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RURAL ECONOMY AND SOCIETY STUDY GROUP
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7-8 July, 1987

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PREFACE

On July 7 and 8, 1987 Lincoln College hosted a two-day symposium on rural research needs. The Rural Economy and Society Study Group organised the symposium as a follow-up to last year's seminar (see AERU Discussion Paper No. 105). The symposium proceedings provide a valuable source of research ideas, and the AERU is pleased to contribute to the activities of the RESSG by again publishing the proceedings as an AERU Discussion Paper.

J. G. Pryde
DIRECTOR

SUMMARY

This Discussion Paper records both the formal papers and the group discussions of a two-day symposium on rural research needs held at Lincoln College on the 7-8 July, 1987.

The papers cover many aspects of rural economy and society, and the group discussions point to important research needs. Topics considered important for research were: rural decline, deteriorating urban-rural relationships, coping with change, rural powerlessness, low farm/rural income, and the use and bias in information.

Solutions put forward included: revamping Federated Farmers, fostering work and school exchanges, education programmes for major life changes, devolving decision-making to the regions, research into international consumer food preferences, and promoting to the media affirmative action for rural New Zealand.

CHAPTER 1

INTRODUCTION

Last year, on 3 July, 1986 the Rural Economy and Society Study Group held a one-day seminar at Lincoln College. The objective then was to foster rural research by examining rural issues. The outcome of the seminar included pointers to some important theoretical issues and a record of what research topics were considered to be important. In addition, it was suggested by many participants that more time was needed to evaluate what were considered to be the priorities for rural research.

In response to the first seminar, a two-day, live-in symposium was organised in 1977 to provide more time for discussion of rural research issues. The symposium was organised around two parallel objectives. The first objective was to present papers by a variety of authors on a variety of topics in order to inform participants of those factors influencing rural society. The second objective was to provide ample time for group discussions on rural research needs. The main over-riding objective was to specify the important rural research needs.

The participants at the symposium consisted of an approximately equal number of rural people and academics. The mixing of these two groups was useful in that it allowed rural people to put their views directly to the academics. Also, it allowed the academics an opportunity to put forward their views on rural research. These proceedings reflect the mix of participants in that there are both formal papers and statements of research needs.

The papers recorded in these proceedings are of interest in themselves, and they include clear statements of what the authors believe are important research issues. In addition, the records of the group discussions provide a valuable insight into the research needs. These records document the concerns that participants expressed and their desired goals for rural economy and society. From these goals, and the associated problems in achieving them, are derived the key research needs. Chapter 12 records the outcomes of the group discussions and provides a source of many research ideas.

These proceedings provide both timely papers on the general topic of change in rural economy and society, and they provide a foundation for future rural research.

CHAPTER 2

GLOBAL PROCESSES AND LOCAL ADJUSTMENTS; UNDERSTANDING CHANGES IN FOOD AND FIBRE PRODUCTION IN NEW ZEALAND

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2.1 Introduction

This paper sketches a framework for understanding the structural processes that are redefining the rural dimensions of New Zealand society in the late 1980s. It is a response to remarks at the 1986 Lincoln Rural Economy and Society seminar that research in New Zealand should have a "framework of argument to make the detail part of a larger ... picture." (Carter, 1986: 4). In the same seminar, Sharp (1986: 13-14) argues that researchers were "not developing lines of inquiry at the fundamental level", there being "little evidence of theory being developed in New Zealand that is relevant for contemporary phenomenon". This paper goes further, suggesting that unless there is wide appreciation of the mix and nature of present influences which distinguish the New Zealand scene, the social capacity to manage and change the dynamics of production and other activities will be severely limited. Indeed, Rural Economy and Society groups in the United Kingdom and the United States have highlighted the inadequacy of much earlier theorisation and the almost general failure of policy-makers to effectively plan 'rural' development (Berardi and Geisler, 1984; Newby, 1986). These deficiencies are ascribed to incomplete conceptualisation of the nature of societies and production systems under scrutiny (Massey, 1984; Massey and Meegan, 1985).

But what did Sharp mean by 'inquiry at the fundamental level' and 'theory relevant for contemporary rural phenomenon'? This paper attempts to provide some content to Sharp's statements. This paper focuses on three structural 'facts'. They are:

- (1) increasing globalisation of world production,
- (2) New Zealand's post-World War II structural 'isolation' from many world developments, and,
- (3) the recent state-led restructuring of New Zealand's connections with the world economy.

This paper outlines some key ideas from contemporary social theory which deal with recent developments in the world

economy. Also this paper summarises special features of food and fibre (or land-based) production in New Zealand when the economy was insulated from many overseas developments. Finally, this paper examines significant aspects to present restructuring in New Zealand of both production in general and of food and fibre production in particular. The concluding section discusses research priorities in the current structural context.

The paper accepts the thesis that New Zealand society is a capitalist society, albeit a distinctive variant in world terms (Armstrong, 1978; Ehrensaft and Armstrong, 1981; Franklin, 1978). Adequate labelling of New Zealand society and production is important. Even if researchers take the capitalist system as given, it is still essential that, where appropriate, production which is organised along capitalist lines be conceptualised as capitalist. This is increasingly recognised as a methodological premise by overseas researchers but in New Zealand few investigators have explored the capital nature of particular sectors of production (Britton and Le Heron, 1987, Fairweather, 1982; Le Heron, 1987 a, b, c; Le Heron and Roche, 1984, 1985). If New Zealand is a capitalist society, then knowledge of general developments in capitalism is an axiomatic requirement. This is not however an uncritical acceptance of overseas theory or a suggestion that indigenous theorisation is unimportant. To the contrary, a crucial mission (now, as it should have been in the past) is to interpret general developments in capitalist production as they are worked out in specific settings, and that demands an integration of international and locally-oriented theory.

Thus, an international literature is used to situate New Zealand changes in the global context and to provide an approach to the study of particular developments in New Zealand. Findings from the Massey University Department of Geography's research programme into food and fibre production (embracing pastoralism and forestry) and a variety of other New Zealand sources (Agricultural Economics Research Unit, Lincoln College, and the Centre for Agricultural Policy Studies, Massey University) are used to help identify the structural context of the general crisis in New Zealand capitalist production and the nature of present 'crises' in rural production.

2.2 What is Distinctive about Production under Capitalism?

This section is a short overview of a number of features of capitalist production (see Harvey, 1982 and Roweiss, 1981 for more complete statements). The aspects selected are those which are especially central to understanding the recent and prospective character of food and fibre production in New Zealand. There are ten relevant characteristics:

- (1) Production in capitalist societies is geared to making a profit, so that investors (predominantly organisations,

when measured by capital employed) are able to accumulate and participate in further rounds of investment. Production is normally a two-sided process involving management and dependent labour, although in some organisations this cleavage is artificially concealed (e.g., owner-operated farms).

- (2) How production is organised, as well as what is produced, has a big impact on which organisations survive and grow and who obtains employment, where, and for how long. An effective way of achieving this is through politics and on occasion some groups gain and hold advantages over others.
- (3) Production is often disrupted by discontinuities. This means that the convenient but misleading idea of only talking about production as a linear sequence of physical production must be modified to take account of the inability of investors to guarantee links in chains of physical production.
- (4) Production is crisis ridden (e.g., difficulties are met in realising investment) and this poses problems for investors and many others who are affected. The breadth, intensity and geography of crises varies, leading to differential sectoral and community impacts during adjustment.
- (5) It is in the interest of any organisation, operating for profit or to similar performance criteria, to control and coordinate other areas of production, by whatever means obtainable (e.g., ownership, purchasing practices, licensing, market dominance) so as to reduce market and environmental risk, preserve assets and maximise returns.
- (6) Governments have generally followed various strategies to contain the worst features and foster the best aspects of capitalist production. However, there is neither perfect nor simultaneous resolution of the myriad of investor and state-regulatory decisions. This situation is complicated by the fact that the state rarely dictates what investors must do and that investors usually hold back from pressuring for a 100 per cent subsidy of their production.
- (7) Periods of stability in what governments do and what investors push governments for are punctuated by reappraisals of existing arrangements for profitable production, typically in responses to crises.
- (8) In particular capitalist societies state regulations of conditions for production (in general or in specific sectors) may or may not reflect broad developments in capitalism or development in different spheres of production.
- (9) Capitalist production involves at least three obviously different spheres - food and fibre, industrial, and

credit/information production. Food and fibre production is defined as production intersecting with biophysical processes. Historically, food and fibre production has been less rapidly and often less completely organised along capitalist lines, when compared with industrial production.

- (10) Since World War II profound changes have occurred in the general nature of capitalism. Competitive pressures have necessitated organisational change (to more effectively control and coordinate production for profit) and technological change (to find more profitable and different ways of transforming, transferring and controlling materials and information). Perhaps most significantly, many recent developments have been associated with multinational or global corporations. The continued growth of this form of organisation (of production) indicates the relative and absolute advantages these organisations often have.

Some care should be taken over the use of the word restructuring. Typically the term is used as if change is an exceptional state of affairs. This is too narrow a view and diverts attention away from the dynamics of capitalist production. However, some periods of restructuring are more important than others. In periods when the 'old order of relationships' is undergoing rapid, or sustained, or fundamental change, the implications for investors and labour can be quite profound.

Since World War II the forms of development of production in New Zealand have been greatly influenced by a state regulatory strategy that effectively 'boxed' or 'isolated' the New Zealand economy (and therefore organisations) from much international restructuring or production. In order to grasp the character and implications of post-1984 restructuring of the New Zealand economy with the rest of the world economy, it is necessary to know something of the nature of the New Zealand production which is being reorganised and the context in which reorganising New Zealand production is set. The next two sections selectively cover these matters.

2.3 What Happened to the Capitalist World Economy while New Zealand Investors were Isolated from the Mainstream of World Development?

Foremost, a qualitative change has taken place in the nature of world capitalist production since World War II. Many influences now shaping national and international production and trade are operating at quite a different scale (e.g., global) compared to the past. Many changes are broadly connected with the emergence of multinational corporations which have opened up new avenues for the organisation of individual company and sectoral production. Consistent with the

propositions outlined in the previous sections, the developments have a dual character: changes in investment processes and changes in labour processes. The new world economic order has at least five notable features. These are:

- (1) the appearance of intra-company transfers as a significant component in world trade (Taylor and Thrift, 1982, 1985) and changes in links between food and fibre and industrial production (Drucker, 1986),
- (2) expanded internationalisation of capital (that is in addition to capital exports aimed at obtaining raw materials, the export of capital to penetrate markets and to set up production at other locations) (Thrift, 1986),
- (3) the growth of a truly international network of finance, insurance, real estate and other producer service companies able to finance and foster new levels of economic interchange (Thrift, 1985),
- (4) the internationalisation of the state through world tendering, new generations of protectionist policy, national initiatives to attract investors and international quasi-state organisations, and,
- (5) a new generation of labour processes and widespread revision of existing labour relationships.

Importantly, major alterations in regulatory policy are underway in many countries and this is giving unprecedented 'scope' for the re-integration of production.

If the new order of world trade and production is dominated by multinational organisations (and evidence seems to confirm this) and these organisations are also the crucibles of further change, then some important methodological implications follow for analysis in particular countries. In brief, five can be identified:

- (1) Globalisation means care must be taken to conceptualise production at the appropriate geographic scale and utilising appropriate categories.
- (2) Conceptualising capitalist production implies viewing organisations as contradictory social agencies and locating organisations in the relevant context of, probably international, capitalist production. A corollary to these methodological positions is the development of global-centred rather than nation-centred frameworks. A reluctance to make this step will limit the scope of explanation to inside the economy, so ignoring what is happening outside and of course distancing such analysis from informed policy recommendations.

- (3) The need to discuss the totality as well as parts of production (occasioned by the uncertainties which abound in any sequence of physical production) gains greater urgency given the potential of new global pathways for control and coordination. In essence, this shifts as much effort onto decoding how production has been organised and is being restructured as it does on summarising what is being produced and traded.
- (4) The nature of state-economy relations remain central because a knowledge of policy gives a basis for delineating possibilities for investing organisations.
- (5) Single organisations may be simultaneously participants in a range of structural developments. Moreover new relationships are being forged with other sorts of enterprises (e.g., international banks and farmers, multinational food or fibre companies, and state-owned enterprises).

It must be stressed that although developments in world capitalist production have been outlined above no case is being made that these developments will either be manifest in New Zealand or be exact replicas, should they emerge. Instead the developments should be seen as both possibilities (which investors may or may not perceive, copy or modify) and pressures which will induce, via complex causalities, investors in particular contexts to respond to new competitive conditions.

Why was New Zealand insulated from the above developments for several decades? The key determinant was probably a regulatory order (e.g., state policy) that slowed down organisational transformation and resulted in very few organisations of sufficient strength, appropriate structure, and up-to-date technology to engage in activities other than traditional commodity trading. The general question which ensues is: "How was food and fibre production organised prior to 1984 when the old order of external links and internal production conditions prevailed?" This question can be answered by looking at the general and sectoral policies under which investors operated, the organisational forms and patterns of concentration and centralisation exhibited, and the nature of interdependencies between organisations, at different stages in the chain from farm to supermarket, and so on.

2.4 What happened to Food and Fibre Production in New Zealand during the Period of Relative Isolation?

Using the foregoing framework to interpret earlier phases of New Zealand food and fibre production reveals a number of dimensions that have been overlooked or down-played in conventional analyses. This section touches on some theoretical and empirical findings which help clarify the

structural form of food and fibre production in the 1960-1980s. The dimensions are:

- (1) An examination of state-economy relations is needed at two levels, both generally (although the influences are not always obvious) and in sectoral terms. The economy-wide features can be usefully defined in relation to external links (e.g., fixed exchange rates, minimal new foreign investment, restricted currency transfer, import controls and tariffs) and internal conditions (e.g., regulated banking, interest rates, transport sectors and an almost complete subsidy of research).
- (2) Production possibilities involving the land were confined to a few sectors (e.g., dairying, sheep/beef farming, exotic forestry, some arable farming and limited horticulture) and sector-specific regulations were devised. Overwhelmingly, two main platforms for accumulation - as evidenced by quantitative change in total production and the growth of individual organisations (e.g., New Zealand Forest Products, NZ Dairy Board) - were pastoralism and forestry. Distinctive ecologies of production and social forms (e.g., family-farms, company ownership of forests) were found for each. A notable aspect was the social designation of land for livestock farming (with a few localised exceptions). The institutional apparatus built up reinforced this specialisation internationally.
- (3) Organisational growth in each sector was relatively autonomous, with little overlap initially in the operational scope of organisations.
- (4) Intervention directed to livestock farming and forestry evolved in an effort to raise aggregate production to meet export targets (see Table 1). However, options for maintaining sectoral profitability were hampered by overseas returns. In the pastoral complex for instance, there were noticeable cyclical downswings in particular commodities, profit decline (absolutely and relatively), production bottlenecks, a technological slowdown in grassland ecosystem, and, in some areas of primary processing, overproduction in relation to markets, and industrial input and energy cost rises.
- (5) The regulatory umbrella constrained organisational options (e.g., permission for investment abroad was hard to obtain). This structural limit should not be underestimated. The post-World War II interventionary period in New Zealand saw minor qualitative changes in organisational forms and minimal changes in labour processes. In spite of restraints on production reorganisation, periodic sectoral restructuring did take place, for various reasons (e.g., forest company acquisition of forest in early 1960's, farm amalgamations

STATE REGULATION OF LAND-BASED PRODUCTION IN NEW ZEALAND 1960 - 1984

Source: Appendix Journal House of Representatives, C5 and 93, 1960-1985

in early 1970s, diversification of forestry companies, and dairy companies amalgamations).

