated. The need to have fruit packed and stored as soon as possible after harvest is paramount.

Also, once the packing company was set up it was found that the shareholding between the two was very similar and management, by necessity, was closely aligned. Subsequently the cold store operation merged into the Bay of Plenty Fruitpackers to form one company.

In 1978 a second major re-organization was required in the co-operative structure. The post-harvest facilities, especially the cold storage capacity, had by this time attracted significant commercial interest. The units proximity to major transport links (road, rail and sea) made it very desirable. Further, the seasonal nature of kiwi-fruit usage of these facilities meant much space was unused over the summer and autumn months.

However there is a statutory requirement in this country that at least 80% of the co-operatives throughput must be from shareholders in order for it to continue to enjoy the taxation and other benefits of a co-operative. The use of cold storage by independent interests would have been well in excess of this figure. By the same token, these commercial interests had no desire to become involved with the packing side of the co-operative.

This problem was resolved by separating the two functions in terms of ownership but at the same time retaining overall management in one central body. A new subsidary co-operative company was set up to take over the cold store operation. The shareholding has changed considerably since inception and is now held almost entirely by the fruit packing co-operative, with token shares owned by those commercial interests that have negotiated to use the off-peak storage capacity.

It is as two separate co-operative companies but under one overall management control that the present post-harvest operations are carried out.

3.2.2 Operation of Post Harvest Facility

3.2.2.1 Present Facilities

The fruitpacking co-operative and its subsidary cold storage co-operative have, for their

operations, an area of 13 ha of which approximately half has been developed for handling kiwifruit. It is situated on the outskirts of the district town, in an industrial area adjoining the railhead and just off State Highway 2.

At present the packing facilities consist of two 2787 m^2 packhouses each housing two electronic 8 lane weight graders. A third packhouse is presently under construction and will house an additional 6 lane grader. Capacity is difficult to guage but should average approximately 9,000 trays/hour in total. Daily throughput will vary according to how many workers' shifts are employed and how long each shift works for, but a target of 100,000 trays per day is envisaged. The packhouses should have capacity to pack in excess of 3M export trays over the 1983 season.

Part of the packhouse complex is given over to a high humidity coolstore. This special unit is used for the initial storage of the bulk bins of fruit when they first come from the orchards. It has storage capacity for approximately one day's pick and was built to ensure a steady supply of fruit to the graders, uninterrupted by the vagaries of weather.

Included on the site is a central office block which handles the administration function of both co-operatives. There is also a well equipped workshop, and kiwifruit laboratory for research purposes.

The cold storage company has 14 refrigerated storage rooms adjacent to the packhouses, providing approximately 80,000 m3 of space. The storage rooms are divided into four separate complexes, each with its own refrigeration equipment, and capable of providing both cool and cold storage of produce. Each storage complex has its own forced air pre-cooling units for the rapid removal of field heat from the fruit. The cold storage operation is capable of handling 50-60 pallets of packed export kiwifruit per hour, determined by the time required in pre-cooling. Present cold storage facilities could store up to 2.7M trays with additional facilities available on lease in the nearby Dairy Company stores.

3.2.2.2 Throughput

Development of these post-harvest facilities has been quite dramatic. In 1972, the first season of operation, the packhouse handled 28,500 trays of export fruit. Facilities were expanded virtually every year as the packhouse throughput

grew to 2.1M trays in 1981, the most handled in one season to date (table seven).

As well as the export fruit, last season the packhouses handled 250 tonne of local market kiwifruit, plus 75 tonne of export asparagus and 700 tonne of export squash. A small amount of shareholders' avacados were also packed and stored. These "catch crops" are sought, as available, on a seasonal basis to use the facilities which would otherwise be lying idle, and provide relatively modest contribution to overall cash flow.

The cold storage operation also mushroomed to keep pace with this rapid growth in kiwifruit harvests. From a leased facility in 1972, the cold storage facility now has capacity for 2.7M trays if fully used. However part of the area is given over to forced-air cooling and this reduces the available storage space. Also some of the storage chambers are used almost continuously by the commercial shareholders. While the growers have first priority to storage for kiwifruit, in an average year it is expected that 8,000 tonne (2.2M trays) of export kiwifruit and 8,000 tonne of other frozen product would be stored.

3.2.2.3 Future Requirements

Future expansion of both packhouse and cool-store facilities will be governed by the rate at

TABLE SEVEN - PACKHOUSE THROUGHPUT - CASE STUDY TWO

Year	Grafted Vines (Cumulative)	Total Throughput (Trays)	Net Annual Increase (Trays)	Percentage Annual Increase
1972		28,500		
1973	69,413	50,000	21,500	75%
1974	78,526	145,000	95,000	190%
1975	94,584	249,000	104,000	72%
1976	108,829	543,000	294,000	118%
1977	118,943	642,000	99,000	18%
1978	126,862	655,000	13,000	2%
1979	150,082	1,354,000	699,000	107%
1980	175,255	1,490,000	136,000	10%
1981	198,632	2,100,000	610,000	41%
1982	222,210	1,300,000	800,000 (-)	38% (-)

Throughput for 1982 was considerably reduced by adverse climatic conditions during the autumn. Predictions for the season prior to this placed the likely throughput at 2.5m trays, and predictions for 1983 season are 2.7-3m trays.

Source - Company records

which shareholders' vines reach maturity. Following the end of the 1982 harvest, a survey of growers revealed 198,632 grafted female vines of which approximately 150,000 were already in production to some degree. A further 23,578 vines was planted but not yet grafted, and growers proposed an additional 38,015 planted in the future. Thus the present shareholding would represent approximately 260,000 female vines (table eight).

Based on this information, projections for future packhouse requirements indicated a steadily increasing demand to 4.3M trays in 1987. Cold storage facilities will have to be enlarged as well, but not to the same extent. Early season kiwifruit can normally be moved to market before the late season fruit is harvested. Consequently throughputs of 1.2 to 1.3 times actual capacity are feasible and this will reduce cold store requirements to 3.5M trays.

Ultimate throughput is less readily identifiable but given the present level of technological development, this site's maximum usage is reckoned at 5-6M trays.

TABLE EIGHT - SHAREHOLDERS FUTURE REQUIREMENTS FOR POST HARVEST FACILITIES - CASE STUDY TWO

Year	Future Vine Plantings	Estimated Production (Trays)	Net Annual Increase (Trays)	Percentage Annual Increase
1982	(20,206)	(1,300,000)		
1983	15,399	2,700,000	1,400,000	108%
1984	2,380	2,550,000	150,000 (-)	6% (-)
1985	30	3,400,000	850,000	33%
1986		3,200,000	200,000 (-)	6% (-)
1987		4,300,000	1,100,000	34%

Note - 1982 vines are already planted and production is known.

Source - Company records

3.2.3 Shareholding

3.2.3.1 Size of Shareholding

There are approximately 150 growers holding shares in the Fruitpacking co-operative, and the shareholding is now closed. The cold storage co-operative, being a subsidary company, has only 3 shareholders with 97.72% of the shares held by the parent company.

The decision to close the shareholding was a reflection of the ultimate capacity of the present 13 ha site. The directors felt that given a throughput ceiling of 5-6M trays, and a standing agreement to handle additional production from existing shareholders (up to 300,000 female vines), then 150 active shareholders represented about the maximum kiwifruit production possible.

Shareholders are drawn mostly from the central Bay of Plenty region where the kiwifruit industry first became established. However, reflecting the central position of this co-operative, a number of growers who were early to establish orchards in other localities are also shareholders.

3.2.3.2 Costs and Benefits

The growers normally take out their shareholding when they graft their kiwifruit vines. This allows for a staggered input to the post-harvest

facilities coinciding with the development of the shareholder's orchard. It also provides the co-operative with a time-table of future grower requirements that must be met.

Payment of share capital is on the basis of an initial $3 per grafted female vine (which includes a share premium of $1 per vine) plus a further $10 per vine payable on export tray throughput over the subsequent 5 to 7 years. The payments are split up into a share capital contribution of $6 per vine, and a revenue levy which at the moment is also $6 per vine. This revenue levy is adjusted annually to meet the inflating costs of providing additional facilities.

In return for accepting the growers' shareholding, the company agrees to provide all packing and storage requirements for kiwifruit, including present and future plantings. This includes providing for transport of bulk bins both to and from the orchard. Shareholders have priority for use of the facilities ahead of any unattached growers.

The grower is constrained to provide his fruit to the co-operative regardless of quality. This gives the co-operative considerable control over, and knowledge of, its fruit supply, as 12

months notice is required to withdraw share-holding. There is no provision for any form of "dry" shareholding whatsoever.

The penalty for suppliers who do not conform to this ruling is at the directors' discretion but to date has resulted in expulsion from the co-operative. Usually the decision is submitted to a general meeting of shareholders for ratification which, so far, has always been forthcoming. Shareholder support for the monopoly of fruit processing is a feature of this case study.

3.2.3.3 Voting of Members

The articles of association provide that "on a show of hands every member present in person shall have one vote and on a poll every member shall have one vote for every $1.00 paid up on the shares registered in his name." Effectively the company has directed that on straightforward matters a "one man - one vote" principle will apply. However on more controversial matters that cannot be settled in this fashion, the shareholders will be able to reflect their will in relation to their patronage of the co-operative.

3.2.3.4 Communication with Shareholders

Communication is an essential feature of this co-operatives philosophy. The attitude of the

directors is to maintain a high public profile and support any decisions with an appropriate information flow to the shareholders.

There is a formal communications network consisting of the annual general meeting for shareholders, supplemented by official newsletters published on an "as required" basis. This is normally the vehicle for official company policy matters and information regarding overall objectives.

Of equal importance is an informal network built up over the last four or five years. This consists of two mass meetings and several group discussions.