- (6) By the 1980s there were indications of considerable corporate restructuring within New Zealand, some of which involved mergers embracing primary processing and forestry companies. Additionally, a number of New Zealand companies were internationalising in order to maintain their growth and profitability (Le Heron, 1980, 1987c).

Conceptualising food and fibre production in New Zealand as capitalist also highlights several problem areas in theoretical practice. Most controversial would be the not uncommon assumption that 'rural production' should only be seen from a farmer perspective (see Gill and Gill, 1974 for an informative critique of this assumption), despite the absence of a priori grounds for the claim. This world view permeated the farmer-forestry conflicts in the 1970s (Le Heron and Roche, 1984). Another shortcoming is the history of compartmentalised sectoral analyses. Further, although a number of organisations occupied strategic positions in the total production system, their significance was left untheorised.

This section has exposed aspects of the structural character of different sectors constituting New Zealand food and fibre production at a time when it was becoming harder to sustain accumulation from such production. The year 1984 has been mentioned as a significant historical reference point. During that year the Labour Government effected a changeover in regulatory posture. In several respects however the move represented a culmination of a decade (starting with the report of the Task Force on Economic and Social Planning (1976)) of reviews of intervention (Economic Monitoring Group, 1983; The Treasury, 1984a, b) and built on some isolated but nevertheless preparatory steps to 'derigidify' the economy.

2.5 What are the New Realities of Food and Fibre Production under the New Regulatory Order?

The rapidity and comprehensiveness of the shift in state regulatory policy since 1984 is probably unparalleled in world terms. The package of reforms rests on three principles: market determination of capital allocation, reduction of both costs and inflexibility in resource allocation, and enhancement of competitive exposure. Policy instruments consistent with these aims are shown in Table 2. The changes have direct and indirect repercussions for private and state investors. Some obvious immediate impacts can be denoted for pastoralism, horticulture and forestry (Table 3).

However, a medium and long run perspective forces considerations of the new possibilities for probable investment opened up by the relaxation of 'border' controls. Two obvious questions spring to mind. How might New Zealand land enter into national and international production and what avenues are

TABLE 2

GOVERNMENT REGULATORY CHANGES
AFFECTING PRODUCTION

POLICY INSTRUMENT	GENERAL IMPACT ON PRIVATE (ESPECIALLY COMPANY) INVESTORS		
	Market Determination Capital Allocation	Reduction of Costs and Inflexibility	Enhancement of Competitive Exposure
1 Move to global tariff rates	*	*	*
2 Floating exchange rate	*		*
3 Removal of subsidies and assistance	*		*
4 Removal of export incentives	*		*
5 User pays pricing of state services	*		
6 Neutral inter-industry tax rates	*	*	
7 Market determined interest rates	*		
8 Deregulation of currency transfers	*	*	*
9 Deregulation of transport		*	*
10 Removal of import controls		*	*
11 Deregulation of union practices		*	
12 Deregulation of finance sector	*	*	*
13 CER agreement	*	*	*
14 Production in government statutory procedures		*	
15 Relaxation of Company Practices Act	*	*	*
16 Relaxation of provisions governing mergers and acquisitions	*		
17 Relaxation of provisions governing foreign investment			*
18 Withdrawal of regional assistance	*		
19 Corporatisation of state trading departments	*	*	*

Source: Adapted from Britton and Le Heron (1987) and Perry, Britton and Burton, (1987)

TABLE 3

**IMMEDIATE IMPACTS OF GOVERNMENT REGULATORY
CHANGES ON LAND BASED PRODUCTION**

POLICY INSTRUMENT	PASTORALISM	HORTICULTURE	FORESTRY
1	Cheaper industrial inputs	Cheaper industrial inputs	Cheaper industrial inputs
2	Earnings affected by foreign currency fluctuations	Earnings affected by foreign currency fluctuations	Earnings affected by foreign currency fluctuations
3	Cost increases and price reductions	Little impact	Afforestation slowed, little impact on utilisation
4	No impact	Little impact	Removal of grants
5	Inspection charges Farm advisor charges More research costs borne by investors	Inspection charges Farm advisor charges More research costs borne by investors	Forestry Corporation charges Farm advisor charges More research costs borne by investors
6	Goat/deer equated with other livestock industries	Equated with other uses of land	Return to pre-1965 conditions
7	Deflation of speculative market for rural land Rural Bank rates up Producer Board credit withdrawn		
8	New investment strategies of primary processing companies including investment overseas		Reinforced investment overseas by forestry companies
9	More differentiated services	More differentiated services	
10	Some competition from imports (eg, processed cheeses)		Competition from imports
11	Reduced unionisation	Minimum unionisation	Examination of national awards
12	Money market influence on exchange value	Money market influence on exchange value	Money market influence on exchange value
13	New scope for dominance	New scope for dominance	New scope for dominance
14/15	Heightened demand for information to reduce legal risk	Heightened demand for information to reduce legal risk	Heightened demand for information to reduce legal risk
16	Company restructuring across and into different industries	Company restructuring across and into different industries	Company restructuring and into different industries
17	Possible new entrants into New Zealand	Possible new entrants into New Zealand	Possible new entrants into New Zealand
18	Minimal impact	Minimal impact	Localised and major impact
19	Comparison of state and private services	Comparison of state and private services	Comparison of state and private services

now open to organise production involving New Zealand land? These are big questions. Moreover, they are questions that are not designed to yield predictions. But they are in a form which can be dealt with theoretically.

It cannot be overstated that under the new regulatory order the scope for elaboration of the forces of capitalist production in New Zealand society is once again considerable. Organisations are searching to find arrangements that will ensure survival and provide stable platforms for accumulation in the widest setting - the world economy.

Already evidence points to some clear directions of change. Monetary and real incomes of sheep/beef and dairy farmers have been drastically lowered, to the point where a sizable segment of farmer-investors are experiencing trading difficulties. Some resource processing and processing-market relations have been rendered problematic with the decline in stock numbers. A reversal in ownership of export meat kill from largely overseas to mainly (internationalising) New Zealand companies has occurred. Centralisation of related activities by large enterprises is being seriously examined (e.g., Watties and the NZ Dairy Board; Watties and New Zealand Forest Products). Existing models of coordination of profit realisation are being debated (with the Dairy Board model being advocated). Fresh overseas investment in land and land-based production is underway (e.g., Japanese purchase of farmland for afforestation, entry of Elders Pastoral). And experimentation in different forms of farm ownership and management, input purchasing, and selling techniques is reported.

These indicators are suggestive of simultaneous adjustments to realign New Zealand production with that overseas (to world productivity and wage levels) and to restructure production into the world economy. Grassland livestock farming, industrial forestry, and horticulture and all being globalised in new ways - especially by large organisations with cross-sectoral production complexes. This general rearticulation opens the possibility of fresh land use specialisations to meet the strategic needs and capacities of different fractions of capital (corporate instead of family farm units). There is also likely to be different forms of production regulation, notably from on and offshore finance companies and banks. The capacity of different regions to sustain a mix of land uses will become an issue as new investment patterns affect the operating economies of existing infrastructure. The new realities are such that the use of the land has been generalised: investors can now use New Zealand land for any type of production but whether the land is actually used is much more problematic than formerly.

2.6 Research Priorities under the New Regulatory Order

This theoretically-informed assessment of the realities of New Zealand food and fibre production has stressed the

capitalist nature of that production. The discussion has been necessarily brief but enough has been dealt with to give a basis for exploring empirically the reconstruction of food and fibre production in New Zealand in the late 1980s. From this assessment certain research priorities must follow.

Undeniably central is the task of conceptualising the total organisation of different capitalist production processes (the nature of which keeps changing!) and the significance of key organisations in the processes. Against this backdrop a number of strategically important theoretical and empirical studies can be identified (see Table 4).

The research foci presented in Table 4 probably form a contentious list. However, it is a list based on an argued case. The *modus operandi* is to come to grips with the underlying causalities and dynamics of post-1984 food and fibre production in this country. In a sense the agenda is also aimed at helping raise the social capacity to move beyond purely reactive responses to production reorganisation (N.B.: most organisations advise labour very late in their planning of intended changes).

By clearly identifying the new structural possibilities something of the range of pathways open for investors in general can be ascertained and the ramifications and repercussions of each, for whom, investigated. However, evaluative effort of this type, intended as it is to give a basis for planned management of production by all involved, must itself be set in the emerging structural context. If a new regulatory regime returns the bulk of production planning to the private sphere, with a corresponding decline in the latitude of state mediation, then discussion relating to research and planning initiatives will need to accommodate this new structural circumstance.

TABLE 4**Food and Fibre Production: A Research Agenda****1 Transformation of New Zealand Capital**

Internationalisation of companies engaged in food/fibre production. Company and Producer Board developments in the inshore and offshore 'New Zealand' economy. Sectoral Studies focusing on key organisation and integration strategies.

2 Transformation of Overseas Capital

Penetration or divestment of overseas companies in New Zealand food/fibre production. Company developments overseas and in New Zealand. Sectoral Studies focusing on role of old and new corporations.

3 Concentration and Centralisation of Capital

New alliances in New Zealand and overseas food/fibre production. Internal and external market dominance. Patterns of growth and diversification - farmer capital, industrial capital. Patterns of control and co-ordination - from land to supermarket.

4 State Corporatisation

Public and private provision of services - withdrawal, addition and modification. Behaviour of state-owned enterprise - inshore and offshore. Funding of R & D and ownership of products and processes.

5 New Technologies: Biotechnology and Information Technology

New information technology and inputs, i.e., sectors. Assessment of existing and new grassland ecosystems, silviculture regimes. Forms of ownership and control of bio and information technology. Combinations of industrial, bio and information technology.

6 Reorganisation of Labour Within Production

Redefinition of seasonal and part-time labour in different farming and forestry systems. Different forms of co-operation in farming and forestry. Impacts of new technologies in key organisations, sectors and at different stages in physical production chains. Contraction of owner-operated production.

7 Changes in Labour Supply and Demand

Job losses and job gains in food/fibre production. Relocation of labour. Intra-organisation mobility - in New Zealand, trans-Tasman. Patterns of Maori and Pakeha labour force participation.

8 Capital-Labour Relations

New bargaining processes. International comparisons of awards, wages, productivity. Regional variations in labour response.

9 Nature of Labour Markets

Organisational dependence and segmentation. Labour histories of different communities.

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CHAPTER 3

N.Z. FARMING IN AN INCREASINGLY INTERDEPENDENT WORLD¹

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3.1 Introduction and Historical Background

International relations are an important component of agriculture and rural life. Basically, of course, our rural growth depends on overseas market development - a fact ingrained in the thinking of every New Zealander over the age of ten - but international relations in the broader areas of cultural, social, political and recreational (tourist) matters also have important commercial implications.

Beginning our story in 1930s, we find that New Zealand's international relations were Dominated (capital D) then by bilateral relations with the United Kingdom. This resulted in (and may even have been caused by) the slow faltering development of our national identity (Sinclair, 1986), as it manifested itself in constitutional, trading, immigration, commercial and sectoral policies.

These facts will help to set the scene:

- (a) The United Kingdom offered New Zealand its formal constitutional independence (Statue of Westminster) in 1931. The New Zealand Government ratified that position in 1947.
- (b) It was not until the early 1980s that the defence of New Zealand itself was given first priority in New Zealand Defence Policy.
- (c) New Zealanders travel overseas much more than do residents of other countries even though the real cost of doing so is significantly higher than in other industrial countries.
- (d) New Zealand has jealously guarded her 'independence' on the one hand, refusing closer political ties in the past with Australia (and, it is rumoured, the European Economic Community), while clinging to quasi-colony status on the other.

1. Taken from Chapter 9 in "Rural New Zealand - What Next?" by L.Tim Wallace and Ralph Lattimore (eds.) 1987, AERU, Lincoln College

The ambivalence implied by the above remarks may be a pakeha phenomenon. The Maori people have had the time to

achieve nationhood and the stimulus to work to rediscover it. The pakeha, however, may be regarded as collectively conservative and as individually independent.

The world has changed markedly since World War II. There have been explosions in science and technology, in information, international trade, population and the number of sovereign states. There have been major changes, too, for the human environment - the physical and political. Each has been important because increasing information flows and improved technology have created an increasingly interdependent world.

This international process was aided immediately after World War II by multilateral initiatives to facilitate trade (GATT), macro-economic co-operation (IMF, OECD), political co-operation (UN), technological and institutional information transfer (UN system including UNESCO, UNIDO, FAO, WHO, WMO, etc.), and aid transfers (World Bank).

New Zealand was a rather reluctant participant in these developments. It was an early member of GATT and the United Nations but held off joining the IMF, World Bank and the OECD for many years. One possible explanation for the hesitancy is that New Zealand remained unsure of itself in the immediate post-war period, having grasped elements of economic sovereignty in a unique fashion during the 1930s. Between 1934 and 1938, under two governments, New Zealand progressively insulated itself from the world economy by adopting an inward-looking development and financial system with an interventionist approach to domestic social, political and economic affairs.

The year 1934 saw the introduction of high, most favoured nation import tariffs. These tended later to impair not only trade but technological transfer and broader international relations with important countries outside the Commonwealth including the United States, Japan and Western Europe. Import selection and foreign exchange controls in 1938 further deterred these relationships and caused Commonwealth ties to weaken as well, although the situation was eased during the War by other programmes like the bulk purchase and sterling area arrangements. At War's end, New Zealand was closer to Britain than before in export activities, and more distant from most other countries, especially those that were about to take a leading role in post-war recovery.

It must be remembered that the depression environment in the 1930s produced a rash of import restrictions and competitive devaluations in many countries. Nevertheless,

there are some qualitative differences between typical short-term import restrictions and the full-blown, import selection, industrial 'development' financial control strategy adopted by New Zealand.

A crucial decision period for New Zealand came immediately after the war. International relations had been badly bruised by our insulation policies and reaction had been swift and harsh especially from the British (Sinclair, 1976). The New Zealand economic platform was explicitly bilateral, not multilateral in its international orientation. In short, as New Zealand emerged from its position as a quasi-colony in the 1930s, she was swimming against an emerging tide of world opinion that was globally oriented. The war increased this momentum to the point that multilateral thrusts, already referred to, mushroomed in the late 1940s to aid, or to at least validate, a global approach in many areas of interest. Was New Zealand too unsure of itself to change course at this stage? Were the policies already too entrenched? Was the private gain to particular groups in New Zealand too large to effect change? We may never know.

Major policy strands remained in place driving the New Zealand economy and some aspects of international relations on a narrower and different course from most other developed countries.

3.2 Post World War II Changes

New Zealand trade relations have altered significantly since World War II and some of these shifts can be seen from the data presented in Tables 5 and 6. Table 5 shows the rapid decline in the importance of the United Kingdom as a source of imports and as an export market. The United Kingdom's position was taken over by Australia and Japan who had both been minor export partners in the 1950s. Perhaps the surprising feature of these developments has been the continuing importance of the United States throughout the 40-year period since 1947.

Table 5: Destination and Origin of External Trade

Year	Britain	Australia	Japan	United States	Other Countries	Britain	Australia	Japan	United States	Other Countries
Exports per cent					Imports per cent					
December										
1920...	74	5	...	16	5	48	17	..	18	17
1930...	80	3	..	5	12	47	8	..	18	27
1940...	88	3	..	4	5	47	16	..	12	25
1950...	66	3	..	10	21	60	12	..	7	21
1960...	53	4	..	13	30	43	18	..	10	29
June										
1960	36	8	10	16	30	30	21	8	13	28
1975	22	12	12	12	42	19	20	14	13	34
1980	14	12	13	14	47	15	19	13	14	39
1982	14	15	13	14	44	9	20	17	16	37
1983	13	12	14	15	54	9	20	17	17	37
1984	10	14	16	13	47	9	20	21	15	35
1985	9	15	15	14	47	8	17	18	15	42

Source: New Zealand Yearbook, Department of Statistics, Wellington

Table 6: Rank Ordering of New Zealand's Major Trading Partners

	1947		1985	
	Exports	Imports	Exports	Imports
Australia	4	3	1 (16%)	2 (19%)
United States	2 (6%)	2 (18%)	2 (15%)	3
Japan	-	-	3	1 (20%)
United Kingdom	1 (77%)	1 (43%)	4	4
Iran	-	9	5	-
P.R.C.	-		6	-
Italy	7		7	10
F.R.G.	-		8	5
France	3	10	9	14
Korea, Republic	-		10	
Canada	5	4	11	8
Hong Kong	-		12	13
Taiwan	-		13	12
Malaysia	-	14*	14	-
Belgium	6	6	15	-
U.S.S.R.	8		16	-
Singapore	-	14*	17	6
Fiji	9	7	18	-
Algeria	-		19	-
Saudi Arabia	-		20	9

Source: New Zealand Yearbook, 1947/49, 1986/87, Department of Statistics, Wellington

Note: The percentages in brackets refer to the proportion of trade occurring to that market.

The more detailed information in Table 6 shows the increased diversification of New Zealand trade. In 1947, our two largest export markets - the United Kingdom and the USA - represented 83 per cent of export earnings. In 1985, our two largest markets amounted to only 31 per cent of earnings. On the import side, 61 per cent of our imports were sourced in the UK and the USA in 1947. In 1985, Australia and Japan contributed 39 per cent of import requirements.

There has been a general drift towards Pacific Basin trade not just with Australia and Japan but with the Peoples Republic of China, Singapore, the Republic of Korea, Taiwan, Hong Kong and Malaysia.

Another important facet of New Zealand international relations is illustrated by Table 7. Over the post World War II period, growth in New Zealand's exports has generally been much slower than in other countries. This is perhaps mainly a reflection of the inward looking growth strategy adopted since the 1930s. One of the side effects of this import substitution strategy was a reduction in the need for exports by constraining imports through selection, achieved by lowering the relative incentive to produce for export.

Table 7: Growth in Real Exports for New Zealand, Developing and Industrial Countries of the World, 1960-70 and 1970-81, (US\$1975 billion).

	1960	Year 1970	1981	Per cent Growth 1960-70	1970-81
<hr/>					
<u>Primary Exports</u>					
New Zealand	1.454	1.660	1.905	14	15
Developing Countries	35.0	47.0	63.0	34	34
Industrial Countries	44.0	76.0	131.0	73	72
<hr/>					
<u>Manufactures</u> ²					
New Zealand	0.102	0.411	1.154	303	181
Developing Countries	6.5	22.1	89.2	240	305
Industrial Countries	100.0	249.0	505.0	149	103
<hr/>					
<u>Total Exports</u>					
New Zealand	1.556	2.071	3.059	33	48
Developing Countries	56.0	100.0	354.0	79	254
Industrial Countries	152.0	342.0	702.0	125	105
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² Excluding petroleum and products

Source: N.Z. Yearbook, Department of Statistics, Wellington and World Bank, Commodity Trade and Price Trends, 1983/84, Washington D.C.

As indicated in Table 7, New Zealand's total and primary exports grew consistently slower than in all other countries, industrial and developing countries. New Zealand exports of manufactured goods did somewhat better (from a low base) in relation to industrial countries perhaps because the import substitution strategy was buffered after 1960 by counter-balancing export incentive programmes.

The key question concerns the relative importance of foreign and domestic policy.

3.3 Specific Trade Relations

United Kingdom and the EEC

In a somewhat contradictory fashion, the continuing strong import substitution policy probably kept the export base narrow. New Zealand remained vulnerable as far as market access for farm products was concerned. As world protectionism in farm products grew in the 1960s and 1970s and protectionism for manufactured products fell, New Zealand remained locked into the United Kingdom market. This had broad implications. Decreasing international travel costs enabled even closer cultural, social and political associations with other countries but the New Zealand trade policy continued to focus attention on the United Kingdom. This may have influenced New Zealand immigration policy; it certainly restricted the technology and experience that immigrants from a variety of countries can bring with them.

The UK's accession to the European Community in 1973 saw New Zealand receive special access for farm exports through Protocol 18. This cemented United Kingdom/New Zealand relations. The direct effect of special access appeared to be positive especially for dairy products. New Zealand export receipts for dairy products have probably been higher with the Protocol. But the unanswerable question is, of course, to what extent did the UK relationship preclude the development of other markets and thus lower potential returns?

North America

Trade relations with North America had been weakened by the New Zealand policies of the 1934-45 period. Even Canadian relations suffered to some extent because the British preferential tariff arrangements stemming from the Ottawa agreement (1932) had been affected by the exclusion of Canada from the sterling area arrangements.

In the area of defence arrangements, liaison with the United States increased markedly after World War II with the advent of ANZUS, but the relationship was weakened in 1985 by the disagreement over nuclear ship visits.

The United States was in the forefront of technological developments during the 1950s and 1960s, but there was a time lag made longer initially by sterling restrictions and continuing import selection before these advances reached New Zealand. A notable example was computer hardware which had an implicit tariff of 40 per cent until 1986. The effect that such restrictions had on skill development and competitiveness may have been important.

Export trade to North America developed quickly following the lifting of sterling area restrictions. After it reached pre-war levels, growth tapered off in the face of increasing protectionist agricultural import policies in both Canada and the United States. However, had the New Zealand manufacturing sector been more outward oriented from 1945-70, it could be argued that trade would have grown faster as real income growth in the region was high and trade barriers to manufactured items were being reduced.

As Table 5 shows, trade (in both directions) with the United States has remained very important throughout the period. The United States is still the second or third most important trading partner. The United Kingdom held the prime position after the war but that position has been taken now by Australia and Japan. Relatively speaking trade with Canada has deteriorated over the period.

Australia

Commercial relations with Australia have grown rapidly since the 1940s particularly with respect to exports (Tables 5 and 6). Part of this growth may be attributed to the two bilateral trade agreements. NAFTA (New Zealand-Australia Free Trade Agreement) from 1965 involved a managed expansion in commercial trade for particular items. This outward looking move was tentative because the arrangement was subservient to the import selection process in New Zealand (Holmes, 1986).

In 1983, the two countries signed a far more outward-looking trade agreement, ANZCERTA (Australia New Zealand Closer Economic Relations Trade Agreement) which provides, with a few exceptions, for the elimination of all tariffs by 1988. The performance of this arrangement to date has been most heartening in trade terms.

Japan and Asia

During the 1950s, New Zealand relations with Asian countries from Japan in the north to India in the south, developed rapidly, for security and economic reasons. Transport costs were lower than to Europe, and there was a high potential for trade with these high-population, land-scarce countries.

Relations fell short of close union at this time for a number of reasons. The Asian region, especially Japan, was highly protected from increasing food inputs in spite of (or perhaps because of) local production disadvantages. New Zealand itself was already highly protected in the range of goods where Asia held a comparative advantage and we had

chosen security arrangements which built on wartime alliances (ANZUS, SEATO). While these alliances were undoubtedly useful in filling a gap left by Britain, they probably reduced New Zealand's ability to open relations with the centrally-planned economies like the Peoples Republic of China. Such reticence was quickly overcome in the case of Japan, Taiwan, Singapore, Malaysia and Hong Kong by the acceleration of economic growth and later by the build-up in technological competence in the region. Japan quickly became a major trade partner in spite of our reluctance to expose New Zealand manufacturing to competition and the lingering mistrust resulting from World War II.

3.4 Chronological Approach

An alternative way to view New Zealand's developing international relations since independence is to examine a brief chronology of the establishment of New Zealand's diplomatic posts (Table 8). At times the establishment of these posts followed, rather than led to, commercial and cultural ties but the dates are generally indicative of strengthening ties.

Table 8: Establishment Dates for Diplomatic Posts

Year	Country	Principle Motivation
1935	Britain	NZ Independence (Statute of Westminster, 1947).
1940s	US, Canada, Australia	Allied War Liaison
1950s	Asia	Pacific relations and Security (following ANZUS, Treaty of Manila) Trade opportunities
1960s	Western Europe	Quest for continued EEC trade access
1970s	Pacific, PRC, Middle East, Latin America	Trading Opportunities (FORUM/SPARTECA)
1980s	Africa, India (re-opened)	General relations, trade opportunities

At the end of World War II, New Zealand had posts in London, Canberra, Washington and Ottawa. The first expansion was to Asia during the 1950s. As an aside, it is

interesting to note that agricultural attaches were not explicitly included as part of these developments in overseas posts. The Department of Trade and Industry has provided virtually all the support for agricultural trade and the only posts with agricultural counsellors are Paris (related to OECD) and London.

During the 1960s, most development centred on Western Europe addressing the threat to traditional trade caused by UK/EEC plans to expand the economic community. This led to intense efforts to bolster bilateral relations and a multilateral response when New Zealand joined the OECD. This was essentially a rearguard action given that there were fairly strict limits on Europe's demand for imported agricultural commodities. This created a dilemma for New Zealand and diverted resources away from expanding markets elsewhere in the world. New Zealand took further multilateral steps in this decade, finally joining the International Monetary Fund (IMF) and the World Bank. The last-mentioned organisation, in its first report on New Zealand in 1968, focused attention on the introverted nature of the industrial development strategy - a comment that was not well received in all quarters.

During the 1970s, international horizons expanded in the aftermath of British entry to the EEC, the rapid fall in agricultural export prices, and the oil crisis. Pacific relations expanded with the South Pacific FORUM agreement (Australia, Cook Islands, Fiji, Nauru, Tonga and Western Samoa). In 1981, the FORUM sponsored a regional South Pacific trade agreement, SPARTECA, providing non-reciprocal duty-free access to New Zealand and Australia. By this time the FORUM had expanded to include the Solomon Islands, Papua New Guinea, Niue, Turalu, Kiribati and Vanuatu, with the Federated States of Micronesia having observer status. Diplomatic missions opened in Chile, Peru, Iran, Iraq, Bahrain and the Peoples Republic of China during the 1970s. Finally, in the 1980s, New Zealand diplomatic posts achieved continental coverage with the opening of a High Commission in Zimbabwe.

The creation of posts provides only a partial view of the depth and breadth of New Zealand's relations with the rest of the world. They have expanded continuously and apparently at an accelerating pace. Cultural, sporting and educational ties have grown alongside commercial trade, financial linkages and international airline landing rights. The thrust has been bilateral, regional and multilateral.

3.5 The Future

New Zealand has come of age in international affairs. The diversity of options involved provides a stimulus to

commercial interests to diversify marketing efforts and explore new avenues in a rapidly changing world. There appears to be a strong continuing pull towards bilateralism. Such relations are easier to develop and require fewer resources to maintain. Multilateral approaches provide few opportunities for New Zealand to exert an influence though there have been major successes even there. The new GATT trade talks begun in Punta Del Este will deal with agricultural protection in perhaps the most comprehensive fashion since the inception of the organisation. This may in part be due to a New Zealand initiative. In 1976, the then Prime Minister, Sir Robert Muldoon, convinced the OECD to bring together the mounting evidence against agricultural protection. This work, which is still being completed, has already had effects around the world.

Currently the CER arrangement with Australia has the potential to deepen bilateral interests considerably without constraining other bilateral, regional or multilateral policy. But there are potential dangers. The Australian economy is perhaps second only to New Zealand (among the developed economies) in its protectionist strategy, although resource endowments in that country have offset to some extent the worst of the effects. It would perhaps be simpler and cheaper for New Zealand to embrace an even broader CER arrangement but there are attendant risks of trade diversion from other markets.

Information and communication technology have drastically reduced the cost of a global strategy, lowering risks and widening opportunities. CER and the South Pacific FORUM provide a broader base from which to face the world. Our international relations have blossomed over the last decade. Can the momentum be maintained or will we retreat back to a narrower global perspective?

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CHAPTER 4

NEW LAND USES: A SEARCH FOR LAND USE SATISFACTIONS

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4.1 Introduction

My original title of "new land uses" felt uncomfortably misleading after the first hour or two of this symposium. I did not/do not, have any new land uses which might act as some kind of elixir to recharge the flagging "body or spirits" of rural New Zealand. Any ideas I might have for land-use diversity have been tried out, and indeed, thought out, by others.

My aim therefore is not to look at opportunities for production (or land outputs) on a macro scale, but rather to focus on a variety of land outputs which may contribute satisfactions to individuals, families, groups, and communities. Some of the comments which follow may be more appropriate regionally, but first of all, my intention is to insist that the inherent values of land are rich and diverse; perhaps more so than we generally acknowledge. Second, I want to ask questions about our individual relationships with land and whether or not these need constantly to be reassessed.

4.2 Rural Life-Styles and Self Sufficiency

I can understand why many rural people become angry when the "life-style" component of farming is highlighted by "urban cousins" as a positive component of farming. Notions of being "self-sufficient" may be of little solace if there is not enough real money to purchase those items which "self-sufficiency" can not provide. If farms are to be treated concurrently as a business, many farmers tend to see such qualities as life-style as irrelevant when compared with the realities of the market place.

Abraham Maslow wrote of this over forty years ago when he described human needs as being hierarchically dependent. He described basic needs as physiological, safety, love, esteem and finally self-actualisation. Without describing these different levels, or resorting to jargon, it seems to me that few rural people are deprived of basic physiological needs. From this point of view, self-sufficiency is a plus! Many however, may be deeply affected by safety needs - - not in the sense of shelter or physical safety fears, but from the more insidious effects of uncertainty, whether this be as direct as mortgage repayments, or the longer-term implications of market changes, viability, "rural decline", etc.

Whatever the realities of the situation might be, Maslow's theory would insist that in circumstances of unfulfilled safety needs it is unlikely, or even impossible for individuals to achieve the higher levels of human aspirations mentioned previously. I find it difficult therefore, to visualise a highly creative, divergent, and buoyant rural sector in the absence of personal individual security (safety) and personal worth and esteem.

The twist I want to give to this part of my paper is that the historical benefits of "life-style" and "self-sufficiency" should be retained (or regained!). They should continue to be an important component of rural living. In times of stress they can provide a fall-back position from which to tackle the major concerns which have been identified by others at this symposium.

My point is not simply that one might save dollars by growing food or fibre for personal consumption. Time spent in other pursuits might provide a manyfold return from which food and fibre can be purchased. But can the satisfactions be matched? Being partly self-sufficient is not a "big deal" in itself. It is only a part of it, albeit an important one. It is an "output" of one's land - - an opportunity to do something which fulfills to some extent our unique humaneness.

4.3 A Variety of Outputs

Other outputs of land are reviewed in the slides which follow. Each bracket of slides contributes ideas on one or more outputs:

- one output of land can be shared by everyone. These are landscape values - - the opportunity to live and travel in pleasing environments.
- an output of land is the conservation of nature in all of its diversity, complexity, and richness. This should not be seen only in terms of rare and endangered species of plants and animals, but the entire range of species which constitute living things.
- an output of land is the symbolism which inheres in landforms and which land nurtures. Names, places, landmarks became cultural systems, storing the richness of our heritage, both Maori and European, which provide continuity over time and space.
- an output of land is the provision of a range of habitats and environments which provides a place to live. From mountain top to sea these ecosystems provide both for biological and cultural diversity, health, and well-being.