The first meeting is held in the last week of April. It is convened so that any personal grievances or problems anticipated with the coming season can be ironed out. The second is held shortly after the season ends. It provides the opportunity for growers to voice their opinions on how the season went and any problems that were encountered.

The group discussions are convened periodically during the year, involving perhaps 20 shareholders. They could be held on an orchard, or in the boardroom depending on the level of

discussion desired. These "road meetings" provide the opportunity for directors to get beside growers in an atmosphere less restrictive than a full shareholders' meeting in formal surroundings. In addition, every director is accessible to direct approaches from individual growers.

3.2.3.5 Surrender of Shares

In keeping with one basic principle of co-operative organizations, this case study co-operative retains absolute control over their shares, at all times. Transmission or surrender of shares is at the directors' discretion, and the company's articles of association specifically exclude any appreciation in share value above par when determining the level of compensation for shares surrendered.

Surrendered shares will be reimbursed to the level at which they were paid up only, and no interest is payable on this amount. Further, the co-operative has up to five years to fulfill its obligations in this respect.

Members are obliged to give 12 months notice of their intention to cease supplying kiwi-fruit to the co-operative, and hence relinquish their shareholding. However this does not alter

the directors' powers, although in practice shareholders leaving for satisfactory reasons (such as sale of orchard, or joining a more local co-operative recently established) are paid out immediately and in full.

3.2.4 Directors and Direction

3.2.4.1 Board of Directors

The articles of association of the pack-house company allow for a maximum of 10 directors. Of these, not less than 8 shall be elected by the members from amongst their number. A further 2 directors can be appointed at the discretion of the 8 member-directors, regardless of their share-holding status.

The coolstore co-operative has a similar board structure but with 6 member-directors and 2 appointed directors.

Compensation for board members was set at a nominal level initially. However the board has now developed a more professional aspect and the fees have been increased substantially. Payment is tied to level of work performed on behalf of the co-operative.

Traditionally the non-member directors have held observer status as representatives of interested parties - e.g. financiers. However

recently this has changed with a move to strengthen the board by appointing senior management from within the firms.

3.2.4.2 Ethical Issues

The articles of association provide that a director must declare any conflict of interest in his dealings on behalf of the co-operative. Any such conflict removes the directors right to vote on that issue, but it does not prevent the director from negotiating with the company in his private capacity as grower or independent businessman.

3.2.4.3 Management

A general manager is employed and it is his responsibility to ensure the overall operation is run efficiently. In the past this has been a member-director but last year an independent professional was appointed.

Directly under the general manager are the separate managers for the two operations, each with their own permanent and seasonal staff. Management remuneration is determined by negotiation between the board and the individual concerned.

3.2.4.4 Control

Control of the companies rests fairly and squarely with the boards. While the shareholders

do provide the ultimate authority, in practice they have relinquished much of this to their directors.

The board of directors have assumed much of this control, in keeping with the general desire to run the co-operative along strictly commercial lines. The accepted co-operative pattern of grower consensus reflecting in board decision then advising management to implement is not evident at all. Instead board decisions are made and management instructed - periodically growers are informed of what is being instigated.

Grower contact is solely with the company officals. While there is an "open shed" policy encouraging growers to watch their own fruit being processed, they cannot interfere in the packing operation. The grower's role as shareowner is subordinate to that of client and the contact is strictly that of an individual engaged in a commercial transaction with a company.

3.2.4.5 Influence in the Industry and Attitude to further Functions

The actual influence of this co-operative extends beyond its provision of post-harvest facilities. For example each grower appoints an exporter to handle this aspect of his crop. But

when it comes to discussing general issues related to exporting, the growers tend to look to the co-operative to negotiate on their behalf. This tacit appointment is equally apparent with other matters of general grower interest (advisory work, labour etc.)

The co-operative has willingly accepted this role, in keeping with its general policy of a high public profile and leading position in the industry. Also the co-operative deals with the servicing industries on a reasonably regular basis and is now perceived by them as representative of the general views of the growers.

3.2.5 Physical Factors

3.2.5.1 Labour

The packhouse operation will require a staff of approximately 100 workers per grading line, mostly for the brief picking season May to July. This includes all ancillary staff such as office workers, forklift operators, tally clerks, foreman etc. Effectively, for the 5 lines proposed the company will need 500 workers per shift. Two shifts are envisaged to handle the 1983 crop, drawn from the local population and an itinerant labour force attracted to the area.

The normal practice is to fill the key positions prior to the season starting. This will ensure a trained team of supervisors is ready once the peak labour period is reached. A core staff of administrative personnel is employed all year round.

The cold storage facility is also seasonal in its demand for labour but nowhere near to the same extent. A permanent staff of 8 is employed and this increases to around 30 at peak times.

Wage rates are agreed before the season starts, normally at award rates with grades for skill and experience. There is minimal union involvement in this organization as yet.

3.2.5.2 Supply of Fruit

The operation of these facilities requires an even flow of fruit. Consequently the co-operative prepares a picking programme for each shareholder. The aim is to ensure a regular supply of fruit to the packhouse, weather excluded. Vagaries in the weather are minimised as much as possible by storing a days pick in advance in the controlled humidity store.

The programmes are determined from information supplied by the growers. Basically this consists of production estimates made in December,

February and April, attempting to determine a realistic throughput figure. In April the grower nominates which exporter will handle the fruit plus provides other pertinent information - preferred picking dates, number of days required, normal starting date etc.

The picking programme is drawn up by the packhouse management and aims to be as flexible as possible while maintaining equitable distribution of days for each grower. It is impossible for all growers to pick at the ideal time so it is company policy to allocate days to growers and stagger the days over the season, intending that everyone will have a share of good and bad days.

Penalties for growers who do not conform to these requirements are strictly enforced. Non-supply on notified days, without due cause, relegates the grower to the end of the queue and that fruit will be picked at the company's convenience. Over supply is less of a concern as growers' estimates are based on what they can comfortably pick in a day, and is rarely exceeded to any great extent.

3.2.5.3 Identification of Fruit

Identification of fruit is implemented immediately the field bins arrive from the orchard.

Each bin is labelled with the grower's code number as it is off loaded at the depot. The bins are logged in by the receiver and docketed evidence is kept of each grower's supply. The code number is carried through to the export boxes as the fruit goes over the grader in grower batches. Once packed in these boxes, source of fruit is readily traceable. Consequently packing in coolstorage is organized according to export size for convenience in removal by the exporter.

3.2.5.4 Quality Control

Quality of export fruit is maintained in this case study co-operative by a specially appointed quality control officer with a team of assistants, one to each packing line. They have absolute control over fruit standards, based on their inspections of a specified sample of both export and reject fruit.

Growers have no direct contact with quality control staff. If they are dissatisfied with the standards being imposed there is a standard complaints procedure to follow. The impartiality this brings to the grading process is a deliberate policy of this case study, and this is generally accepted by the growers. The use of identification numbers lends anonymity to the process and adds to the perceived impartiality of

the operation.

3.2.5.5 Charge-Out Rates

It is a basic principle of this co-operative that the grower should, as accurately as possible, pay for the service he uses. The packhouse operation is charged-out at a standard rate per tray of export fruit. This basic charge is tempered by the quality of fruit presented to the packhouse, based on the speed it takes to pack the product. A better quality line, more stringently selected in the orchard, has less rejects and can be passed over the grader and packed quickly, whereas a high level of rejects slows the whole process down. A sliding scale around the basic rate rewards better quality lines.

The co-operative is in an unenviable position in the setting of packing charges for the season. The management establish the charge on a cost-plus basis, allowing for all expenses (including non-cash items) and loan repayments plus capital expenditure and some surplus. However the co-operatives high profile and central position in the industry tends to make its charges the benchmark against which other, private packhouses determine their own charge-out

rates. Consequently the co-operative's rates are usually above the district average and growers, forced to pack fruit through the co-operative, only reluctantly accept this situation.

There is no differential in charge-out rate between members and non-members of the co-operative.

Coolstorage charges have recently come under direct control of the industry with each store handling kiwifruit now requiring a licence. The licence specifies the charge-out rate applicable, based on the level of services available at the site - direct access to railhead, truck and trailer access, covered loading bays etc. This has removed many anomolies in the cost of coolstorage.

This company's coolstorage is charged out at a relatively high rate with virtually all required services being provided.

3.2.5.6 Payment of Co-operatives Charges

Growers are expected to meet the packing charges one month after the fruit has been packed. The companies attitude is that this is a strictly commercial operation, the accounts requiring prompt settlement as with any other commercial transaction.

However there is a tendency amongst shareholders to treat the co-operative as a benevolent organization which will carry their account if they themselves have liquidity problems. To alleviate this problem, management have introduced penalties for late payment, effectively providing a discount for accounts settled in good time. However the last 10-20% of shareholders are a constant problem.

Coolstorage charges have been rationalised on an industry-wide basis and now all storage of kiwifruit is paid for by the exporter involved, from the export pool. The transaction is maintained at a strictly business level and no trouble is experienced with outstanding storage charges for kiwifruit.

However the flexibility inherent in the co-operative setting its own charges has been lost. The charges are set prior to the picking season and cannot be adjusted by the individual company to suit local, seasonal conditions, such as the reduced crop in 1982. The company could not offset the loss caused by less fruit stored, against an increased individual storage charge.

3.2.6 Financial Factors

3.2.6.1 Shareholders Funds

Authorised capital is set at $1,800,000 comprising 1.8M $1 shares, of which 1.37M are already allotted, and called up to a level of approximately $1M. Raising capital from shareholders is a major problem for the co-operative as the on-orchard development has normally absorbed all surplus cash. The co-operative is somewhat undercapitalised as a result, with shareholders' funds representing less than 30% of the total assets of the company and actual investment by shareholders less than 10% (table nine).

The problems of undercapitalisation reflect in restricted liquidity and limited funds available for capital projects. Thus, to some extent, the expansion of facilities here has been undertaken by borrowing against the equity increase, due to inflation, of the existing facilities.