- an output of land is the physical environments for a diversity of recreational opportunities including tourism (domestic and international).
- an output of land is its provision of opportunities (places/environments) for people to be together. It provides a sense of scale, a sense of stability in times of rapid change. When people come together in such places - - to relax, to have fun - - there is sharing, caring and thoughtfulness. Many of these are best promoted in relatively natural places rather than areas heavily dominated by human impacts.

4.4. Recreation and Tourism

Opportunities for recreation have traditionally been the responsibility of central, regional or local government. More recently, private lands and resources are being used to develop recreational opportunities. "Recreation" literally means to "re-create" one's self. Recreational activities must therefore be physically, intellectually, socially or spiritually rewarding and fulfilling. Land seems to provide for this in unique ways. Many writers have described the last few hundred years of human history as a "separation of people from land" and pointed out undesirable social/psychological consequences of this. For the original New Zealanders, the Maori, there was no separation of people from nature. They were "a part" of it, not "apart" from it. There is a wholeness or continuity between the physical and natural world, past and present. "Mauri", a life-force, was pervasive through all things, both natural and physical. Land and people are thus integrated, and this infusion of spiritual values in land is something Pakeha people should look to closely. Failure to try and understand these land relationships is culturally naive and insensitive. Conversely, efforts to understand and empathise with the Maori view will enrich us.

From the Maori perspective, land did not have to provide economic return (output) to have value. Nor was it seen to be a playground. Mountain ranges (we assume) were not crossed for fun, nor oceans sailed. Resources of pounamu from the other side of the mountain range, or fish from the sea, were primary motivations.

Our early European forefathers were not so different in pragmatic terms, but their relationship with the land went through a victor/vanquished relationship. Once the land had been "bent to their will" and responded to new land uses, so too did our forebears become more generally concerned about their environments. I suggest however that this as much as, or more than anything else, co-incided with a surplus economy! In the intervening years, the land had been a cushion, a refuge, a source of worth and so on. Should it be any less so now than then? Or have we once again temporarily grown "apart" from it?

Whether land is seen as an ancestral gift or as a "commodity", it nevertheless retains a set of inherent qualities capable of fulfilling a range of satisfactions not possible through other devices or resources.

4.5 How much Diversification?

Around the regions on any half days drive you can see diversification of land use. Goats, deer, horticulture, viticulture - - all would cause bemused bewilderment to the farmer of fifty years ago dropped without warning into the 1980s. So too would the impact of touristic and entrepreneurial developments such as Castle Hill Village, and Flockhill in the Upper Waimakariri Basin, or caravan parks, camping, and farm holidays on traditional farms.

All of these activities are options, but in most cases, the options are relatively few. With careful planning, attention to details, knowledge of markets, and a strong desire to be a part of it, a small group of farmers can substantially diversify into recreational tourism.

A larger group could go a part way towards this by simply "home hosting" tourists for a short stay which submerges visitors temporarily into a farm life-style.

If either process is selected, an important consideration must simply be that these new activities are going to have an impact which will itself generate change. No action is without a reaction or consequence. We have not (in my opinion) thought through the social consequences of these extensions to conventional rural activities.

4.6 Conclusion

Of the new and different land outputs I have mentioned (or alluded to but not mentioned, e.g., horse trekking, safaris, hunting/fishing, cross-country skiing) few are within the scope or capacity of most rural people. If everyone tried to diversify in this way, a boom/bust situation would surely follow.

It is for this reason that I have chosen to place my emphasis on those land outputs that are less-well recognised, or from which we must very deliberately re-seek our satisfactions. If we are able to do this, then the lifestyle of rural persons must surely be enhanced. I have equally deliberately stated that little of what I have to say will be meaningful to those whose basic security is under threat. However, I must insist that they are two issues which can be resolved in parallel. In other words, a greater recognition of

deep seated and lasting values of land may enable us more easily to deal with other land-related problems - - hence - - a search for satisfaction!

To the Maori goes the last word:

Whakangarongaro he tangata
Toitu he whenua.
(People pass but land endures!)

CHAPTER 5

TRENDS AND PROBLEMS IN RURAL SOCIAL SERVICES DELIVERY

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5.1 Scope of this Paper

This paper looks at the issues involved in the delivery of social services to rural communities and the research implications of the current state of knowledge about these issues.

A review of the literature of the 1970s and 1980s identifies the key problems and trends in social service provision. The paper concludes with a highlighting of the areas where further research is needed in order to assist the development of appropriate services.

5.2 Definitions

The rural areas of New Zealand are commonly defined as those areas outside urban centres or settlements of 1,000 persons or more. This residual definition perhaps parallels the description of many rural dweller's current account balance: the area of debt after income has provided for family needs.

Social services are generally recognised as the range of services which cover the following needs: employment, education, health, housing, income maintenance, and individual and community welfare (Ministerial Task Force on Social Welfare Services 1986, Social Welfare Services, p4).

Perhaps this is an urban concept of social services. Certainly one of the major areas of concern of rural residents suggests that communication systems - roads, transport, radio, television, newspapers, telephones - should be included as a vital social service.

5.3 Review of the Literature

The literature on rural social services can be grouped into four categories. Firstly, there are the rural locality and resident studies; secondly, writings on actual social services. The third category covers demographic and social planning literature and in the fourth is the more recent social impact literature which is starting to abound.

While there is overlap among these categories the breakdown of the literature into these groupings is useful. Each category provides a different start on the delivery of social services. Studies of localities provide the rural resident and consumer issues and viewpoints.

Literature on the social services tends to give a more in-depth look at specific areas and often (though not exclusively) gives the professional viewpoint. Demographic and planning literature tends to be from an academic perspective and social impact literature provides a particular perspective relative to current or proposed major economic change.

The issues in social services delivery will now be explored through these four different approaches.

5.4 Resident and Locality Studies

Education, health and communication services emerge throughout the literature as the key social services in rural areas. Housing, employment and personal and community services receive less attention and the issues relating to them are somewhat different.

Two major themes run through the issues concerning social service provision. They are access to services and quality of services. Often, along with access goes the issue of retention of services. Underlying all is the need to maintain a vital community.

Heather Little commented that "Rural people do not want all the services inherent to urban life ... (but they) should not be disadvantaged beyond their capabilities" (Little, 1979, 62). The loss of services often has a domino effect well beyond the withdrawal of that particular service.

The retention of rural services has been commented on in a number of studies. A seminar on rural depopulation and resettlement (Cant and O'Neill, 1980) addressed this issue from a number of perspectives.

Improving the quality of rural life was a major theme of the seminars. Retention of services was seen as a key way to address this issue. Glendining, in her study of Eketahuna, monitored the loss of services and population (Glendining, 1978: Table 1).

Kaplan's study of sheep/beef farms in the Mangamahu Valley (Kaplan, 1979) talks of the deteriorating spiral of population decline and declining rural services and links them to stagnating productivity.

Various ways of addressing the problem of declining rural services have been identified. These have included improved

planning strategies which encourage more rural settlement, development of specific rural government policies in service provision, greater land use diversification, concerted community action to welcome newcomers, use of local services, and the development of strong, supportive communities (Cant and O'Neill, 1980).

The question of adequate access to services recurs in various consumer studies. Improvement in communication services was the foremost need identified in Gill's recent survey of the Taranaki hill county. The retention of a freight rail service and improvements to roads and telephone services were seen as vital, given the isolation of the area. Similarly, communication systems were a major concern in Sparrow's study of Banks Peninsula communities in 1977. Physical barriers and remoteness from services created the greatest problems. Policy barriers created greatest resentment: for example, policies which meant that 'phone calls to someone a short distance away were toll calls. The telephone system was seen as the community lifeline. The two major concerns regarding medical services were the availability of accident and emergency services and the need for a comprehensive primary health care service - a service which would include physiotherapy, occupational therapy and counselling as well as general practitioner services.

In education, access to services is also a concern. The lack of pre-school facilities in many rural areas was identified in Gill's national survey of rural women (Gill, 1975). Packman also identified an uneven spread of pre-school services. He considered that mobile services (mobile units, itinerant teachers and community pre-school workers) had real potential to fill many of the gaps in pre-school provision. However, a better co-ordinated basis of service provision and the ironing out of some of the resourcing anomalies among these services would also be necessary.

The access of children to primary and secondary schooling focuses on three aspects; school bus services, boarding bursaries and correspondence schooling. Concerns about the length of time some children spend travelling on a school bus each day are raised from time to time (Henry, 1977/78).

The recent government decision to put all school bus services up for tender has raised fears that some of these services will be closed down. Another area where accessibility can be a problem for children is the great distances they have to travel to sporting and cultural events (Henry, 1977/78).

The provision of boarding bursaries is contentious in that as a partial subsidy only of the cost of boarding a child, it provides an option only for the better-off rural residents. Also, children leaving country districts to attend town boarding schools can jeopardise or down-grade the country school for those remaining. A major correspondence school concern recently addressed was the question of payments to

parents of the supervision of their children's work. Last year a payment was introduced. A high waiting list for the correspondence school pre-school programme is a remaining problem.

Lloyd's case study of the East Cape highlighted major gaps in the provision of welfare services to rural areas (Lloyd, 1982). Isolation and smallness of scale were identified by Gray as factors inherent in rural life which contribute to difficulties in providing social services to rural communities (Gray, 1986).

5.5 Quality of Services

Concerns about the quality of rural services have been raised in some consumer studies, particularly in relation to health and education services. A WDFE survey on rural education in 1985 found concerns about poor quality teachers, particularly in remote schools (WDFE, 1986). Lack of specialist services and extra resources such as library materials were also criticised.

In the Banks Peninsula Study (Sparrow, 1979) paramedical services such as physiotherapists, counsellors and occupational therapists were wanted to provide more comprehensive primary health care. The Women's Health Committee of the Board of Health Study (Glendining, 1986) drew attention to the flow-on effects of the closure of country hospitals - namely, the likely loss of ambulance and chemist services. Lack of counselling and other services that respond to mental and social conditions such as depression, stress, alcoholism and relationship problems were also identified (Glendining, 1986; Mackay, 1977/78).

Rural housing is another area where social service provision has been lacking. Northland and the East Cape were identified in the National Housing Commission report on rural housing as having major housing problems (Fitzgerald, 1982). Inadequate government response over a number of years has failed to fully address this problem.

5.6 The Professional Perspective on Services

Many of the concerns identified by consumers are of course recognised by service providers. However, an additional perspective is offered in their literature.

Among teachers, deteriorating community relationships is an area of growing concern (Nash, 1986; Frater, 1981). Frater, in a 1979 survey, identified several problems on the part of both some teachers and some communities. Lack of preparation of teachers for teaching and living in a rural community were seen

as contributing factors. The need for specific preparation for rural practice has also been identified by doctors (RNZ College of GP's, 1986) and clergy (Elvidge, 1981).

Recruitment and retention of teachers to rural schools is another concern. The abolition of country service, raised rents in school houses, and delays in career development that tend to result for teachers who take up country positions, are some of the factors that have contributed to this problem (Nash, 1986). The lack of opportunities for professional development and stimulation is also an issue.

Professional isolation is a problem too for country GP's (Guerin, 1986) and other rural professionals such as social workers, clergy, district or public health nurses and teachers. A high profile in a rural community, not being able to escape one's "role", pressure on personal or family life, and the need to regular breaks away are other issues for rural professionals. Lack of access to specialist or back-up services are further factors which place greater demands on these rural workers.

Flowing on from this lack of alternative professional resources is the need for rural service providers to deliver a generalist service. For example, a GP is expected to have a broad general knowledge of all primary medical and health care; a social worker must be able to respond to a wide range of social distress from child abuse to providing information on services for the elderly or disabled to mental counselling. Country teachers are expected to assume leadership and resource roles far beyond the classroom.

The ability to develop and support auxiliary services, to make appropriate use of volunteers, and the need to work co-operatively with other disciplines are additional skills which rural professionals need to include in their repertoire.

The professional literature has also covered issues relating to a range of rural social services little touched on elsewhere. In "Bridging the Gap", Packman (1985) selected for study a disparate range of services - library services, pre-school education, women's refuges, rural mail delivery and health services. His aims included looking for common elements in the management and distribution of services and he covered assessment of need as well as organisational factors. Gaps in services and scope for greater co-ordination and co-operation were some of his conclusions.

In the mental health field, Herman (1981) initiated some studies into stress and rural mental health. He concluded that the development of mental health services separate from other health services has resulted in some inadequate servicing of rural mental health needs.

The West Coast Hospital Board service development plan in 1984 redirected its mental health services away from

institutional care. The Mental Health Care Advisory Committee of the Board set out a plan for more extensive counselling and mental health education programmes and greater supports to voluntary groups. In Northland, a study of the work of public health nurses gives an in-depth picture of their work in primary and intermediate schools.

The other rural service which has received some attention has been library services. Packman found a need for the reorganisation of services on a regional basis, a need well-recognised by librarians. Subsequent to Packman's study, a ministerial review of national library services to rural areas recommended a revamped service which would better meet present and future needs.

5.7 Demographic Factors

The relative decline of rural populations and the high mobility of people within, and in and out, of rural areas are the main demographic factors affecting social service delivery (Heenan, 1980). The need to maintain viable communities is the bottom line for some areas or regions, particularly the West Coast (Bennett, 1980; Martin, 1986). Population-based funding policies work against rural interests when there is no recognition of spatial factors nor any concept of "minimum supply" built into the funding criteria. The circular nature of the interaction of social services and falling population is highlighted in the Taranaki hill country study: "At risk is service provision within the hill country. The overall welfare of the Taranaki eastern hill country is dependent on its ability to maintain its population. Some communities are so fragile that the loss of even one family can have an impact disproportionate to the numbers involved" (Gill, 1986: 10).

Alongside the mobility and comparative decline of the rural population is the factor of regional differences. Rural New Zealand is far from being homogeneous. The Department of Statistics in its Rural Profile identified significantly different regional growth patterns. A recent analysis of county and district rural population change by Cant (1986a) has identified those areas most advantaged and those most under pressure from economic and social decline. This great variability in rural New Zealand needs to be borne in mind when looking at rural research or policy needs.

5.8 Social Planning

The part played by conservative planning and the lack of comprehensive and integrated social planning are two themes of the rural planning literature. Conservative planning has affected social service delivery in two ways. Conservative

land use policy has contributed to declining rural population by not permitting or limiting small holdings and alternative land uses, and by controlling rural housing (Cloke, 1986: Richardson, 1980: Stokes, 1979).

The exclusion of any responsibility for social planning up until the 1977 amendment to the Town and Country Planning Act has left rural social service provision largely in the hands of centralised government departments or agencies.

Thus, urban and centralised policies have steered rural services. Where rural conditions have hindered the application of these policies, rural areas have tended to be the losers. Packman commented on the need for central government departments to work more closely together - "Many gaps in rural services could be reduced through greater co-operation and limited additional resources" (Packman, 1985: 91). Several writers (Martin, 1986: Heenan, 1980: Cloke, 1986: Gray, 1986) have identified the need for a rural perspective, for consultation by planners and policy makers with rural consumers, and for the development of specific rural policies.

The need for and potential of comprehensive planning for rural areas has been recognised. Packman cites the example of the Southland United Council. This council undertook an expensive community consultation about the health needs of the region and attempted to co-ordinate and co-operate with all the relevant agencies within the health sector in Southland to produce a regional health plan.

The Auckland Regional Authority has also been quoted by Cloke (1986) as an example of a regional authority undertaking rural strategic planning. He illustrates its effectiveness with a description of the part the Auckland Regional Authority played in fighting the closure of a rural maternity hospital at Helensville (Cloke, 1986: 8).

Fischer too reinforces the potential of the regional planning process to address rural social service needs (Fisher, 1980:26).

In summary then, the mobility, relative decline and regional variability of the rural sector are the main demographic features to emerge from the literature. Lack of comprehensive social planning, planning which has hindered rather than helped rural community growth, centralised national social service provision and policies, and a lack of co-ordination among service providers have been key issues revealed in the planning literature.

Calls are for comprehensive approaches to rural planning which recognise and promote social welfare alongside the economic wellbeing of the community. Consultation with rural consumers, co-operation among rural service providers, and distinctly rural policies which recognise regional differences are seen as ways of addressing growing rural social problems.

5.9 Social Impact Literature

The fourth division of rural social services writing is that of social impact literature. The general aims of this literature are to help communities prepare for, manage and respond to the social impacts of major economic changes.

In New Zealand, various rural communities have been affected in this way. The Huntly power project in Waikato, the Upper Clutha power developments in Central Otago, the closure of the Patea Freezing Company in South Taranaki and the possible closure of the Golden Bay Cement Works in North-west Nelson have all been major economic developments or closures which have affected (or have the potential) to affect the rural towns and communities markedly.

Changes in the rural sector itself have also been the subject of some studies. The change from dairying to beef in Northland, rapid expansion of the kiwifruit industry in the Bay of Plenty and the move of farm families in Canterbury into horticulture with irrigation have all been studies.

Perhaps the key feature of social impact literature in relation to rural social service provision is the validation that the literature provides for its work. Information is thrown up about a number of factors such as: what changes are taking place, who are being affected, how are they being affected, and what new and different demands there are for social services. Knowledge about these factors is vital for residents, service providers and planners.

The ongoing nature of a process of social assessment and management of the changes is another key piece of knowledge which these studies have brought to light.

Taylor's (1986) review of social assessment for rural development identifies some of the problems for rural communities that this literature exposes. He suggests the need for a national social policy which takes into account, in the rural sector, such things as the desirable balance between corporate and family farming, the relationship between population and levels of social services, and the extent to which regional development will be promoted. Other studies reinforce findings from the planning literature such as the need for social development policies to be integrated with economic developments, and the need for co-ordination and co-operation among social service providers.

5.10 Current and Future Trends

Different population patterns of growth and decline are affecting New Zealand regionally. These population changes will continue to affect the provision of social services. In a climate of greater demands for efficiency and accountability,

greater pressure will be put on service providers to withdraw services from areas of declining populations. Population-based funding is also exerting a similar pressure on services in these areas.

The "market rules" and "user pays" philosophies are having flow-on effects into the social services. Even if there is no move to fees for service, there is a greater pressure exerted on service providers and consumers to prove their case for social services. The separation out of the "social" aspect of an economic service as in Post Office services and the corporatisation of some government departments will also see the chop given to a number of services. For example, the supply of benefit forms by the Post Office, the social assessment studies undertaken by the Ministry of Works and Development, the charging for information previously or now provided free.

On the more positive side, the decentralisation of social services in the Department of Social Welfare is leading to greater recognition of rural needs. Devolved funding such as Community Organisation Grants and greater recognition and funding diverted into Maori tribal authorities are all feeding more resources for social services into rural communities.

The formation of Area Health Boards is providing opportunities for more comprehensive approaches to health provision. The need for social planning and needs assessment is gaining greater recognition.

As well, a side effect of the rural crisis has been the revival of many rural community support structures. A "pulling together" in the face of collective distress has resulted in more rural community social activities. The rural community spirit which affluence and the motor car had caused to dissipate somewhat is being restored.

5.11 Research Needs

There are many areas in the wide field which this paper has covered where more information and study is needed. Rather than traverse these and produce a long recital of research needs, I have chosen instead to focus on three gaps in the knowledge of social providers and policy makers.

The first is an information base on specific rural districts and regions such as the Community Profile of Census Information which the Ministry of Works and Development has prepared. Much information currently collected does not separate out rural dwellers. Coupled with this, the extraction of rural population density information would also be exceedingly valuable. Levett (1983) has advocated the need for a rural resources inventory and has outlined some of the material which could usefully be included.

The second is the establishment of a researched baseline of social service provision for a community of a specific area and population would provide a touchstone for policy makers. An alternative approach to this would be development of a definition of a "viable" community", built around a concept of a "minimum acceptable level of social service provision".

The third area is one identified by Cloke (1986), namely the investigation of the incidence of rural deprivation. He is concerned that deprived people rather than deprived areas were targeted. Research into the actual costs of rural living as suggested by Gillies - the costs of transport, vehicle wear and tear, additional product costs, toll calls and other costs derived from rural living - would also assist policy makers in the formation of rural incentives and compensatory measures to attract professionals to the country.

In conclusion, access to and quality of services are the concerns coming through in the resident literature. Communications systems, health and education services are seen as the major social services supporting rural community life. The quality of rural housing, employment opportunities, and personal and community services have received comparatively little study. The residual nature of these services possibly accounts for this lesser attention.

Deficiencies in planning procedures and government policies and practices have been identified. Better planning practices and greater acknowledgements by decision makers of specifically rural issues are seen as responses that are needed.

Greater information on social service needs and a fuller rural information base are the key for research.

Social services delivery to rural communities has received comparatively little research attention. The field for research is wide open.

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CHAPTER 6

GOVERNMENT INFLUENCE - PAST, PRESENT AND FUTURE

by Robin Johnson

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In this paper, I want to present an over-view of Government involvement in the rural economy, and then go on to discuss recent changes in Government's attitudes and their effects in the future. The paper is more about the role of Government in society than about problem areas; more about describing what was and what is than providing solutions; and more about the reasons why things happened than providing analytical constructs for further analysis. In short, my instructions are to background the changing nature of Government policies affecting the rural environment and to speculate a little on where these may be heading.

While this paper is essentially about Government influence in the agricultural production sector, I acknowledge that rural economy and society can have a much wider meaning. The view taken here is that the majority of rural people are those engaged in farming, and changes in Government policy toward agricultural production will have a major influence on the wider rural economy. No doubt, forestry and tourism exert other influences. There does seem to be a dearth of studies of the inter-relationships between the different parts of the rural economy in New Zealand (not to mention defining what the words actually mean) - could I suggest that such a topic be put down for further discussion and study? There is certainly a need to formulate some sort of integrated framework for this purpose in the light of current developments in regional development, for example.

Secondly, I have confined myself to economic policies for agriculture, an area where I have experience and understanding. Clearly, others with the necessary experience should comment on the delivery of other Government services to the rural economy as a whole.

In what follows, I want to discuss the historic development of government policy for agriculture in New Zealand and how it has changed in the recent past. Intervention in the economy is quite traditional in this country and has been accepted by both the governed and the government. Recent developments have reversed this long-held view, and we are now embarking on a somewhat new policy direction, the long-term implications of which are not at all clear.

On the other hand, Government has a number of administrative roles in our society which are unlikely to change much. In particular, it has the responsibility of maintaining law and order, collecting taxes, defending the realm and so on. Of particular importance for the agricultural economy is the maintenance of legal systems, including the sanctity of contracts and the protection of property rights. Because these institutions function so well in today's society, we may be inclined to overlook what might happen if they were not there or

seriously modified. The New Zealand agricultural economy has a very strong legal base in its land deeds and registration system, and a great deal of its stability in the face of economic changes rests on this background. Current debate about the ownership of land does not present a challenge to the majority of freehold land in New Zealand (it is protected by the very rigidity of the land registration system introduced in the last century) but there is a sorting out starting to take place on the status of crown land and unoccupied land which may lead to challenges to the status of freehold land. In particular, the claims to land being made under the Treaty of Waitangi could lead to a modification of the land registration system in this way at some future date.

Let me now turn to government policies in agriculture. A government role which has been very strong in New Zealand is that of fostering economic development. With our colonial past, successive governments have seen their mission as one of opening up the new country to settlement and development. With the advent of refrigeration in the 1880s, this mission became focused on pastoral development for export trade, and over nearly a century of endeavour, we have seen innumerable government measures that were justified in the name of greater economic growth through export encouragement. I need only mention the breaking up of the large estates in the 1890's, the development of the 70 mile bush in southern Hawkes Bay, and the massive returned soldier settlement schemes after two world wars, to demonstrate the large commitment there was to farm export-led growth in the past.

The important thing about this commitment is that it led to a set of preferences (and fixed ideas) being established for anything to do with exporting, and into this category expanding pastoral production fitted quite naturally. From this perception there developed all the institutions we associate with the agricultural production sector like the Ministry of Agriculture, the Department of Scientific and Industrial Research, the Rural Bank (formally the State Advances Corporation) and the marketing boards. These institutions are not modern inventions, but all date from the period between the turn of the century and the depression of the 1930s, and were established to assist the development of the farm sector in the economy. Without entering into detail, it would be generally true to state institutions were to be provided free of cost in the name of general development objectives. In accepting Government responsibility for providing services of various sorts, it was seemingly accepted that these had to be provided collectively as well.

The idea of collectivised services extends to local government as well as central government. Perhaps in local government, the practice of collecting rates is intended to maintain the relationship between costs and benefits within regional entities, hence we do not see large transfers or wealth to the rural sector through local government action. However, one has only to mention rural electrification and soil and water conservation subsidies (including irrigation) to see that considerable cross-subsidies of these activities has been considered desirable and justifiable in the past and at least partially within the local government services, particularly, as these are more likely to affect the rural community as a whole rather than certain people within it.

This broad pattern of assistance for the rural sector over the longer run, has been accentuated in recent years by more direct economic assistance. This has been more producer-oriented than people-oriented. In the early 1960s, falling economic performance had promoted a re-examination of the balance of payments situation, and it was decided to introduce policies for direct encouragement of exports, be they in manufacturing or in agriculture (or forestry). Export tax incentives were introduced for manufacturing goods (including forestry); taxation write-offs on development, fertiliser subsidies, and farm development loans were introduced for farming. At this stage, changing the fiscal position of producers was considered as desirable encouragement, with a little attention to basic costs such as through the fertiliser subsidy. Prior to the 1960's development loans had not been available from State Advances.

In the 1970s this pattern of direct economic assistance was increased further. In 1971, 1975 and 1978, direct grants were made to pastoral producers, in years of low export returns, and from 1978, a government-funded floor price scheme for major pastoral products was introduced - the Supplementary Minimum Prices scheme. In the mid 1970s, the producer board minimum price schemes were up-graded with mandatory floor prices for all the major products - apples, milkfat, beef, sheepmeat and wool. (From 1978, such prices were to be administered in a two-tier structure, with board prices providing a base, and government prices a topping up function.) Then in the late 1970s, the government introduced two highly subsidised development loan schemes for pastoral development - the Livestock Incentive Scheme and the Land Development Encouragement Loan Scheme.

Thus in the 1970s, attention passed from a mere tinkering with the fiscal edges of the problem to direct support of producer prices for all major products, plus a heavily subsidised lending programme. The objective of the exercise was to provide a stable environment in which the farm sector could invest in increased production capacity with the ultimate aim of increasing the nation's export earnings. In the event, a considerable increase in export production took place, though at some cost to the taxpayer as all the major support mechanisms had to be mobilised in the period from 1981 to 1984.

The change of government in 1984 brought about a complete re-examination of the export-led growth thesis. For a number of reasons, both the infrastructure of rural assistance and the system of price guarantees came under attack. Let us briefly examine what happened.

The newly elected government opted for a set of economic policies which avoided subsidised prices and activities, and which emphasised market prices and costs. This involved the freeing up of financial markets (with consequent effects on interest rates) and ultimately freeing the \$NZ from exchange rate control, as well as removing direct assistance for the agricultural sector. However, for budgetary reasons, it also involved reducing government expenditure on the many collectivised activities that the country had taken for granted for so long, and introducing user-pays principles where it was appropriate. This has particularly affected the Ministry of Agriculture and Fisheries and the Department of Scientific and Industrial Research. Because the farm sector had been an essential

part of the whole system of expenditure and assistance for so long, the impact of the changed policy environment was all the greater and more difficult to understand.

The essence of the changed attitude was, I suppose, the doing away of preferment for particular growth sectors like pastoral agriculture. It was thought that industries should stand on their own merits and that government should not be involved in picking winners. After being told for many years that they were the backbone of the country, the for the future, the most efficient producers in the world in rainfed pastoral agriculture, and so on, farmers were understandably shocked by the new economic philosophy. Most of us would be too!

In terms of my general approach I suppose 1984 represented the end of the pastoral expansion phase of colonial development which began in 1881 with the advent of refrigeration. It was tacitly accepted, though a whole century of development, that economic growth depended on expanding pastoral agriculture, and all those who contributed to it. Now, for a variety of reasons, this was coming to an end. It has certainly taken some adjusting to, not only for farmers, but for all people who service the rural economy.

What of the future? Let me set out the implications of recent changes for a number of areas where some speculation is possible. I can set out the economic consequences as I see them, and it is up to you the audience, to interpret the wider consequences for rural society as a whole.

First, will the new hands-off policy affect the size of the rural economy? Without the driving force of the growth imperative, will the sector be bigger or smaller than it was in the past? At present, the economics of the sector are largely governed by a world surplus of products in agricultural markets and the Government's position on the exchange rate and interest rates. These forces appear to indicate a shrinkage of the sector at present, to one producing less output and employing fewer people (I generalise, of course). It seems to me that this shrinking down is permanent and that a new, leaner smaller agricultural sector will emerge. There will be changes in product mix, probably towards horticulture and certainly away from meat, even though wool fibre appears relatively buoyant at present. In the longer term, I do not see a great expansion of pastoralism, mostly because I do not see the economic climate improving sufficiently and long enough to make the necessary investments worthwhile.

A smaller agriculture sector means fewer people in agricultural production and fewer people in upstream and downstream industries. We therefore have to assess the implications of population re-distribution. In the rural areas, the critical mass needed to support some services may not be maintained. Schools, chemists, local hospitals could be affected. Local people will have to travel further to reach necessary services. Some areas could benefit from their urban proximity but more distant areas are likely to be seriously affected unless alternative occupations are available.

Secondly, the re-organisation of supporting industry affects some regions more than others. This has been widely discussed in the media. As I see it, a new process of concentrated urbanisation has

been set in motion by the new economic policy and it is largely irreversible. Government says assistance for the regions will not be provided. They should help themselves, it is said. So there is no sign of immediate relief from this direction. I still largely believe in the need for a sound regional distribution of wealth, and I hope we move back toward that position, but at present some new assessment or set of facts (and political willingness) is required before the process is restarted again. The position is not hopeful at present.

There are large scale changes taking place in the way advisory and research services are being organised in agriculture. At the time of writing, there is no indication of the shape of new policies for agricultural education. Research and advisory services are moving to a partial user-pays basis in place of the traditional free service. Again it seems to me that the volume of such services must drop in the short run, as payment is introduced. It seems likely, in the longer run, that less service will be demanded than formerly and what is provided will be more directed and specific. This roughly takes care of immediate needs, but exposes the problem that exercised the Beattie committee of who will pay for long-term research? Unless collective responsibility is accepted the volume of long-term research must fall in the face of a lack of active support. In my view, some re-grouping of sponsorship is required in this case, with possibly some provision for sharing the cost between private and public sponsors, i.e., some collective arrangement is necessary and must be negotiated. At the end of the day, we have to face the question of whether the supply of technology to rural producers is adequate or not, as well as who will pay for it? (Similar arguments apply to the soil conservation network. Here it is a case of local responsibility versus national responsibility as recent articles in the New Zealand Farmer have demonstrated - see April 9 issue.)