The problems of undercapitalisation have been further compounded by the effects of inflation. Shareholders' contributions were determined several years ago when the co-operative was getting established. They were based on cost-estimates prepared at that time but since then, inflation

TABLE NINE - SUMMARY OF CONSOLIDATED BALANCE SHEET OF BOTH PACKHOUSE AND COOLSTORE CO-OPERATIVES, SEPTEMBER 1982

Liabilities	($M) 1982	1981	Assets	($M) 1982	1981
Unsecured Current Liabilities	0.90	1.32	Current Assets and Investments	1.89	1.40
Secured Current Liabilities	2.18	1.58	Land and Buildings	5.56	5.41
Term Liabilities	5.13	3.81	Plant and Equipment	3.94	3.17
Shareholders Funds					
- Paid up Capital	1.03	0.98			
- Net Reserves and Other	2.15	2.29			
	11.39	9.98		11.39	9.98

This balance sheet is prepared on an historical cost basis but adjusted for revaluation of assets. Total authorised capital is $1,800,000 comprising $1,800,000 ordinary shares, par value $1 each.

Source - Company records

has made a mockery of these figures. Consequently, the contributions now required of new shareholders have been adjusted for inflation by allotting additional shares for each shareholder's female vines, and incorporating a flexible revenue levy which is subject to annual review. Thus shareholders are obliged to hold the original share issue, plus additional shares allotted, plus meet the revenue levy as it is annually calculated.

3.2.6.2 Calls on Share Capital

To ease the financial strain on shareholders, the co-operative has formulated a staged programme for calling share capital. A minimum deposit is required but the balance of the share value is collected in relation to throughput of export fruit. A charge per export tray is levied each year until the shares are paid in full. However the directors retain the right to call-up uncalled share capital outside this system if so required.

3.2.6.3 Term Liabilities

The expansion of facilities has relied heavily on the provision of loan capital, repayable over a relatively long period on reasonable terms. At present the co-operatives only source of such finance is from a central government agency, from

funds set aside specifically for rural industrial development. This finance has been used for land purchase and development, building construction and plant purchase. The maximum amount available has been two-thirds of the cost of the facilities.

The securities required for this loan capital consists of mortgages over land and buildings, bills of sale over plant and debentures over the fixed and floating assets and undertakings of the company. The ranking of these securities has been a negotiable matter tied in with the security requirements of the seasonal financier.

Additional to these securities, the provision of loan capital is subject to each shareholder personally accepting some level of responsibility for its repayment. Originally personal covenants from each shareholder were required but of late this has been amended to a security over some portion of issued but uncalled shareholding.

A special requirement of this loan capital has been that one appointment to the board of directors is at the discretion of the financing organization. Traditionally the appointee has been the head of the local office of this organization. Originally the role was that of

full director but this has been scaled down in recent times to maintaining a watching brief only.

3.2.6.4 Seasonal Finance

The co-operative has a seasonal finance arrangement by way of overdraft facilities at one of the local trading banks. In this respect the company is very similar to any other commercial organization.

Its requirement for overdraft facilities is very high, a reflection on the scale of operation involved here. Much of the finance is required to purchase packaging material which has to be acquired and made up well in advance of the packing season. In a difficult season such as 1982, when actual crop production was well below estimates, the co-operative's income is under budget and much material is left on hand, adding further strain to the seasonal finance facility.

The trading bank's arrangement is to provide the finance needed to keep the co-operative in business until the season's income can be generated. However with difficulties in raising shareholder funds there has been a strong tendency to use the current account facility for capital work, recovering this extra overdraft by levying shareholders per tray of export kiwifruit. This is

effectively a reserve created in anticipation of expected income.

The bank does provide some longer term finance normally helping to bridge the gap between the term loan raised and the amount shareholders are able to contribute. The loans are usually repayable over a shorter period with terms reflecting the current market situation. It also provides some hire purchase assistance for specified items of plant.

The securities required for this assistance are very similar to those given to the term financier. The relative priority of each security is agreed by negotiation although this financial assistance tends to take second place to longer term securities. There is no requirement that each shareholder should be personally liable for any part of the company's debts with the trading bank.

3.2.6.5 Reserves and Returns-to-Shareholders

There is provision in the articles of association to return any operating surplus back to the shareholders by way of rebate, dividend or interest. The rebates are calculated according to patronage but dividend and interest calculated according to paid up share capital. However it

has been company policy to retain all surpluses as reserves for financing further development. Effectively the only return to shareholders has been the availability of adequate post-harvest facilities at competitive rates.

3.3 A DESCRIPTION OF CASE STUDY THREE

3.3.1 The Co-operative

3.3.1.1 Background

This co-operative company has been established for some years and is developing facilities to handle kiwifruit in a somewhat isolated locality in the Bay of Plenty. The area was originally establishing mostly citrus orchards until the kiwifruit industry expanded rapidly in the early seventies. The co-operative has undergone a considerable transformation to cope with the change in crop and the type of facilities it was requested to provide.

3.3.1.2 History

The difficulties in establishing horticultural production in areas at some distance from traditional zones was all too apparent to the early growers in this locality. The original citrus growers needed a co-ordinated marketing approach to get their produce to the distant consumers as cheaply as possible. To this end, in 1973, a fruit juice co-operative was established. The co-operative provided no facilities - essentially it provided a marketing function for citrus fruit, for a handful of local growers. The packing and storage operations

were provided in private on-orchard facilities which were generally adequate for the then level of production.

With the rapid expansion in kiwifruit, the number of growers increased enormously in this area from the mid seventies. An influx of new growers, developing new orchards, almost invariably results in a drastic shortgage of post-harvest facilities, and this area was no exception. The demand for adequate packing and storage facilities far exceeded the existing supply.

Typical of many developing horticultural localities the growers here were chronically short of capital. The cost of orchard development absorbed nearly all available financial resources. Providing post-harvest facilities was very much second priority for funds but still needed urgent attention because of the scale of development involved. The construction of central, community facilities was one obvious solution and the citrus growers' co-operative seemed an ideal ownership structure already in place. This was especially so with citrus production giving way to kiwifruit plantings.

Two growers in particular, already established in citrus and among the first to plant kiwifruit, instigated the initial moves to transform the

co-operative. Despite some opposition from other citrus grower shareholders, the company accepted new articles of association in 1977 and increased its share capital to permit new kiwifruit growers to buy in.

The nature of the co-operative changed with this move. Kiwifruit marketing is rigidly controlled, in the hands of the exporters and a separate authority within the industry. The co-operative's selling function was no longer required. Instead the co-operative was established to provide the fruit handling function - packing and storage. It was expected to invest considerable capital to secure these facilities.

The new co-operative's first move was to purchase a block of industrial land near the local dairy factory and start construction on a packhouse and small coolstore. This was completed for use in the 1978 season.

The company was able to provide adequate coolstorage space by leasing the dairy company's coolstores for a four month period over the winter. The seasonal nature of dairy produce supply had the stores mostly standing empty at this time of the year, so the arrangement worked to both companies' advantage. The company has since built a larger

coolstore of its own but still works in with the dairy company if necessary.

The co-operative provides both packing and coolstorage facilities, essentially for kiwifruit but with provision to handle any other crops the members may produce. It is now well established in this district.

3.3.2 Operation of Post Harvest Facilities

3.3.2.1 Present Facilities

The company owns an industrial section of 2 hectares a short distance from the district town. It is near the local dairy factory and serviced by an unsealed country road just off a main state highway. There is no rail service to this area so all transport is by road.

The packhouse had been operating five seasons now and present facilities consist of a 540m^2 shed housing one electronic four lane weight-grader. Extensions to this facility to house a second or larger grader are contemplated in the near future. To date this facility has not had to operate at capacity so throughput is somewhat difficult to assess. However it is accredited with a capacity of 7,000 trays per day given a normal eight hour day labour shift. It is within the grader's capacity to handle the expected 1983 harvest of 210,000 trays.

Further throughput could be attained by introducing a second shift of workers.

Coolstorage capacity was increased for the 1982 harvest and presently the co-operative has storage space for 150,000 trays with forced-air pre-cooling facilities adjoining. (N.Z.K.E.A. 1982). Each unit is independantly controlled and designed specifically for kiwifruit storage. This space should be adequate for the 1983 harvest and the dairy company coldstores are available should any problems arise.

Included on the site is an administrative building housing the manager's office and a staff canteen and facilities.

3.3.2.2 Throughput

This kiwifruit co-operative packed its first fruit in 1978, putting through 28,000 trays of export fruit. Production since then has generally increased but somewhat erratically, to last season's throughput of 60,000 trays which was badly affected by unseasonal autumn weather (table ten). Throughput for 1983 is estimated at 210,000 trays as the vines planted with the influx of growers in 1978 come into production.

As well as the kiwifruit, the packhouse has handled a small quantity of export melons and sundry

TABLE TEN - PACKHOUSE THROUGHPUT - CASE STUDY THREE

Year	Grafted Vines (Cumulative)	Total Throughput (Trays)	Net Annual Increase (Trays)	Percentage Annual Increase
1978		28,000		
1979		45,000	17,000	61%
1980		45,000		Nil
1981		73,400	28,400	63%
1982		60,000	13,400 (-)	18% (-)

1982 throughput was adversely affected by unseasonal autumn conditions. Estimated throughput prior to this was 120,000 trays, an increase of 63% over the 1982 year.

other produce. The co-operative is prepared to handle any produce on behalf of its grower-members as a means of utilizing the facilities in the off-season. However there is not a significant amount of other produce available in this locality and this operation does not contribute much to the co-operative's income.