Another feature of the new policy is the removal of a number of stabilising devices in the prices and income of rural producers. Overseas income is subject to the vagaries of the floating exchange rate. Producer board stabilisation reserves have been exhausted and there is an unwillingness to borrow money to supplement them. Also, at present, interest rates and inflation are at excessively high levels and their future course is uncertain. One obvious outcome of the new policy, therefore, is greater uncertainty for farm producers in the market place. It seems clear they will be less willing to take risks in such an environment. We can therefore expect a more conservative approach to farm production and investment. The likely response to this new risk environment will be to build up or establish new mechanisms/institutions for dealing with such risks, and this will take time. I have in mind here such measures as the income equalisation accounts, tax averaging, futures contracts and options (a right to take up a contract). In the meantime, the effects on rural economy and society are more likely to be constrictive than expansionary, and hence will reinforce the trend toward a smaller agricultural sector as discussed earlier.

There are many changes taking place in the financial structure of farms. There is, of course, the immediate problem of adjustment to lower incomes and higher debt ratios, and the financial viability of some farm units. These adjustment have implications for family health, working off-farm, giving up farming, re-financing debt and so on. Most

public and private agencies will be highly involved in one or other of these aspects at the present time.

In the longer run, there are a number of queries that arise over land, ownership and finance which I can only refer to briefly:

- a) The question of settlement of young farmers needs to be completely reviewed. Existing loan schemes have been cancelled or are in abeyance. Landless farmers are probably being prevented from access to the land by the slow down (and interventions in) the farm land market. Who will replace the existing crop of farmers?
- b) The future of the family farm needs to be re-assessed. Can ownership still be conveyed from one generation to the next? Are existing financial arrangements capable of supporting the new generation? Is there a trend away to corporate ownership, as they can more readily raise equity capital? Will this involve different ownership structures on farms?
- c) Will there need to be changes in the size of farms? Certainly pastoral farms will need to be more labour efficient; smaller farms would probably best be amalgamated with others. How will this be arranged?
- d) How will new investment be financed? From retained earnings? From commercial bank loans at 23%? From equity investment? What level of new investment will be maintained in the future?

Perhaps I am getting into too much detail. There are certainly some basic structural changes taking place at the present time in the rural economy which require the attention of economists, geographers and sociologists. There are many issues I haven't touched upon (for example, town planning ordinances and procedures). The present mood is for less Government involvement in the economic affairs of the people. Is this what the people want? And how will this affect the ultimate shape of the rural economy and society in New Zealand?

CHAPTER 7

AGRICULTURAL FUTURES

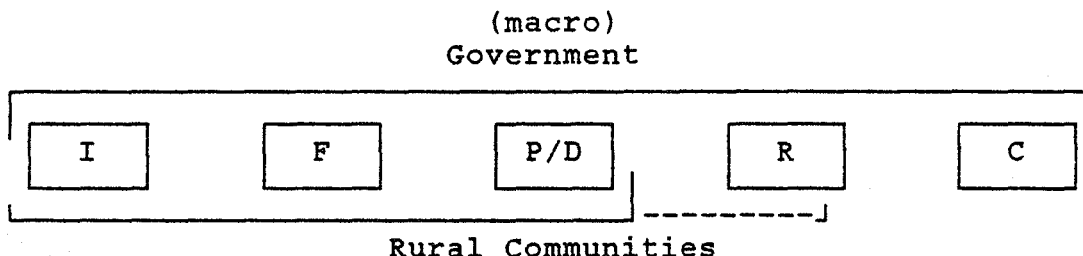
by L. Tim Wallace

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Agriculture is more than farming. It includes all the input supply people, those in finance, fertilizer sales, aerial spraying workers, hired general labour, consultants, and all the others who provide farmers with the materials and contractible skills needed to produce the raw food and fibre products.

Agriculture also involves the people and firms who process the raw products into further value-added food items and woollen materials. It includes those who transport and distribute the items, insure them and see that a transfer of title takes place. Some people think that food retailers should be included in a definition of agriculture, and I agree. Why? - because farmers are more and more directed in their productive efforts by what transpires at the retail food level. Consumers vote with their pocketbooks, and if farmers are unaware of what consumers want and buy then they end up producing the wrong kinds of items.

If we draw a picture of this food and fibre system, it looks something like this:



The F square is for farmers (production of any commodity), I stands for input suppliers, P/D equates to processors and distributors etc., R for retailers and C of consumers. The point is that they are an interdependent system, each depends upon other parts of the system for economic success.

Government regulations and other "macro" forces such as foreign exchange rates, interest rates, trade policies of other nations, and cultural traits - influence all of the parts of the system. Each is affected differently, and reacts differently, yet each is nonetheless affected.

Rural communities are usually composed mostly of the I, F, P/D and R squares. Consumers make up the people who operate those parts, yet there is something less there than the total which Government views.

If we look at the F square, it is changing almost before our eyes. Instead of being grouped around some sort of average farm organised around a notion of a family farm (based usually on a unit of physical labour rather than a concept of a business run by a family which chooses to farm), it is dividing into two main groups. One group is made up mostly of small farms increasingly dependent on off-farm jobs or investments for their livelihoods. The other group is made up of larger commercial production units, almost entirely dependent on farm income. Many have become vertically integrated and are moving their raw farm commodities into some sort of value added food or fibre item.

The producers who choose not to get into a value added operation will remain price takers, accepting what the market offers, or what they are told it has offered. The others who have found a way to merge into some sort of processing, packaging, marketing effort which allows increased value have become price makers - and will tend to have relatively more profitable operations than their neighbours. The risks will also be higher, however, and life will be a little more hectic and uncertain.

This is the structural background upon which we may look at further possible changes. What we have so far is: agriculture is much broader than just farming, it is a system with parts highly dependent upon each other, the parts react differently to the same general sorts of stimuli, and the farms are slowly dividing themselves into two groups - one of which is becoming more dependent upon non-farm sources of income and the other becoming more dependent upon value added production.

Let us look at the prevailing myth that farmers are independent controllers of their own destiny. While this is the self-image many farmers have of themselves (not only in New Zealand, but in many other countries) it is a false one. Most New Zealand farmers lost their independence in 1882 when the first boat load of frozen sheepmeat went to England. How? - because the shipper told the killing works when to have a load of carcasses ready, and they, in turn, told the farmers when to bring their sheep in, and the farmers brought them the sheep.

In fact if we look down the road drawn by the system above, if for a very brief time the farmers had much control, it was diluted immediately he/she began to be dependent on a processor. This applies to grain farmers (wheat to flour), to the pastoral farmers, to vegetable growers, and suppliers of fruit to cooler plants in which they are not part owners.

Another concept that is under severe pressure is the family farm. By New Zealand law, wives are full partners in the farm

operations, and many are paid as operating partners (if they aren't paid it may be difficult to insure them in case of an accident). This is a blow at the man, wife, and children concept of all putting their shoulder to the wheel and getting on with it. Society will not let it go that easily any more. In addition, as the size of a family farm increases, as the notion of it being a business is more generally accepted, the notion of exactly what a family farm is will change. It does not mean that the change is for the worse or better - it simply means that it will change. The people involved will decide for themselves whether or not the change is good or bad.

Another change taking place is in the way people view their farm land. It is already changing to a fair extent in the North Island, and I think the change will also extend to the South Island. It is historic fact that farmers have, for many reasons, always thought that land ownership was the thing to strive for if one were a farmer. Yet, perhaps there are other aspects about land. Looking back over the last three years at the farmers who are in trouble, it is primarily the ones who have bought additional land, or the ones who bought land to get into farming at all, who are in difficulty with their large debt-servicing loads. If one accepts that land ownership is simply a license to farm, one can see that the profit from the land itself is not realised until the land is sold, and most farmers do not want to sell their land.

On the other hand, if one wants to farm one can do so by leasing land. One can farm exactly the same farm operation by owning it or leasing it, and in most cases, it costs considerably less to lease a property than it does to own it. Both methods give control of the land, yet leasing means all of one's capital is working for the farmer. By owning the entire operation, one has to give up the interest (opportunity cost) that investment might have made elsewhere. The question of whether to own or lease will be on the minds of farmers more and more in the future. There is no right way or wrong way, no perfect decision about the subject. Each farmer will have to make up their own decision. Yet as people turn their minds to it they will find that it might not always pay to continue owning all their operations, and might be more profitable to own some land and rent some more if scale is desired. We might even find out in the future that land is perhaps the least expensive of all the farming inputs.

Another aspect of change is technology. If we think of technology as a concept, it can result in something tangible like a new machine or breed of cattle. It can also result in an intangible item such as a different way of doing business or organising a farm unit, or combining a production farm with a processing firm, of share farming costs and profits, of drafting a lease, or any of a thousand other kinds of things. For example, pursuing that lease idea, payment does not have to be a set amount of the market value of the land - it can be a share of the gross income when the value added product is finally sold. For example, farmers can bring lambs down from

the high country to finish on farms close to a works. When the animals are finally sold the proceeds can be divided in some pre-agreed on manner that each farmer deems equitable. No actual cash need change hands until the animals are sold for slaughter and there is cash on hand.

On-farm technology will also change in response to signals given by consumers to retailers who then pass it on to processors through differential prices paid for differing qualities of raw agricultural product. We already see this in the way many consumers will not buy meat which has been fed certain additives, sprayed with certain chemicals, or treated with certain drugs. The farmer is responding to these signals with different bio-genetic, ecologically and environmentally sound technologies - and, certainly, many more will develop in the future.

In the same manner processors will develop new technologies. The most obvious one for New Zealand in the past few years is the shift from frozen meat products to super chilled cuts, packaged for a market, contracted for before the animals are even found to kill. The fruit and vegetable industry is also seeing ways to package their items to make them more attractive to buyers.

Marketing and merchandising will be seen in a highly sophisticated technological light in the future. After all, why should marketing concepts be exempt from the Kiwi innovative genius? The challenge of accessing new markets, of developing and maintaining them will be the challenge of the future.

These changes will create pressures on government for a different kind of help than commodity or resource subsidies. It will be pressured, instead, for help in gaining access to foreign markets, leaving the actual contacting, contracting, and delivery arrangements up to the private sector. It will create more opportunity for Government to be a facilitator than a director of economic/social activity.

In this regard, agriculture will have to look more broadly than it does now into the matter of creating useful political coalitions. If the number of farmers decreases as indicated; if the kinds of products offered lend themselves more to vertical integration; and if the entire food and fibre system becomes more aware of the concerns of consumers, there will be things that need to be done politically that the segments of the system simply do not have the power to do by themselves. They will need help - they will need political coalitions. This does not mean that the people in each segment will abandon their goals, purpose and integrity. Far from it. It does mean, however, that the power of agriculture is changing as the country's economy matures, and as agricultural leadership sees the need to achieve goals as yet unthought of for agriculture.

These coalitions will likely come by joining environmental and consumer groups; environmentalists because they will become more involved with natural resource use (land, water and air), and consumer groups because they will become more vocal and sophisticated in their food preferences. Recreation groups offer natural allies as more farmers turn to the recreation industry as a way to increase their incomes; they, too, will want to exert some controls over the natural resource base they want to use. Controls may be proposed over the use of water, the access to land, the use of aircraft, the ability of farmers to use certain chemicals or even of fires to control brush. The use of water in streams will be debated more and more in the sports/commercial fishing controversy, and if trout producers bid for the same type of commercialization successes that salmon growers have now, the debates will become even more intense.

All these changes will bring a different focus on the kinds of education and information exchanges desired by agriculture. Classes in Agribusiness, in applied international marketing, in merchandising, in financial control, in accessing new sources of capital, and how to develop increased leadership skills will be demanded. The purpose of Extension, its sources of information and the kind of analysis it can do will all change. The user-pay concept will undoubtedly force people to evaluate their requests for help differently. Hopefully, we will not kill the goose that lays the golden egg.

I view all these changes in a very positive light. Farming and agriculture in its entirety is certainly not doomed. It is true that farming will not occur in the future as it has in the past, and it is true that perhaps not as many people in New Zealand will be farming that want to. Yet there is a professional and personal responsibility attached to making one's livelihood. The professional one is that one does the best job possible - and that means using the head as well as the back. The personal one is to evaluate the options available, to provide for family, and to be responsible to self and others. This, then, means seeking out the best information about what the future might hold for you. It is not a constant, and that's a source of excitement as well as profit. It is challenging. It is something that New Zealand farmers will accept and at which they will do well.

CHAPTER 8

PRIMARY-PRODUCING COUNTRIES AND THE MODERN WORLD ECONOMY:

A CASE STUDY IN INTERNATIONAL DYNAMICS

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8.1 Introduction

"The Industries that Japan should strive to foster comprise ... those natural products such as rice, tea, silk and minerals, for the growth of which she possesses natural advantages, and for which she is sure to find a market abroad, provided she takes payment in foreign imports. All labour and capital that are drawn from these industries in order to enforce manufactures which can be obtained cheaper elsewhere involve, of course, a loss to the country, but the Japanese officials are slow to realise this economical truth; they think the less they buy from abroad the better, and that their people should endeavour to make everything they want for their own uses." (Lord Salisbury, 1878)

Japan failed to take that excellent economic advice on concentrating on the production of rice, tea and silk and adopting tariffs and became fettered with industry, towns and the world's fastest economic growth.

My role today to suggest that orthodox economic advice may lead New Zealand into a dependency trap. This perception arose when I made two journeys in 1984. They illustrate the world, and perhaps give it meaning.

The first was to Tokyo, where I stayed in a traditional inn in the suburb called Ikebukuro. It was serviced by a rail station, four or five levels deep, where trains disgorged a thousand passengers a minute. They could browse in three department stores at the station - one had seventeen storeys, and its enormous ground floor seemed to sell only whiskey. Many passengers strolled to Sun City which covered several city blocks and then rose sixty storeys; I guess it had 400,000 people in it. Not many for a city of fifty universities. But it was more than an ant-heap. Sun City, for me, represents a quantitative leap for mankind. But any forager in Tokyo will perceive a qualitative change. To disembark there from London or New York, and I have done both, is to step from the provincial into the metropolitan. Just as at certain times visitors have regarded Venice, Amsterdam, London, and New York as the world's vortex, so I now regard Tokyo.

Tokyo is emerging as the world's core. Of course, New York, even London, still have an influence or a presence. Yet Tokyo has that feel of the location where a special chemistry will combine capital, technology and artistry to elevate both production and culture in ways that my mentor Fernand Braudel tells us Venice, Antwerp, Amsterdam, London and New York successively did: places where the sunshine of history brought out the bright colours.

But core states are oftentimes disparaged as mere exploiters of the world, their greatness arising merely from their wealth. This view is as mean-spirited as it is inaccurate. Core states boil and bubble because they combine factors of production in a new way at a time when the world context is receptive. Japan's upsurge now may be related to her growing hegemony of many of the world's resources, nevertheless it arises from hard work and a dynamism long apparent. After all, 200 years ago, when Japan was isolated from the world and entirely dependent on her own resources, the Tokugawa contrived a notable civilization, a self-sustaining and growing economy, boasting three of the world's twenty largest cities. The Tokugawa demonstrated potential; modern Japan has grasped it. It would be mean-spirited to disavow modern Japan's self-sustaining momentum. Core nations become rich because of hard work and determination and maturity of long laid plans; at least 100 years effort. Naturally, Japan also derives benefits from its exploitation of its neighbours. But it remains a core, a vortex red hot in the friction arising from the onrush of energies pressing in from the colder periphery.