Up to this last season the co-operative has only had a small coolstore with capacity for less than 50,000 trays. It has been able to provide adequate facilities for its members, however, by leasing the dairy company's surplus space in their off-season. The erection of the new coolstore for the 1982 harvest provided the co-operative with its own facilities but these were grossly under-utilized as a result of the poor yields. Kiwifruit grown by non-members was accepted to help fill this space but its capacity was never threatened at any stage. Present facilities are considered adequate for the 1983 harvest estimated at 210,000 trays with the dairy company able to store any excess fruit. There is virtually no other demand for coolstorage in this district so this store is entirely dependent on the kiwifruit harvest for its revenue.

3.3.2.3 Future Requirements

Future expansion on this site will be governed by the maturity dates of growers vines. A survey

before the 1982 season indicated growers had already grafted some 76,553 female vines and proposed to graft a further 4,190 that year. This would give a total female vine population of 80,743 of which 29,763 were already in production to some degree for the 1982 harvest.

Based on this information, estimated throughput for the packhouse is likely to exceed 1M trays by 1986. This is a fivefold increase on the present packing capacity (table eleven).

Cool storage capacity will have to increase in similar proportion to provide a total space in excess of 750,000 trays. However the proximity of dairy company facilities and close working relationship between the two co-operatives may allow some reduction in this capital investment.

The present site has area to provide packing and storage facilities for up to 1.5M trays, given the present level of technology. This is about the maximum throughput expected when all shareholders are in full production.

3.3.3 Shareholding

3.3.3.1 Size of Shareholding

Initial shareholding in the revamped co-operative was 32 members. It has now increased to 72 members, representing more than 80,000 female vines,

TABLE ELEVEN - SHAREHOLDERS FUTURE REQUIREMENTS FOR POST HARVEST FACILITIES - CASE STUDY THREE

Year	Estimated Production (Trays)	Net Annual Increase (Trays)	Percentage Increase
1982	(60,000)		
1983	210,000	150,000	250%
1984	320,000	110,000	52%
1985	700,000	380,000	119%
1986	1,015,000	315,000	45%
1987	1,245,000	230,000	23%

and has closed at this level.

The decision to close the shareholding was made by the directors. It is a reflection on the ultimate capacity of the present site using existing packing and storage technology.

Shareholding is drawn exclusively from this small locality. The most distant shareholder would be no more than 10-12 km from the packhouse site. Some of the original shareholders gained experience as members of more distant co-operatives before establishing the regional facility.

3.3.3.2 Costs and Benefits

Shareholding initially was taken out by the growers when they grafted their kiwifruit. This provided the initial share capital to start the site development for handling the 1978 harvest. Since then a further issue has been made, based on packhouse patronage, to fund further development in 1981.

The original share issue was allocated as two $1 shares per registered female vine, and this now attracts an additional 50¢ per share premium. The more recent share issue allocated a further 4 $1 shares per vine of which each share required a 25¢ deposit, with the balance collected on throughput - 10¢ per tray until fully paid up. This new issue now also attracts a premium of 25¢ per share -

bringing the total premium due on the 6 shares per vine up to $2.

The issues and calls on shares can be adjusted annually to meet the inflating cost of development. The co-operative is unsure as to what level of shareholding the growers will ultimately hold but do not expect this to exceed 12 shares per female vine.

A second class of share has been created in part settlement of the conditions attached to an offer of loan capital. An issue of B shares, equivalent in value to the loan capital, has been made to shareholders pro-rata according to their existing shareholding. These shares remain uncalled and provide the personal indemnities to the financing organization.

In accepting the growers shareholding, the co-operative agrees to provide all the necessary packing and coolstore facilities for export kiwifruit, plus handle the sale of reject fruit on the domestic market. The co-operative agreement extends to all future plantings and there is no upper limit on each shareholder's supply. Shareholders' requirements will be satisfied first before any non-member business is undertaken.

It is compulsory for the growers to supply all

grades of kiwifruit off registered vines to the co-operative. This secures the fruit supplies for the co-operative but to date limited harvests and problems of adverse weather have made fruit supplies very unpredictable. There is no provision in the companies articles for any level of "dry" shareholding.

The penalties for growers who do not supply all their fruit to the co-operative are at the discretion of the directors. However to date all growers who have been in breach of this condition have withdrawn from the co-operative.

3.3.3.3 Voting of Members

The articles of association provide that on a show of hands the classic co-operative principle of one man : one vote will apply. However should the matter under discussion require a poll of shareholders, voting rights have been considerably modified, to provide additional strength according to patronage:

> Members holding less than 200 shares shall have no votes
>
> Members holding from 200 to 2,500 shares shall have 1 vote
>
> Members holding from 2,500 to 5,000 shares shall have 2 votes
>
> Members holding in excess of 5,000 shares shall have 3 votes
>
> (Company Articles)

3.3.3.4 Communication with Shareholders

Communications within this co-operative are conducted in a somewhat haphazard fashion. The board of directors places a low priority on informing members of co-operative actions.

The communications network that is currently operating is very formal in its application. The basis of grower awareness is the annual general meeting and the supporting data that the co-operative is obliged to supply. This is a mass meeting at which all pertinent matters are expected to be aired. It is supported with official bulletins at irregular intervals, issued when matters of considerable importance are to be decided.

Further meetings are generally held before and after the harvest season. While any matter can be discussed, these are normally concerned about the practical operation of the facilities.

Also, company policy obliges directors to make themselves available at all reasonable times to approaches from individual growers.

3.3.3.5 Surrender of Shares

The articles of association of this co-operative provide that all transactions in shares must be first approved by the company. In this way it retains total control over its shares at all times.

The value of these shares can never exceed par.

Surrendered shares are redeemable by the company for the value of paid up capital, and interest payments on this amount are at the company's discretion. Shareholders must give one month's notice of surrendering of shares and the company retains the right to accept the shares but defer payment at the director's discretion.

3.3.4 Directors and Directing

3.3.4.1 Board of Directors

The company's articles of association provide for a minimum of five and a maximum of eight directors, and there is no particular share qualification required to hold that office. These directors can only be elected to the board at a general meeting of shareholders.

Compensation for board members for their work on behalf of the co-operative is set at a nominal figure. The attitude that directors are working for their own benefit and do not require much incentive is strong within the company. Payments are made in relation to the time spent on company affairs.

3.3.4.2 Ethical Issues

The articles of association contain the standard clause regarding the ethics of directors.

Any director who is faced with a conflict of interest situation must declare that interest and disqualify himself from the voting. However it does not impinge on his rights as an individual to do business with the company.

3.3.4.3 Management

Up to last season the management of the facilities was undertaken by the board members. Each was allocated a function to perform on the company's behalf. However a full time manager has recently been employed to ensure the overall operation is run efficiently. The manager handles all practical aspects of the co-operative affairs but financial control and policy decision making are functions retained by the board.

3.3.4.4 Control

Control of this company, while nominally with the shareholders, is effectively maintained by a small group of growers, some of whose number hold directorships in the co-operative. This powerful group of established growers have controlled the decision-making process in this co-operative and as a result have tended to polarise the more recent shareholders. The accepted co-operative pattern of having decisions initiated by grower conserves has been bypassed in favour of a more direct contact

by a few growers, with resultant decisions periodically filtering back to the other shareholders.

It is company policy to separate the grower from the actual operation of the company's facilities and set the grower : co-operative relationship on a strictly commercial basis. However the presence of a powerful clique of growers has tended to reduce the "open shed" policy to a level of active involvement by the growers concerned.

3.3.4.5 Influence in the Industry and Attitude to Further Functions

This co-operative, though well established in the area, has tended to retain a low profile in relation to its members' activities in other matters of concern to fruitgrowers. The local fruitgrowers' association is accepted as the representative of growers in this district.

3.3.5 Physical Factors

3.3.5.1 Labour

The labour force required for this packing and storage facility is estimated to total about 60, mostly required for the short harvest season May to July. At present it is expected that only one shift of workers will be needed, but there would be no trouble adding a further shift, or half-shift, if the throughput was too slow.

The local district can supply all these labour requirements and this situation is expected to continue for a further two or three seasons, before itinerant labour will be needed.

Up to this season all workers have been employed on a casual basis. However two of these workers have now been retained over the summer months and will fill the key operations positions for the 1983 season. In the meantime they are employed on making export boxes and general maintenance, and are available to grower-members to employ on a casual basis. Wage rates are negotiated prior to the start of the season, normally at award levels, and union involvement is minimal on this site.

3.3.5.2 Supply of Fruit

The packhouse requires an even, steady supply of fruit to operate at peak efficiency. To ensure this is provided, the operations manager is to prepare a picking schedule from information supplied by the grower. Basically the information will consist of expected quantities, preferred picking dates and the name of the exporter to handle the fruit.

Up to last season the picking programmes had been arranged by member-directors and were subject

to some dispute. With the operations manager now to undertake this function, it is the co-operative's intention to provide each grower with an equitable distribution of harvest days by staggering them over the season.

Once the programme is agreed then the growers are expected to stick to it. Penalties for non-supply on allocated days are at the directors' discretion and have not been formulated as yet. However it is likely to place that grower's fruit last in order, picked at the co-operative's convenience. To date supply has not been in sufficient quantities to really test the co-operative's operation.

3.3.5.3 Identification of Fruit

In the past, bins have been off loaded at the packhouse reception area and there has been some delay in attaching appropriate identification numbers to them. Fruit has not been adequately controlled over the grader with demarcation between grower's lines somewhat irregular, and docketed evidence incomplete. Last season, record keeping and control and identification of fruit through the complex proved somewhat fallible.

A new system is presently being devised by operations manager and should be in place for the 1983 season.

3.3.5.4 Quality Control

Quality control in the past has been under the direct supervision of the grower-director appointed by the board. He was responsible for the quality standards maintained by the packhouse, hiring and training the necessary staff. In future this function will be handled by the operations manager.

In keeping with M.A.F. requirements, the quality control personnel attend a training course at the start of the season then, in the shed, undertake the necessary quality inspections of each batch of fruit. Theoretically this person has absolute control of fruit quality but in practice this responsibility is shared with the shed supervisor or manager.

Officially the growers are meant to have no direct contact with shed staff. All queries and complaints should be directed to management or the co-operative board. However the informal arrangements in packhouse operation have tended to shun this in favour of direct approach.

3.3.5.5 Charge-Out Rates

Charge-out rates are calculated on a flat basis adhering to the principle that the user shall pay. The charge is calculated per tray of

export kiwifruit and the facility is available to non-members at a similar rate.

The co-operative management set the charges using a cost-plus basis with allowances built in for all expenses plus some debt repayment to a breakeven position. Some reference is also taken of other packing rates both in the district and in the industry generally. However the co-operative is in a somewhat difficult position as to competitiveness because their charges tend to set the upper limit for private packing rates. The principle of economic return on investment is not so important to a private packing house.

The basic packing charge does not include an allowance for capital works. This is collected by way of a development levy which is rolled over every five years, plus an annual call on capital. Both charges are calculated on throughput of export kiwifruit trays and therefore effectively increase the gross packing charge, at least in the eyes of the growers.

With coolstorage charges now controlled by the industry, and each unit subject to licence, the co-operative has no control over charge-out rates. This is calculated from a set formula according to the level of facilities that are provided at the store.

This coolstore is described as a "very good facility" (N.Z.K.E.A. 1982) and attracts a reasonably high charge-out rate.

3.3.5.6 Payment of Co-operative Charges

Debt collection is no problem for this co-operative as, normally, all exporter's payments are made direct to the company. They have the right to deduct outstanding debts before forwarding the balance on to the individual grower within seven days. The secretary of the company is a partner in a firm of accountants and all payments are channelled through this efficient office administration.

With coolstorage charges now under licence and all storage fees met by exporters from their export pool, the payment of coolstore accounts is generally no problem. The only difficulty with a controlled industry such as this is that in adverse seasons, such as 1982, it is impossible to reorganise the charges to compensate for reduced income.

3.3.6 Financial Factors

3.3.6.1 Shareholders' Funds

The authorized capital of this company is $1,050,000 and comprises 1.05M $1 shares of which

600,000 are classified as ordinary and 450,000 are classified B shares. The company has issued 436,410 shares, all ordinary, but shortly after balance date was planning a substantial B share issue. Called up capital totals approximately $120,000. The ordinary shares secure shareholders' capital contributions to the co-operative's development and the B shares are part of the security requirements for the loan capital finances.

The company has been undercapitalised since its inception and shareholders' funds currently represent just over 20% of the value of its assets, with actual investment by shareholders representing approximately 16% of assets. Growers have experienced considerable difficulty in meeting the continual calls on capital and the company has struggled to raise finance virtually since its inception.

The difficulties in raising finance have been compounded by the effects of inflation. Shareholders' contributions when determined in 1978 were based on costings at the time and these have proved to be very inadequate. Consequently the authorised capital of the company was increased in 1981 and a further issue of shares was made. Also

TABLE TWELVE - SUMMARY OF BALANCE SHEET, DECEMBER 1981

Liabilities

	1981	1980
Unsecured Current Liabilities	14,448	6,468
Secured Current Liabilities	-	21,810
Term Liabilities	554,798	109,165
Shareholders Funds		
- Paid up capital	119,398	81,336
- Net Reserves and Other	35,158	12,584
	$723,802	$231,364

Assets

	1981	1980
Current Assets and Investments	100,574	57,457
Land and Buildings (including Development in hand)	564,755	114,826
Plant and Equipment	58,473	59,081
	$723,802	$231,364

This balance sheet is prepared on an historical cost basis.

more recent shareholders to join the company have paid a premium on their shares. A third measure to offset inflation was the introduction of a flexible development levy, payable annually on patronage and rolled over every five years. Consequently shareholders are now obliged to hold a total of 6 shares per vine plus meet the annual development levy.

3.3.6.2 Calls on Share Capital

A set programme of share capital calls has been established by the company to spread the burden for members. A minimum deposit of one quarter is required when the shares are issued and the balance is paid over succeeding years in relation to the shareholders' patronage of the facilities. However, the directors' attitude to share calls is reasonably flexible and they are prepared to operate outside this structure if necessary.

3.3.6.3 Term Liabilities

The availability of suitable term loan capital has been central to the development of this co-operative facility in this district. At present this is all obtained from the one central government agency, providing up to two-thirds of the cost of site purchase and development from funds specially set aside for rural industrial purposes. The continued

expansion of these facilities will be equally reliant on the availability of this finance.

This loan capital finance has been secured by way of a first mortgage over the land and buildings plus a first debenture over the fixed and floating assets of the company. In addition, the terms of the loan capital requires that the company provide security over an issue of uncalled B shares. This provision bypasses the limited liability nature of the co-operative and makes each member accountable for some portion of the company's obligations.

3.3.6.4 Seasonal Finance

The co-operative has limited seasonal finance facilities, arranged with the local trading bank. Its relationship with the bank is similar to any proprietary company, except in this district its operation is a significant force in the small community. To date its requirements for seasonal assistance have not been very high but this is expected to change with the rapid increase in throughput envisaged over the next few seasons. The trading bank has limited security over some company assets for the service it is currently providing.

3.3.6.5 Reserves and Returns to Shareholders

The company has the right to return operating surpluses to the shareholders by way of rebate or interest. The rebates, if any, are to be calculated according to patronage whereas interest is payable on the shareholders' investment with the co-operative.

The decision to make some return to shareholders rests with the board of directors. However it is apparent their attitude is to operate at a break-even level, and provide shareholders with maximum immediate benefit by making no allowance for revenue reserves when establishing the charge-out rates.

CHAPTER 4

SUMMARY, CONCLUSIONS AND INTERPRETATION

The organisation of this research report reflects an attempt to provide results that will have some practical implications for producer co-operatives, particularly those involved in the packing and storage operations on behalf of their members. The study has selected one post-harvest operation in a particular primary industry and has examined three functioning co-operatives within a case-study framework. The intention here is to describe general operational problems experienced by those co-operatives, and identify the management strategies developed in response to such difficulties. The report will conclude with some comments on the strategies that could provide some suggestions for improvement to the operation of rural co-operatives.

4.1 Summary of the Case Studies

4.1.1 General Background

Of the three firms involved in the research project, one has been established for several years and holds a central position in the kiwifruit industry, one has been established for a few years and maintains a low profile and the third has only recently been set up. All three co-operatives provide only the packing and storage functions on behalf of their members, although one company also

handles transport of fruit and boxes to and from the orchard. The largest facility has been operating the longest and has handled annually on average approximately 35% of the total industry production, while the other two facilities handled less than 2% each in 1982. All three co-operatives have major development programmes planned which will significantly increase their scale of operation, most dramatically in the two smaller co-operatives which propose to increase their throughput twenty-fold over the next five years.

Two of the co-operatives own both the packhouse and cool-storage facilities but the third, the larger organisation, has a separate subsidiary co-operative company owning the coolstore. However for all practical purposes this is operated as one company.

Two co-operatives are situated in small localised districts and draw shareholders exclusively from the immediate vicinity. The other is centrally located and is characterised by a more widespread shareholding.

Despite the size variations between the co-operatives, the standard of facilities offered overall is very good. All three use electronic

weight-graders for fruit sorting and packing, and cool-storage facilities meet industry requirements without exception.

4.1.2 Shareholding

The largest company has approximately 150 shareholders whereas the other two have 72 and 57 members respectively. All three have now closed their shareholding at this level although the smallest co-operative is contemplating an increase to around 80 shareholders at some stage in the future. In two instances the decision to close was made in light of the ultimate throughput capacity given full development of the present site area at the current level of technology, whereas the third instance reflects local growers consensus on the optimum size of a co-operative.

Raising share capital has been subjected to much in-house discussion and the three co-operatives have developed similar policies in the matter. In all cases the growers are expected to take out their initial shareholding when their kiwifruit stocks are grafted. Some level of deposit is payable with the issue, and the balance of this share capital is collected in regular payments over succeeding years. The

co-operatives acknowledged the advantages inherent in this method, namely allowing growers to provide a staggered input to post-harvest facilities and providing the co-operative with a timetable of required development. However, raising share capital is still a major concern to all co-operatives.

Subsequent issues of shares have been forced on the co-operatives by the effects of inflation on development costs for this type of facility. The initial issues were invariably linked to the number of grafted female vines, i.e., the potential kiwifruit producers, whereas subsequent issues have been allocated according to patronage with maximum investment per grower referred back to a per-vine basis. Tying the sharepayments to income generation has eased some of the problems of raising share capital.

Shareholders perception of the size of their co-operative varied enormously, between co-operatives and within co-operatives. Also few shareholders fully appreciated the physical scale of enterprise their co-operative will ultimately achieve. It is evident with the larger co-operative that the older growers are becoming concerned at the continuing expansion of the facility, and the demands

this makes on their resources. Also they perceive the effects of inflation making their original investment in facilities a very cheap buy for new growers. To provide the original investers with some benefit from their longer association, this and a second co-operative have introduced a share premium on issues for new vines.

4.1.3 Shareholders Obligations - Fruit Supply Monopoly

The growers' commitment to their co-operative was expressed mostly in economic terms. They would prefer to shop around for packing facilities, with the co-operative providing one option. To prevent such potential disloyalty, and justify their investment in capital works, each co-operative has guaranteed the supply of members produce by including a fruit supply monopoly clause in their articles of association. There is no provision in these documents for any form of "dry" or partial shareholding whatsoever. Officially, any shareholder who does not supply all produce to the co-operative can no longer expect to hold shares in that co-operative. Two co-operatives have additional supply incentives in that they have the right to defer share repayments for considerable periods if circumstances so warrant.