My second journey was by rail along the eastern coastal littoral of South Island, New Zealand: a journey along a hard-won path between alp and ocean. Slowly, very slowly, I was carried through a monocultural green desert of pastoralism. The vista was essentially composed of mean-fenced enclosures, keeping within livestock and the real world at bay. Small clusters of macrocarpa, and a pile of chimney rubble made testimony to bygone, now accumulated properties. The land was owned by a near hereditary caste and its occupation brought the rewards of self-congratulation, capital gains, and the proceeds from the sale of some meat and wool. But any eye would detect that production was secondary to possession. To possess the land was the important thing. Capital and effort is spread thinly over such "economic units". By a sleight of a political wand, the establishment makes it hard for a man to farm less than 200 acres. Only men of substance apply, land has become the cheap factor of production, it is used liberally with a miserly application of labour and capital. One could compare a Philippino rice paddy, where land is precious, hard-won, and pampered with labour and capital. Traditionally the Asian peasant has, however imperfectly, shared his land, while New Zealanders have not. "For-the-good-of-the-country" it rests in the hands of the unimaginative few. But then New Zealand is the least egalitarian land in the OECD.

A marvellous conjunction of political power and cultural hegemony supports this strange land use. Its red meat and wool are for export to an unclamouring world. The fields are not related to society's needs, but those of reluctant foreign consumers. When returns are low the cry has been for more production, lower costs and wages, a noticeable reinforcement of failure. Non-farmers have had to subsidize the increase in production, and sometimes see that transformed into fertilizer. There exists then in pastoral New Zealand, a politically powerful agrarian caste in search of a powerful foreign customer or, indeed, protector. The dominion has not sought autonomous growth or self-reliance but seeks dependency. Perhaps it is easier to find a foreign master than it is to re-arrange the existing distribution of wealth and mode of production.

Perhaps my brush strokes are too bold. Boldness is imperative for the calligrapher but fatal to the historian. The latter insists on the detail - show an historian a climax beech forest and he or she will find hebes. Yes the monoculture of pastoralism has islands of other cash crops - especially cereals, seeds, timber, even fruit and wines. Near Oamaru, Chinese farmers grow vegetables intensively but their allocation of land is small. Their beautiful fields are surrounded by the pastoralist's harsh barbed wire. Moreover, there are pastoral mutations, not only lamb and wool, beef and milk but horses, goats and aphrodisiac-laden deer. Nevertheless, pastoralism dominates.

Two journeys. Two societies. How will their destinies fare? Their historical roots diverge but their shared membership of a world economy is breaking down barriers between them. Even the cultural barriers, do not seem utterly impregnable. Their political links are important but capable of much more intimacy. But their economic relationship must be our focus; and our concern. It is generally assumed, in New Zealand at least, that this will be founded in equality, along a North-to-North axis. Such a relationship would be welcome, but the writer thinks it uncertain. Japan has little experience of equality; its lonely course has lately been marked by deference to the United States and arrogance to ASEAN. Japan is a loner, a maverick, combining as the Economist says (August 17, 1985) "the world's most feebly inefficient foreign policy". If Japan is to be the ecumene or core, as I confidently predict, then New Zealand may be destined to a relationship of dependency: a dependency economy is one which can scarcely function except in relation to the markets, factories and banks of the core. In that case, there will be a vertical, hierarchic relationship closer to a North-South axis. Certain trends in Japanese and New Zealand's recent history give scope for such an apprehension. For New Zealand is rather underdeveloped and Japanese business is masterful in throwing it's coils of backward and forward linkages. New Zealand is a price-taker; Japan fixes her prices.

But here I must pause and apologise to my audience for using extravagant terms like core and periphery without explanation. With your indulgence I will attempt to explain dependency between the core and periphery in the context of Japan's and New Zealand's experience. I will then proceed to examine Japan's recent astounding development, before examining the New Zealand-Japan relationship.

8.2 Dependency Between Core and Periphery

My starting point is that it's a dog-eat-dog world. New Zealand is in an intermediate position of being exploited by the rich countries which are exploiting the poor. The accompanying table of New Zealand's overseas exchange transactions illustrates the predatory nature of the world economy. The advanced economies sell us more goods and services than we export to them. We pay for it by borrowing. Similarly we exploit our position of power over the less sophisticated economies of the Pacific (and Middle East). Table 9 shows, for example, that New Zealand has a negative current account balance with Japan and a positive current account balance with Fiji.

The World economy could initially be viewed as a whirlpool. Those who live at the centre, or core, lord it over others for capitalism is hierarchic. As one moves from the centre one enjoys fewer advantages; splendour, wealth and pleasant living are at the centre, with high prices (land in the Ginza sells at U.S. \$10,000 per square foot), high salaries, and a respected currency. Every precocious form of economic modernity is practised and the latest technical skills flourish there (Tsukuba Science City has 60,000 scientists with the world's best equipment). The standard of living falls as we move from the core; financial organisation is often foreign-directed and industry is relatively traditional. Gradually, as we move to the periphery, living becomes cheaper, but modes of production become more primitive, even regressive. The periphery depends on the needs of the core that controls it.

World economy theorists insist Japan developed because it was the only third world country that escaped becoming a satellite of the West. Satellites elsewhere were turned into raw material supplying dependencies. They remained locked into primary production because core or metropolitan states manipulated their development - through class creation, tariffs, banking, investment policies, and trade practices which promoted monocultural production. An industrial society was inhibited because development was skewed to cheap exports. If some manufacturing took place, it was of an enclave nature, again export-orientated, unrelated to local needs, with few backward and forward linkages.

In a world of imperfect competition, I assume that trade between unequal powers is determined by price and power. Core

TABLE 9

NEW ZEALAND'S OVERSEAS EXCHANGE TRANSACTIONS
Balance with Countries. Year Ended December 1984

(NZ\$ thousands)						Exports	Imports	Other Current Receipts	Other Current Payments	Current Account Balance	Capital Account Balance
United Kingdom						1,147,022	863,721	617,359	1,520,850	- 620,190	- 200,663
Australia						1,256,369	1,839,736	812,470	951,625	- 722,522	+ 515,569
United States of America						1,273,262	1,644,477	670,593	1,456,060	- 1,156,682	+ 1,188,090
Canada						145,482	195,498	67,505	56,725	- 39,236	- 8,132
Japan						1,338,577	1,556,630	169,630	409,144	- 457,567	+ 2,266,613
E.E.C. Countries (excluding U.K.):											
Belgium (inc. EEC orgs)						99,993	38,545	9,546	35,044	+ 35,950	+ 790
Denmark						15,866	26,453	3,792	15,224	- 22,019	- 399
Eire						7,754	15,823	1,889	2,581	- 8,761	- 179
France						159,464	81,866	6,059	25,700	+ 57,957	+ 2,967
West Germany						220,870	297,771	31,080	144,909	- 190,730	+ 206,152
Italy						178,590	108,126	1,842	11,561	+ 60,745	+ 100
Luxembourg						—	2,954	145	1,266	- 4,075	- 1,117
Netherlands						93,432	108,176	32,252	84,980	- 67,472	+ 13,975
Greece						58,724	1,720	648	7,826	+ 49,826	- 68
Sub-Total						834,693	681,434	87,253	329,091	- 88,579	+ 222,221
Other O.E.C.D. Countries											
Spain						26,572	20,979	519	1,218	+ 4,894	+ 29
Sweden						11,007	98,195	5,083	28,918	- 111,023	+ 2,003
Switzerland (inc. B.I.S.)						15,259	78,973	39,249	171,831	- 196,296	+ 14,384
Other OECD Countries						31,320	41,363	3,101	17,436	- 24,378	+ 1,209
Sub-Total						84,158	239,510	47,952	219,403	- 326,803	+ 17,625
Sub-Total All O.E.C.D. Members						6,079,563	7,021,006	2,472,762	4,942,898	- 3,411,579	+ 4,001,323
Asia-Oceania:											
India						37,243	27,480	406	4,505	+ 5,664	- 135
Pakistan						19,859	7,079	392	539	+ 12,633	+ 20
Indonesia						104,263	249,855	5,051	5,876	- 146,417	+ 258
Malaysia						136,300	28,747	12,671	8,830	+ 111,394	+ 1,750
Philippines						54,770	19,052	962	3,715	+ 32,965	- 13
Singapore						163,116	231,565	48,014	120,584	- 141,019	- 39,333
Thailand						53,702	13,728	1,071	3,895	+ 37,150	- 334
China						184,919	48,323	4,320	4,586	+ 136,330	-
Hong Kong						157,282	170,254	38,870	91,004	- 65,106	+ 79,007
South Korea						191,341	50,594	5,803	11,466	+ 135,084	- 262
Taiwan						130,750	97,318	3,354	2,603	+ 34,183	+ 877
Other Asian Countries						12,596	11,084	1,019	2,042	+ 489	+ 48
Fiji						107,105	10,644	25,136	57,559	+ 64,038	+ 4,290
Western Samoa						20,963	5,769	7,670	16,618	+ 6,246	+ 254
Papua New Guinea						88,303	12,760	18,909	5,921	+ 88,531	+ 4,826
Other Pacific Islands						110,771	41,502	34,011	33,468	+ 69,812	+ 3,530
Sub-Total						1,523,283	1,025,754	207,659	373,211	+ 381,977	+ 54,783
Latin America-Caribbean:						219,325	80,053	26,012	11,278	+ 154,006	- 354
Other Countries:											
U.S.S.R.						204,343	11,619	7,803	6,787	+ 193,740	-
Other Eastern Europe (n.e.i.)						47,154	10,226	576	2,764	+ 34,740	-
Iran						445,162	342	1,312	881	+ 445,251	- 4
Kuwait						29,914	120	238	181	+ 29,851	+ 10
Other Middle East Countries						226,202	177,239	7,281	43,310	+ 12,934	+ 33,018
South Africa						30,364	15,228	5,144	4,922	+ 15,358	+ 334
Other African Countries						16,304	4,620	561	1,453	+ 28,992	+ 13
Other Countries (n.e.i.)						23,716	360	58	385	+ 4,829	+ 124
International Organisations						—	—	1,221	37,809	- 36,588	-
Sub-Total						1,023,159	219,754	24,194	98,492	+ 729,107	+ 33,495
Grand Total						8,895,330	8,346,567	2,730,627	5,425,879	- 2,146,489	+ 4,089,247

1 Import payments are shown on a consignment basis — i.e., according to country from which goods are purchased. Refer to table 4 for statistics by country of settlement.

nations (and multi-national corporations) exploit the periphery. More explicitly I deny the assumption that markets are neutral instruments for resource allocation; they are creatures of social and political systems. I assume that the mechanism of core dominance is exerted along four axes:

1. Capital Flows

Foreign investments in peripheral countries are repaid handsomely in interest, profits, payments for software (licenses, royalties, patents, etc.) and for invisible exports - (banking, insurance, transport, etc.), and the rewards of joint ventures.

2. Transnational Production

A peripheral country may be the location where factors of production are brought together in an enclave. The production process has few linkages with the community. Exports may be under-priced - 'transfer pricing'.

For example, New Zealand Aluminium Smelters is a 'tolling' operation which makes no profit. Japan invested \$U.S. 22b. last year in products.

3. Technology

Hans Singer argues that technology is the main source of maldistribution of gain as poor nations find access to technology exorbitantly expensive; or available technology is inappropriate. Weak nations may be denied access.

For example, The Christchurch Press alleges that Japan is denying New Zealand access to squid-fishing technology.

4. Trade

In the core-periphery context trade can be a means of unequal exchange, thereby the principal means of transferring a surplus to the core.

Unequal exchange often operates through deteriorating terms of trade. Falling commodity prices are influenced by core nation investments in peripheral country infrastructures and monocultural production to ensure "reliability of supply" via backward linkages. The economy is skewed to cheap exports by policies (taxation, banking, transport and production) fostered by foreigners and collaborating elites.

Example: Japan has developed Australian coal export facilities. Recently it has stimulated rival Canadian facilities and cut contracts with Australia. It has enforced heavy price falls on New Zealand coal: a 21 per cent cut in 1983 alone (Christchurch Press, 23/4/1983). Similarly, core nations often use great pressure to press

their exports and organise their sales through a distribution network amply backed by the state and capital.

8.3 Japan's Development

Japan has moved very rapidly from being a giant economy into that of a monster. Its speed of advance is amazing. Japan's trade balance was US\$ 6.7b. in 1972 and last year it was US\$ 101b. (Table 10).

Table 10

Trade Surplus For Japan, 1983-87 (US \$ b.)

Year	Exports	Imports	Trade Balance
1983	152	129	34
1984	169	134	45
1985	182	130	61
1986	215	125	101
1987	218	126	91

It can be noted as a comparison that for West Germany the 1984 (best year) trade balance was \$US 6.3b. Further, Japan's net foreign assets have risen quickly in recent years. For 1981-85 net foreign assets surpasses the US (Table 11).

Table 11

Net Balance of External Asset, USA, Japan and UK, 1975-86 (US \$ b.)

Year	USA	Japan	UK
1975	74	7	4
1977	72	22	7
1979	94	30	28
1981	143	11	58
1982	149	25	70
1983	106	37	81
1984	28	87	
1985	-107	126	
1986	-200	180	

Source: Quarterly Economic Review 1987, p. 37.

In other areas, such as the stock exchange and in banking, Japan is a world leader in terms of size.

Japan now predicts a "New World Economic Framework" with herself named as the core rather than the USA. Most of the world will stagnate except for the Western Pacific which Japan will integrate around itself as the core (their words, International Bank of Japan, p. 14). This will permit a higher-order international division of labour, and a massive re-location of industry. Japan will move production to South Korea, Taiwan and China of ships, silk, fibres, ferro-alloys, pulp, pig-iron, knitwear, fertilizer and clothing.

Japan will become a mature creditor nation, increasing in imports and paying for them with interest earned on investments. it will produce leading-edge technology and high value-added goods. By the end of 1980s West Pacific will produce 42 per cent of world trade instead of 24 percent for 1983-86. These changes will be the fastest shift of industrial power in world history.

By 1990 the Japanese economy will have restructured. Some changes: food imports will double but raw material will stagnate. The demand for coal, iron, timber products, aluminium, and wool will decrease as Japan intends to buy finished goods, chemicals and most industrial products abroad, especially from the West Pacific.

As will be seen in bilateral relations, Japan extends her control along the four axes adumbrated earlier. Most rich nations do. But Japan is different in that she retains a unique degree of control of access to her own markets for goods and services. Access to Japanese consumers (or goods or services) is very limited, and where permitted, usually mediated through the Soga Soshii or an association of wholesalers. No one sells rice to Japan, other commodities and goods are bought cheap and sold dear. It is a closed shop. Normal competitive forces are thwarted by the distribution network. The forward integration of Japanese manufacturing into the retail sector, by means of loans to wholesalers and retailers, or by means of exclusive regional supply contracts, keeps prices high and imports out. Moreover, the Japanese consumer is very loyal to brand names: in many areas Taiwanese or South Korean substitutes are shunned until re-branded by a Japanese manufacturer.

The best illustration of Japanese control of its domestic market occurred last year when the Yen appreciated 250/150 to the US dollars. Any consumer expecting cheaper whiskey or shirts was disappointed as Table 12 shows.

Table 12

Changes in Prices and Cost of Living Index in Japan
for the Third Quarter, 1986

Import Prices		Wholesale Prices:	Cost of Living Index
	Materials	Finished Goods	
	-43%	-8.8%	-0.9%
			+0.2%

Source: F.E.E.R., 4 June 1987: p. 94.