In practice, one co-operative enforces the compulsory supply rule rigidly, whereas the other two

have adopted more flexible attitudes. It is noticeable that the first co-operative has much stronger grower support for its actions and less trouble, now, in securing fruit throughput.

4.1.4 Influence in the Company - Patronage or Democracy

The democratic principles espoused by the Rochdale pioneers has found only limited acceptance in all three co-operative companies. The shareholders, generally, were unwilling to accept that the growers with much at stake could not have more influence on company affairs, especially in controversial matters. Thus, in all cases the democratic principle was modified to some extent in that a show of hands rated one vote per man but a poll was contrived to more closely reflect patronage.

4.1.5 Communications within the Co-operative

One co-operative placed considerable emphasis on close communication between board and member, with the impetus for contact coming from the directors. Another of the co-operatives maintained a reasonable flow of information from the board but its directors were unwilling to initiate contact with growers. The third co-operative was characterised by a negligible effective contact between board and growers.

It is apparent that, despite some expected disadvantages inherent in its organisation, the first co-operative was in most things united, with members better informed and more supportive of directors decisions. The second co-operative was equally strongly united but its more recent formation could have had something of a bearing on this. Certainly its members, while generally supportive, were less aware of the company's roles and requirements in providing the post-harvest facilities. The last co-operative contains a significant disenchanted faction within its share-holders, which has in part been fostered by a breakdown in the communication system.

4.1.6 Directors

All three co-operatives have made provision for directors to be drawn either from amongst their own shareholders, or from outside the company structure. It is of note, however, that only one co-operative requires that the absolute majority on the board must be in the hands of its members. The other two require no share qualifications of any of its directors, the controlling feature being that each director must be elected by a general share-holders meeting.

To date only one co-operative has made any move to introduce non-member, professional directors

into their boardroom. This co-operative has accepted the need to pay professional fees for professional guidance and has adopted a reasonable scale of directors' reimbursement, tied to directors' inputs. It is noticeable that this board has assumed virtually full control of the co-operative's activities and initiates most of the decision processes itself.

The remaining two co-operatives strongly support the concept that the directors are acting as much in their own interests as in the interests of the Company and will consequently require no more than nominal compensation. The directors are all growers, and in the main are the individuals who were most instrumental in getting the co-operative organised in the first place. The decision making process in both companies is somewhat ponderous and considerable delays are eivdent in most activities as the directors refer matters back to the share-holders for approval.

In one of these companies a clique of growers has developed as the power-base of the co-operative. This group includes some officers of the company and provides the initiative to the decision-making process. While this has tended to improve the decisive character of the company, it has also tended to antagonize and isolate the balance of the share-holders.

4.1.7 Management

Two co-operatives accept the need for professional, independent management, albeit one of them with some reluctance. The third co-operative places a very low priority on employing such personnel at present.

The decision on management has generally been related to size. The larger co-operative has progressively built up a considerable administrative staff, including management, to handle the increasing throughputs as the members' orchards have developed. Grower acceptance of the need for this bureaucracy has been realistic.

The second co-operative with a full-time manager had the decision virtually forced on it by the somewhat divided nature of the shareholding. Considerable discord is evident especially over questions of impartiality in the operation of the post-harvest facilities. To alleviate this an independent manager has been employed, despite the general belief that the size of operation does not warrant this step yet.

The only co-operative without a full time manager employs a part time shed manager for the period of the harvest season. This facility has only been operating a short while with limited throughput and has been generally successful.

One co-operative has the function of management clearly identified and the manager is provided with a good deal of autonomy. The other two co-operatives have only established a general role for the management employed and allocate particular functions to this role as they become necessary. No comment on this practice is possible as the present management structures have only been operating for a limited period.

4.1.8 Labour

The large co-operative has a very high demand for labour, concentrated over the short harvest season from May to July. To date labour supply has been just adequate with the local workforce being supplemented by a large itinerant population attracted to the area at that time. However the quality of much of the workforce has not been satisfactory, even for menial positions. Company practice of filling key positions early in the season and providing these individuals with a good grounding in the facilities operation has helped to ease this problem.

The two smaller co-operatives can currently meet their labour requirement by drawing from the local population alone. Their scale of operation requires only one or two individuals to be specifically trained in some function and this can be handled as

as the season gets underway.

4.1.9 Handling of Produce

All three co-operatives appreciate the need to maintain a steady flow of fruit through their facilities once the harvest season begins. To obtain regularity of supply each prepares a picking programme for all their members, from information supplied by the members. Each co-operative has developed a system which, in principle, will ensure each grower has an equitable spread of picking days throughout the season, no one grower being more favoured than another. The programme is drawn up by the plant manager, or the board member appointed to handle that function.

With two co-operatives this system has worked to both parties' satisfaction, although one of these co-operative's experience in fruit through put is limited. Penalty clauses regarding non-supply of fruit have not had to be invoked.

The picking programme in the third co-operative was the cause of much dissatisfaction between members. The programme that was set was seen by some share-holders as favouring the established growers and the rights and wrongs of the dispute were impossible to unravel. This year the proportion of this programme is to be taken out of the hands of the directors and given to the recently employed operations

manager.

Identification of fruit with grower as it passes through the post-harvest facility has been good in two co-operatives. Both require docketed evidence from the grower as the bins arrive at the packhouse, and evidence of orchard or origin remains with that fruit until it is packed in the appropriately marked export boxes.

The third co-operative has accepted a less formal system because of the close contact the growers have normally maintained with their fruit as it is being packed. Last season this proved less than adequate with fruit not clearly identified, and docketed evidence not available to support growers' claims. The manager is now preparing a formal docketing system which will originate with the grower on the orchard, and must be complete to allow trucks to unload.

4.1.10 Quality of Produce

There is universal acceptance of the need to maintain high standards of fruit quality in the kiwifruit industry. All three co-operatives employ M.A.F. trained quality control personnel to supervise the fruit selection in their packhouses. These quality control officers, in principle, have the absolute control on fruit quality. Standards in all

co-operatives have been maintained at levels acceptable by the industries inspectors.

One co-operative provides an impartial quality control function. Fruit quality is handled by the quality control personnel and grower dissatisfaction with the standards being set must be directed toward the packhouse management. The other two co-operatives are less objective in the independence provided quality control staff. In both cases the responsibility for quality tends to be shared between the staff member and the packhouse manager. Also the relationship between grower and co-operative labour is much less formal, with growers often approaching the workers directly if it is considered necessary.

It is noticeable that the quality control system of the first co-operative causes considerably less grower antagonism and fewer problems than the methods adopted by the other two co-operatives.

4.1.11 Charging for the use of the Facilities

The three case study co-operatives all calculated their charge-out rates for the packing operation on a cost-plus basis. Two co-operatives included a level of surplus in their calculations whereas the third engineered a break-even situation. The cost of packing is levied on the amount of export

kiwifruit generated and only one co-operative has introduced a variation to the levying of this charge, according to the quality of the orchard picking. No co-operative included a differential when charging for packing non-member fruit.

Coolstorage charges come under the licencing regulations of the industry and the individual co-operatives do not have control of the charge-out rate for their stores.

The central position accorded each co-operative by the growers in their district means their charge-out rates become something of a benchmark against which private packers set their own charges. As a consequence all co-operatives charges were near or at the top of the range of rates being charged through the district. Growers perception of this relatively high packing cost is intensified by the practice of all three co-operatives of collecting development levies and share calls as an additional charge on fruit packing.

Settlement of growers' accounts for use of the facilities was a problem in two of the three co-operatives, especially collecting the last 20% of outstanding debts. While the co-operatives considered the packing arrangements to be on a strictly commercial basis there was a strong tendency

for the growers to regard the co-operative as a community fund which could carry the individuals over their own liquidity crises. Despite the imposition of penalties for late payment, the co-operatives tended to be out-of-pocket with these growers who did not settle in time.

The third co-operative has adopted a very effective system of collecting growers charges for packing kiwifruit. As a condition of share-holding it is required that all payments from exporters to growers be channelled through the co-operative, which is entitled to deduct its due debt before forwarding on the balance. Consequently no problem is experienced in debt collection at all.

Coolstorage charges, since becoming subject to licence, are met by the exporters concerned from their export pool. This has reduced the individual co-operatives flexibility to charge at cost, but has eliminated any debt collection problem.

4.1.12 Capital Structure

All three co-operative companies were evidenced of a very highly geared financial structure with debt to equity ratios of approximately three to one. This high level of borrowing implies an equally high degree of financial risk, unless the co-operatives

have access to very favourable loan capital arrangements. With the three co-operatives having such access, the situation to date has been one of an efficient level of gearing rather than any particular emphasis on inadequate equity capital. The major problem this has created has been the increased working capital requirements of the organisations relative to a realistic charge-out rate for their services.

It remains a universal attitude to obtain the absolute maximum in loan capital and reduce shareholders' inputs to as low as possible. This has been strongly influenced by the co-operative's ability to borrow at relatively cheap rates, generally for below the cost to each individual of borrowing separately for equity capital. Consequently in achieving the lowest weighted average cost of loan and equity financing to the co-operative, there has been this emphasis on obtaining a large element of loan capital. Most shareholders are aware of this situation and accept the debt servicing as an additional charge in their annual operation of the co-operative.

However, despite their relatively low level of input, the shareholders generally have been continuously struggling to meet the capital calls

from the co-operative. In all the case studies a programme of staged share calls is operating to spread the burden, with collection on subsequent share issues by way of additional charges relative to patronage.

To date, the loan capital has been provided by one central government agency. The availability of finance from this source has been adequate, funding to a level of two-thirds of the cost of the development. The co-operatives have been required to provide comprehensive securities over all their assets and undertakings, and as well each shareholder has been required to personally guarantee some portion of the finance.

Provision of working capital requirements has had to fit around the requirements for raising loan capital. All three co-operatives meet their operating requirements through the use of an overdraft facility at a local trading bank, similar to any commercial operation.

For one co-operative, working capital has been a major obstacle with development requirements absorbing any cash surplus and major securities held by the loan capital financier. The situation was not helped by the company's propensity to use working capital to fund development and recover this at harvest time from an extra levy on fruit packing.

The problem has now been rectified by a trade-off in securities and the company's substantial seasonal requirement is well catered for.

The other two co-operatives have not faced the same problems in arranging seasonal finance. Both use bank facilities solely for funding short-term deficits and have adequate securities subsequent to those required for loan capital finance.

4.1.13 Attitude to Reserves

Two co-operative companies incorporate a moderate allowance for reserves in their calculation of the seasons packing charges. Rebates can be made but, to date, monies retained in this way have been utilized mostly for development purposes. The third company calculates its packing charges to provide a break-even cashflow, with no funds retained by the company.

4.2 Some Common Problems

4.2.1 Impartiality

One problem area that caused considerable discontent within the co-operatives was that of providing a fair and impartial service to each grower. The problem is not so much in the fair and impartial treatment in itself which in general was of a good standard. It was the grower-members perception of

this impartiality which led to the problems for the co-operatives. The management decisions of member-directors, even with the best of intentions, were viewed with suspicion once the co-operatives actions ran counter to the interests of the individual.

The problem of impartial operation also extended to the actions of the growers within the co-operatives field of function. There was a strong tendency for growers to interfere in the handling of their own fruit, especially in the key area of quality control. The impartial application of fruit standards was almost impossible with growers intervening and enforcing their own judgements.

Employing independent, competent management was observed as the only effective strategy for preserving the impartiality of the post-harvest function. The manager's role should be clearly defined and provided with a high degree of autonomy such that the operation of the post-harvest facility is independent of member interference and prejudice. Impartiality should have as much consideration as economics when contemplating the employment of independent management.

4.2.2 Direction and Leadership

The need for decisive leadership was apparent in all three co-operatives. However the experience and ability of the boards of directors

were often not sufficient to handle the type of decision making expected of them. The workload and responsibility almost invariably fell to one or two individuals, and the decision process was often somewhat ponderous with excessive reference back to shareholders for shareholder consensus.

The most effective strategy to counter this problem has been to introduce some professional expertise on to the board and into the company's management. This has been closely tied to the co-operative's recognition that the direction of their operation is a considerable undertaking and should be compensated at a realistic level. It is a logical argument to suggest that members when acting in some professional capacity on behalf of the co-operative, should receive the appropriate compensation. There is no reason to suppose a token payment will be satisfactory, or even that the opportunity cost of this member's time is a realistic figure. The charges for management and direction should be at an appropriate rate for that particular scale of enterprise.

4.2.3 Disunity Amongst Shareholding

A common problem encountered by the co-operatives was the lack of unity amongst shareholders reflected in a limited consensus over company objectives and priorities. With the power that shareholders have in

a co-operative, it is important that general agreement over such matters should be reached. A disenchanted faction added considerably to the problems of management, and a powerful clique of growers holding effective control further aggravated this situation.

Those co-operatives with a generally united shareholding were characterised by a very good level of internal communication. The communication process was almost invariably initiated by the board of directors and consisted of both formal and informal information flows.

The problems of control appear to relate to the misuse of positional power within the co-operative company. Where the role of the directors is clearly identified and understood this is much less of an issue. Instructing the directors as to their function within the co-operative does provide some decided advantages.

4.2.4 Influence in the Company

At the initial stages of formation, a general matter of some concern to shareholders was the perceived inequity of a co-operative structure. The democratic principle of one man-one vote did not give sufficient emphasis to patronage - the shareholder with most to lose had no more say than any others in the co-operative operation. This limitation has been effectively countered by providing a two

level voting structure. Informal matters relate to the democratic principle, more important matters can be resolved with some reference to level of shareholding.

4.2.5 Long Term Grower Patronage

A considerable problem exists in ensuring the long term support and utilization of co-operative facility by its members. The development of a co-operative facility is a long term project but growers tend to perceive the costs and benefits in terms of short-term economic gain. Securing their continued loyalty is a matter of some concern.

The most effective strategy to counter this problem has been to enforce the supply of all produce as a condition of accepting shareholding. This on its own, however, is often not sufficient as some growers were prepared to sacrifice their shareholding if they perceived a substantial advantage elsewhere. Deferring repayment for substantial periods was some further incentive for loyalty, but the more effective long term solution is grower education in the principles and practices of co-operatives.

The implications of loyalty is that growers must remain active within their co-operative because the long term return from membership is much better

than not being in it. If this is not so then there is no justification for continuing the co-operative as this is the members only yield on their investment.

4.2.6 Growth of the Co-Operative Enterprise

There is an obvious trade-off between additional shareholders implying more efficient utilization of capital intensive facilities, and the same increase in membership leading to oversupply of produce reflecting in queuing problems. In all three cases the reaction to growth was to close the membership and adopt a wait-and-see attitude to co-operative development. Aspects of management efficiency to allow for increased shareholding received scant attention from any co-operative.

Two further problems related to the growth of the co-operative were evidenced by the research. The first was in terms of the physical size of the co-operative itself. As the facility expanded the grower's perception of his own role in the organization tended to diminish in proportion. The co-operative accepting additional shareholders added a physical dimension to this perception. The difficulty of contact with the company increases, and shareholders become more reluctant to continue investing in the facilities.

The only effective strategy developed so far has been to improve the communication channels and provide the members with additional avenues of access to the co-operative. In the one co-operative significantly affected by size, this has proved reasonably effective.

The second problem area relates also to the effects of inflation. The early subscribers consider themselves at a disadvantage, having invested capital some time previously to provide the facilities and now seeing these used by the newer members for substantially the same capital contribution. They have provided modern facilities for new growers who can now "buy" their use at prices ruling when they were constructed. To offset this effect of inflation, a premium is often incorporates into share issues for new growers.

It is not sufficient to simply require new shareholders to purchase additional shares. With the stepped voting arrangements evident in all three co-operatives, the issue of extra shares to new members would effectively increase their influence in the company. Older members would be seriously disadvantaged with influence no longer reflecting patronage.

Economic logic would suggest that the level of premium attached to new share issues should be

based on the marginal cost of providing additional facilities. This would effectively nullify any effect of inflation and by applying the premium to all new share issues, including those for existing shareholders, the co-operative would raise its equity contribution with issues of equal shares at each development phase. Redemption of shares would have to be at cost to be fair to all members.

4.2.7 Inflation

The effects of inflation have a significant bearing on the operation of these co-operatives. One problem, just described, relates to rewarding shareholders who invested early in a co-operative's activities the second major problem is the continually inflating cost of capital development. The financial requirements envisaged when the project is initiated rapidly become hopelessly outdated. The co-operatives generally set their initial share issues well below the ultimate requirements.

The only solution to this dilemma has been to obtain additional funds from shareholders and elsewhere. One alternative has been to increase the companies authorised capital, issue shares and progressively call up the capital. A second alternative is to implement a development levy which may be rolled over, or repayable at some stage. A further option is to incorporate an allowance for

development reserve from revenue. The availability of adequate loan capital on acceptable terms has been an essential aspect in alleviating some of the problems of inflation.

The problem has also been reduced significantly over the last year or two by a much more progressive attitude to planning. Full allowances for all costs including a substantial unseen element provide a greater degree of realism in forward planning currently undertaken.

4.2.8 Raising Sharecapital

With members fully extended financially to develop their orchards, there is very little surplus cash available to invest in post-harvest facilities. Raising share capital is therefore a considerable problem to these co-operatives. Making excessively onerous demands on shareholders will only serve to discourage their continued participation.

The only effective strategy has been to provide a staggered capital input for growers. This has consisted of a moderate deposit and the balance spread over a reasonable term. Collection of share capital or development levies based on fruit supply has further eased the financial burden for growers.

There are two underlying issues in relation to the timing of share payments. Firstly it must relate to the phasing of capital development, and secondly it must relate to the phasing of co-operative financing.

While the staggered input of share capital, initiated at grafting, has several attractions to these particular co-operatives, this method is not necessarily the best for all co-operatives. It would require a considerably larger study, beyond the scope of this investigation, to identify the optimum pattern of share calls.

Raising equity finance by levying the wealthier, established members holds considerable attraction for co-operatives. This extra shareholder input, in the form of a loan, would be repaid as newer members come "on stream". There is no reason why the older members should not make a greater contribution, according to the ability to pay, although the democratic principle would argue that enforced subscription is unacceptable.

4.2.9 Level of Gearing

There is a pervading attitude that growers should be required to invest the minimum possible amount in co-operative facilities, with the balance obtained as loan capital. This has advantages in that it attracts more members and makes their personal input easier to accumulate. The reasoning behind this attitude lies with the co-operative's aim to obtain the lowest average cost for loan and equity capital. With loan capital in this country generally available to co-operatives at a lesser

cost than the individuals opportunity cost of equity capital, growers perceive a considerable advantage in the co-operative undertaking the greater part of the borrowing.

However this does create some problems for the co-operatives in terms of the tight liquidity position it can create, and the shortage of internal resources for expansion or stability. Extensive use of trading bank facilities have eased short term liquidity difficulties but, in general, the cash flow implications of a high level of gearing have only been solved by establishing a charge-out structure adequate to cover all contingencies.

4.2.10 Competitiveness in Charge-out Rates

The co-operatives generally are perceived by the growers as setting the upper limit for packing charges. The co-operatives have to take full consideration of economic return whereas this is less important in private sheds which tend to use the companies figures as a benchmark. The practice of adding levies and share calls to per-tray charges also increases the packing costs in the eyes of the shareholders. As a result grower dissatisfaction with the cost of a service they own themselves was often evident.

The only effective strategy to control this problem has been to provide an improved communications system, and educate the growers in the basic facts of co-operative operation. By explaining the rationale for charge setting, grower acceptance of the situation has been improved to a certain extent. There is some suggestion that growers find it easier to accept the capital contributions as an addition to the packing charge despite their superficial disquiet.

4.2.11 Labour

The problem of adequate labour is a major consideration in all three co-operatives. The problems relate to both quantity and quality, and future predictions for labour requirement indicate the position will not improve (Honeybone 1981).

The practice of employing key personnel very early in the season has resolved the problem to some extent. By undertaking an intensive training programme with these workers, the co-operative can better absorb the mass intake of unskilled labour for the harvest season.

The future will require that much greater attention be paid to the subject of labour force planning. Such aspects as the level of pre-season training, performance-based payments and union

involvement will be major issues as the kiwi fruit industry continues to expand.

4.2.12 Record Keeping

The basic problem has been in maintaining a verifiable identification system for all fruit handled by the co-operative. Unless the administrative system employed is capable of handling the fruit throughput, growers will become disillusioned with the operation of the facility.

A systematic, formal method of recording produce into the co-operative facilities has proved very effective. This should be supported with a verifiable batch-handling method so that at all times any quantities of fruit can be identified with a particular grower.

4.2.13 Breach of Faith

Breaches of company faith were mostly a problem in financial areas, although the fruit supply monopoly has caused some problems. The main difficulty is in the shareholders' attitude to the co-operative when they themselves are under financial pressure. The tendency is to use the company as a form of bank and only meet their obligations to it as convenient, not necessarily by due date. This has been most effectively resolved by having shareholders' proceeds for fruit all channelled through the co-operative which deducts

its due before forwarding to the grower.

Enforcing the supply monopoly has proved somewhat difficult, especially where private packhouses have offered very competitive services. Treating the matter leniently in order to attract the grower back to the co-operative has been evident in some co-operatives. However the rigid enforcement of company rules has been more effective in maintaining grower loyalty and acceptance of company policies.

4.2.14 Growers Awareness

It was evident that growers were largely unaware of the needs of the company, particularly in regard to the accuracy and timeliness of information about their requirements for post-harvest facilities. This has been most effectively countered by improving the information flow from the board of directors, especially on an informal basis.

4.3 General Strategies to Improve the Operation of Rural Co-operatives

The research project has identified several problem areas and the types of organizational and management responses these have engendered. The strategies relate particularly to the co-operative case studies, operating as they do in the kiwi fruit industry in the Bay of Plenty.

However there is a general pattern to the management responses which could have a much wider application. These are now summarised, and presented as some principles which could be of assistance in the successful operation of rural co-operatives in New Zealand.

(i) Professional Direction

The need for a professional attitude by the directors is very important, especially as the co-operative enterprise expands. Grower-directors should have their roles clearly identified and accept professional assistance to some degree. This implies a realistic compensation for the director's function.

(ii) Independent Management

The value of employing independent competent management should not be underrated. The advantage is not just in the potential to improve the standard of management. There is also an improvement in the impartial operation of the facility, and this can significantly affect the level of member commitment.

(iii) Additional Influence for Patronage

Modification of the democratic principle to allow members to reflect their patronage to some extent should be incorporated in a co-operative company's articles. This is of special significance when establishing co-operative aims and objectives of considerable importance.

(iv) Supply Monopoly

It is very important for the co-operative to obtain total commitment from its shareholders, to the point of including a supply monopoly as a condition of entry. The co-operative could not justify major capital expenditure unless fruit supply was assured.

(v) Improved Planning

Realistic forward planning, incorporating full allowances for unforeseen circumstances, should be completed as one of the first priorities of the co-operative enterprise.

(vi) Raising Share Capital

A staggered programme of share capital calls has many advantageous features for a modern co-operative. If adopted, the programme should include a moderate deposit as soon as potential throughput can be reasonably assessed, with progressive share calls tied to a preset time-table of development. Collection of share calls by a charge on throughput, and hence growers income, has several advantages. A premium should be allocated to share issues to new growers.

(vii) Communications

Efficient internal communications within a co-operative is an essential feature of an

effective organization. The initiative for contact has to be instigated by the board of directors and should include both formal and informal channels.

(viii) Education

As part of the communication network, the co-operative should undertake an education programme on two levels. Firstly informing members of the principles, practices and long term nature of co-operative enterprise, and secondly coaching directors in business world practices.

(ix) Action for Breach of Rules

All breaches of the co-operatives' rules should be dealt with promptly and severely. Universal application of this principle has long term benefits through an increase in co-operative prestige and stronger grower allegiance.

(x) Administration Function

Attention should be paid to increasing the administrative functions of the co-operative in conjunction with the development of the actual facilities themselves. The expansion should be planned rather than crisis orientated.

APPENDIX ONE

CHECKLIST QUESTIONNAIRE PREPARED SUBSEQUENT TO DISCUSSIONS WITH THE PRELIMINARY CASE STUDY CO-OPERATIVE

1. History and Structure of Co-operative - packing and storage facilities together or separate, relationship between the two.

2. Role of the Co-operative
   - purchaser, agent or handler
   - packing and storage, expansion to other roles
   - How do shareholders (directors) perceive co-operatives role.

3. Facilities
   - who provides them, shareholders guaranteed or prior use
   - use by non-shareholders
   - proposed expansion.

4. Shareholding
   - how is it allocated (by trees, throughput?)
   - how is share capital accumulated
   - size of shareholding, limitations on numbers
   - background and education of shareholders
   - compulsory patronage.

5. Directors
   - level of control, need for direction from shareholders
   - role of directors in co-operatives operation
   - compensation
   - non-member directors on the board.

6. Management
   - co-operative member or independent professional
   - role of management in co-operatives operation.

7. Financial
   - shareholders funds in proportion to borrowing
   - provision for working capital
   - loan finance, source and availability
   - shareholders requirements in respect of loan finance
   - compensation for shareholders who work for the co-operative

- rebates and returning surplus to shareholders- accumulation of reserves.

8. Produce Supply
   - level of comulsory patronage
   - picking pattern to regulate supply
   - quality control, impartiality in its application.

9. Charge-out Rates
   - means of calculating packing and storage charges
   - collecting charges, level of sundry debtors amongst shareholders
   - differential charge for non-members.

10. Communications
   - formal and informal structure
   - frequency and medium

APPENDIX TWO

TABULATED SUMMARY OF THE ORGANISATION AND MANAGEMENT PROBLEMS OF THE CASE-STUDY CO-OPERATIVES

Type of Problem	Operational Area	Strategies Observed
Impartiality	Quality Control (Training Okay) Picking Programme Use of facilities	Employ independent management of a high standard - clarify duties between director and manager.
Leadership	Decision making - decisiveness Knowledge as data base	Employ professionals, pay professional fees.
Divided Shareholders	Disenchanted Faction Small group with all power	Communications Identify Directors roles Educate Directors in duties.
Voting	Voting rights, level of influence	Small matters: one vote Important matters: patronage.
Grower Loyalty	Continued patronage of Co-op	Supply monopoly Educate growers Defer share repayment.
Growth of Co-operative	Size - loss of contact Early subscribers dis-advantaged	Communication Share premium, development levies.
Inflation	Early subscribers disadvantaged Capital cost of Development	Share premium Increase shareholding, improve planning.
Raising Sharecapital	Limited ready cash from members	Stagger share calls.
High Level of Gearing	Liquidity	Increase charges, use trading banks.
Competitive Edge	Perceived high charge-out rate	Communication.
Labour	Quality Quantity	Employ key positions, train well. Industry problem!
Record-keeping	Identification of fruit in store	Systematic recording.
Growers Unaware of Company Needs	Quantity information for throughput	Communications.

Type of Problem	Operational Area	Strategies Observed
Breach of Faith	Breach of supply monopoly Non-payment of debt to Company	Penalise heavily Exporters pay to co-operative directly.

APPENDIX THREE

LETTER REQUESTING THE PARTICIPATION OF THE FOUR CO-OPERATIVES

RURAL BANKING & FINANCE CORPORATION

HEAD OFFICE, LAMBTON HOUSE, 152-172 LAMBTON QUAY.

Please address all letters to "The General Manager", P.O. Box 3688, Wellington quoting our reference:

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TELEPHONE 737-822
TELEX 31036

25 August 1982

Dear Sir

The Rural Bank as you are aware is involved to a significant degree in the financing of the infrastructure essential to the expansion of the Horticulture industry and has an increasing financial involvement with producer co-operative ventures.

Earlier this year a member of the bank's field staff, Mr Michael Beattie of Palmerston North commenced his Masterate in Agricultural Business Administration at Massey University. Following discussions with the bank's Director's it was agreed to support his study which primarily involves a thesis on "Rural Co-operative Management".

In completing the thesis he wishes to undertake a detailed study of the financial and management aspects of four co-operative coolstore ventures.

We are writing to enquire if you would be prepared to participate in the study. To protect the confidentiality of the Rural Bank's involvement with the co-operative we seek your agreement to making financial and management information held by the bank available to Mr Beattie.

If you are prepared to assist in this study we will advise Mr Beattie of your willingness to participate and your agreement to disclosure of relevant information.

This study would also include meeting with some of the co-operative's members and executives at the site of your operation.

It would not be necessary for the co-operative to be identified by name in the resulting thesis. However it is recognised that a physical description of the enterprise could indirectly identify your operation.

Accordingly Mr Beattie has undertaken that the thesis would only be made available to the Faculty of Business Studies at Massey University and the Rural Bank as sponsors.

.../2

The bank considers such a study can contribute significantly to its knowledge and understanding of the nature and operation of co-operative ventures and would materially assist in the development of adequate credit facilities available to such organisations in the future.

We would appreciate an early response as to whether or not you are prepared to participate in the study.

Yours faithfully

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