8.4 New Zealand-Japan Relationships

The New Zealand and Japanese economies seem complementary. Japan is capital and technology rich, physically cramped and energy poor: New Zealand is precisely the reverse. Their exchange of manufactured goods for processed raw materials seems to instrument Ricardo's advocacy of comparative advantage. Thus, theoretically, the relation augers well for stimulating more beneficial specialisation. But there is a problem of scale. Japan is New Zealand's biggest trading partner and source of capital, but New Zealand is a small customer of Japan's, being a source of only 0.7 per cent of Japan's trade. Can such unequal powers co-operate on a basis of equality and mutual respect? Perhaps their trade will prove a dependency trap.

It would be inappropriate to be adamant about any prognosis of the future for, unlike Australia, there are no research institutions monitoring relations with Japan and the National Research Bureau uses Japanese sources. My own research is at present very incomplete and most firms have declined all requests for information. Time does not permit an investigation of Japanese exports of capital to New Zealand.

There are several features of the Japanese presence in New Zealand. The most prominent is the activities of the Soga Shosha or general trading companies, such as Mitsui, Mitsubishi, Sumitomo, Itoh and Marubeni, whose scale of activity is obscured in secrecy. They assist the direct selling of Japanese brand producers, especially in motor vehicles, machinery, tools and appliances. Also, they are involved, in some degree, in procuring New Zealand resources and raw materials at fixed prices and have the exclusive right to sell them to Japanese customers. Other Japanese firms have also acquired monopsonistic power to buy resources in New Zealand and of sale to privileged Japanese customers. Japanese firms also act in the transport and financial field. It is possible that a high proportion of Japanese trade with New Zealand is subject to restrictive practices to the benefit of Japanese corporations.

The following example typifies the nature of Japanese activity in New Zealand. The Carter Oji Kokusaka Pan Pacific Company is a joint-venture with a large plant at Whirinaki near Napier producing timber and pulp. In 1984 it was owned by Carter Holt (60%), Oji (35%) and Sanyo (5%). There are resident Japanese in top production and accounting positions. The output is sold to Nippon-New Zealand trading company and then divided between Oji and Sanyo. The price may be low. The pulp and timber may be exported, shipped, insured and financed by Japanese concerns. Oji is the biggest paper company in the world and has 30 percent of the Japanese market.

The New Zealand-Japan connexion has developed in a context of relative devaluation of the New Zealand dollar greater in degree against the yen than against other trading currencies as Table 13 shows.

Table 13

Relative Exchange Rates for the New Zealand Dollar, 1974-85

Month ending June 30	Yen per NZ\$	Basket ratio to NZ\$
1974	412	133
1976	294	106
1978	211	105
1980	214	94
1982	188	83
1984	150	78
(1985)	114	

Source: Reserve Bank

Thus, while the New Zealand dollar has depreciated against all major trading countries since 1974, the rate of depreciation against the Yen has been approximately double that of other currencies. This indicates that Japanese exports have been remarkably competitive, for Japan increased its share in this market despite unfavourable price movements. Conversely, New Zealand export growth to Japan has manifestly been assisted by very easy prices. For example, New Zealand exports to Japan increased by 23 percent in New Zealand dollar terms in 1984 but declined in Yen terms. Growth was really negative. (Star, Christchurch 25/6/85). The 23 per cent nominal increase in export value was partly attained by an increase of volume in exports. Some 1100 tonnes of beef, 3000 tonnes of fat, 8000 tonnes of cheese, 4000 tonnes of wool and 20,000 tonnes of aluminium went, as it were, as a bonus to the Japanese consumer. That is, of course, simplistic; but it may illustrate the effect of exchange rate movements, and why trade can be viewed by unsophisticated laymen as a means of transferring a surplus from the periphery.

Further investigation of the rate of return on New Zealand's exports to Japan are necessary. It would appear that

not only are many products bought monopsonically by Japanese agents and sold by transfer prices at cost to Japanese monopolies, but these practices have been assisted by subsidies and concessions to New Zealand suppliers. There is some evidence that New Zealand products are sold at lower value to Japan than to other markets (Table 14).

Table 14

Comparison of Quantity and Price
of New Zealand Exports to Japan, 1986

	% Quantity	% Value
Beef	212	200
Sheepmeats	117	95
Cheese	110	94
Wool	89	81
Iron	94	92
Wood Chips	104	99
Casein	97	89
Aluminium	142	142
Fish	93	96
Pulp	124	127

The real return on many unprocessed, low-value, high volume primary exports is low and may be negative. It may be worthwhile to privileged and subsidised companies but it may not be in the public interest, especially if the invisible and environmental costs were taken into account. The political economy of New Zealand has permitted some private enrichment at the cost of the depletion of common resources. This appear to be the case for native forests and marine resources. Indeed, Japan appears well-placed to exert downward pressure on the prices paid for all primary production output. Of course many individual New Zealanders will continue to find Japan a worthwhile market. A concentration on that market may suit individuals but it may lead the nation into a dependency trap.

CHAPTER 9

MEAT INDUSTRY RESTRUCTURING AND TECHNOLOGY CHANGE

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9.1 Introduction

The meat industry is undergoing profound changes brought about by a combination of three main factors: economic (e.g., falling world commodity prices, falling demand for meat); changing government policies (e.g., deregulation of the industry, removal of farming subsidies); and the development of new processing techniques and machinery such as "inverted dressing" and mechanical dressing and boning.

This paper focuses on technology changes which are occurring in meat works as part of the overall restructuring of the industry. It assesses these changes from a theoretical perspective which is critical of a deterministic view of technology and instead analyses the social processes by which technologies are developed and implemented in work-places.

There are four main parts to this paper. First the paper provides the theoretical and empirical context for a discussion of the reasons why meat processing companies have developed the technologies. Second, it gives technical description of both conventional and new processing methods and machinery. Third, it provides a preliminary assessment of the economic and social benefits and costs of new technology. Fourth, it examines the topic of further processing. The paper concludes by outlining the research issues which need to be addressed to contribute towards an understanding of the constraints and opportunities for technological change for the future viability of the industry.

9.2 Background

9.2.1 Data Sources

The data on which the paper is based is drawn from a meat industry study commissioned by meat industry unions. Details of the study's objectives, design, research team and data sources, are contained in an Addendum at the end of this chapter. (See also Meat Industry Study Discussion Paper, June, 1987).

9.2.2 Theoretical Perspective

Technology assessment is a mode of analysis in which attempts are made to understand the potential employment, organisational and economic impacts of new technologies. The method embodies a theoretical perspective on technological change developed within industrial and political sociology, and political economy (see for example, Badham, 1986). This perspective analyses the development of new technologies in their particular economic, social, political and cultural context. The perspective contrasts with the deterministic view in which technology is seen as having its own logic and, hence, its own set of pre-determined outcomes.

Technology assessment carried out from this perspective has two main aims:-

- i) to evaluate a new technology in socio-economic and socio-political terms; and
- ii) to understand the process of developing and deploying technologies in order to try to control and manage them.

9.2.3. Industry Context

Restructuring of the meat industry is occurring as a result of the following factors:

- The effects of stringent meat inspection standards;
- Delicensing and deregulation of the industry;
- Trends towards monopoly ownership of processing capacity;
- The development of new processing methods and new mechanised dressing and boning technologies;
- Changing world markets and the growing popularity of "white meats";
- Declining prices for meat products;
- Pressure to cut labour costs;
- Changing industrial relations within the industry.

To understand the role that new technologies are playing in the current restructuring of the industry, it is important to grasp the inter-relationship between these various factors. Stringent hygiene regulations led to major capital investment by meat companies and to increases in labour costs. Deregulation of the industry led to the opening up of new works as government subsidies to farmers led to significant increases in production. About the same time, however,

international prices for agricultural commodities fell and traditional markets declined (Meat Industry Study, 1987).

Farmers have responded to cuts in government subsidies by reducing supply of stock to meat works. Meat companies are responding to the fall in supply, falling world commodity prices, low rates of return on investment and over-capacity within works by a "market-led" approach and by corporate mergers and takeovers. This industry rationalisation is producing a few major groupings of companies. Each of these groupings has the potential for considerable internal rationalisation. This rationalisation is taking four related forms:

- (a) plant closure (Shortland and Whakatu, with the possibilities of further closures in the South Island).
- (b) reduction in the number of chains operating.
- (c) a combination of increased throughput and reduction in wage costs by some/all of the following means:
 - i) renegotiating contracts with workers to reduce wages (e.g., eliminating overtime and above-tally payments);
 - ii) increasing chain speed, kill tallies and length of working day;
 - iii) increasing the number of shifts*;
 - iv) extending the killing season*;
 - v) introducing new processing methods and machinery; and
 - vi) reducing staffing levels by attrition or redundancy.
- (d) increasing the further processing of lamb carcasses as part of the industry's market-led approach (e.g., chilled or frozen cuts, consumer-ready packs).

9.3 Introduction of New Methods and Machinery

9.3.1 Pressure to Innovate

As part of industry restructuring there is considerable incentive and scope to develop and adopt mechanical and automation technology to replace manual labour and reduce internal costs. At the same time, changing market requirements create pressures to change conventional processing methods and machinery.

* Depending on stock availability.

All operations in a processing plant have a high labour input. However, slaughtering and dressing are at the heart of the production process and absorb the efforts of about 30 per cent of the meat industry workforce. In 1983-84 slaughtering and dressing operations were estimated to be about 27 per cent of the total cost of processing stock (Pappas Carter Evans and Koop [PCEK], 1985).

Changing market requirements also create pressures to change processing methods and machinery. The traditional New Zealand meat export industry produced sheep meat in carcass form for a predominantly British market. In the past 20 years the industry has diversified significantly in terms of markets, products and the extent of processing (Meat Industry Study, 1987). Mechanised technologies can, for example, improve hygiene and product quality, while chilled meat technology can help to create new markets.

The following section examines the emerging key technologies and then moves on to provide a preliminary assessment of their economic and social benefits and costs.

9.3.2 Conventional Methods

Turning live animals into food products and a variety of non-edible products is a complex process involving a multitude of processing and handling operations (Field visits; Frazerhurst, 1986, 59).

Slaughter and dressing operations, which are difficult and labour-intensive, are the dominant activities. For example, fifty different operations are needed to turn a lamb into a dressed carcass. In the sticking pen, the live animal has to be stunned, killed, shackled for processing and prepared for initial pelting and dressing. Carcasses move by on the chain at the rate of about eight per minute. They are floppy to handle and initially dirty. On the mutton slaughterboard, slaughtermen carry out a complex sequence of knife-cuts which make up the following operations: legging, brisket clearing, pelting, head work-up and gutting.

Removal of the pelt involves initial "Y-cuts" on the fore-legs in the sticking pen. On the slaughterboard a complex series of knife cuts and strenuous pulling actions clear the pelt from the skin. This must be done in a way which prevents the wool touching and contaminating the carcass but does not damage the pelt. Removal of internal organs from the carcass, and separation of the visceral mass into its individual parts, requires a similarly complex series of knife cuts (Frazerhurst, 1986; plant visit).

Boning, cutting and trimming are also complex manual procedures which are highly variable because they need to cater for a wide range of end products. Downstream of the slaughterboard, the carcasses are handled through the marshalling floors, freezers and into cold storage, work

which is becoming automated. Handling and processing of guts, casings and, to some extent, pelts and hides involves complex manual work.

9.3.3 New Methods and Machinery

Background

In 1930 a solo butcher processed the complete carcass and therefore needed to be multi-skilled. The average processed was 100 sheep per person per day. The introduction of the chain system in the 1930s broke the work up into discrete tasks reducing the skill requirement and maintaining throughput. By 1980, however, because of the hygiene regulations introduced in the 1960s, output per person had declined to between 65-70 lambs per day. Early work on mechanical dressing technologies, carried out by the Meat Industry Research Institute of New Zealand (MIRINZ)¹ was a direct response to the effects of the hygiene regulations.

The first phase of the Mechanical Dressing Project was designed in 1978 and produced the rotary pelter in 1982. The second phase, between 1983 and 1986, led to the development of six machines associated with pelt-pulling and hock-cutting. (These are described below). A third phase of the project, due for completion in 1989, has just begun. This involves reviewing head processing and evisceration operations.

Rotary Pelter

Early developments in pelting technologies had limited success for a number of technical, economic and social reasons. However, the rotary pelter has been installed at four Waitaki plants, Stoke (1), Wairoa (2), Marlborough (3), and recently at the company's Pukeuri works (4) at a cost of \$5 million. (As a result, one hundred men at Pukeuri have been moved from mutton slaughtering to the lamb-cutting area).

"Ring-and-clamp" Pelting Machines and Related Dressing Technologies

The development of "ring-and-clamp" pelting machines and inverted manual dressing procedures (described below) has resulted in dressing systems consisting of a series of distinct one or two-person tasks (MIRINZ Annual Research Report, 1984-1985). Examples of these tasks include placing fore trotters into spreaders, cutting the skin around the hind trotters, and spear cutting the skin on the hind legs.

The MIRINZ Mechanical Dressing Project has mechanised many of these discrete tasks. Technologies which have been developed to the prototype stage, or are commercially available, include:

Wide to narrow transfer machine
Front trotter remover

1. See notes at end of chapter (editor).

Brisket clearer
Shoulder puller
Final puller
Rear trotter remover.

Two machines, a brisket cutter and neck breaker, are at the developmental stage.

AFFCO's Moerewa Plant and Alliance's Lorneville Plant have installed much of the new equipment on a single chain to experiment with the new methods and procedures. No systematic data exists on the extent of adoption of the new mechanised technologies in other plants, but preliminary evidence suggests that it is limited.

Inverted Dressing Method

On an "inverted" chain the animals are hung by the forelegs while traditional chains suspend the carcasses from the rear legs "for reasons lost in history" (Jackson, The Star, September 1986). Compared with the inverted processing method, the conventional method requires detailed initial pelting work around the hindquarters, the most valuable portions of the carcass.

Boning Technologies

Three years ago, work began at MIRINZ on mutton boning technologies. The most successful machine to be developed is a frame boner which involves removing soft meat from the skeleton mechanically. The machine is now developed to a production prototype.

9.4 Socio-Economic Impacts - A Preliminary Assessment

To understand the significance of the new methods and machines, it is important initially to examine the advantages of inverted dressing to companies. On an inverted chain, work can be reorganised to reduce staffing levels by seven or eight jobs. An inverted chain has a further advantage, however. The design of the chain allows the ready introduction of any of the new dressing technologies.

What is the extent of industry adoption of this method? In 1985 the PCEK Report noted that 18 per cent of sheepmeat capacity within the industry had been converted to inverted dressing. A further 49 per cent was planned in the next five years. According to the Report, industry-wide adoption of the dressing system would result in:

	\$m
Capital Costs	20
Labour Savings	34
Net Yearly Savings*	30

* Labour saving minus capital costs amortised yearly at 20%.
(Exhibit 2-23, PCEK Report).

However, the PCEK Report does not make clear whether, or to what extent, these calculations take into account incorporation of the new mechanised technologies into the inverted chain operation.

Dr C. L. Davey of MIRINZ compared 'man-hours' required to produce 10,000 kg carcass weight of lamb (1987). He noted that 66 'man-hours' were required using traditional processing methods but with the fully mechanised dressing technologies now developed this figure reduced to 28. Dr Davey estimated that these technologies would be in place within two years. However, industry observers note that companies have been slow to pick up on the full range of technologies because of their relatively high costs. In addition, some of the technologies remain untried at full production levels and companies are still wary.

MIRINZ work planned for the next two years includes "systems incorporation" in which all machinery and methods currently developed will be incorporated together using microprocessor control. Dr Davey described this form of control as "electronic brains for mechanical hands production".

Dr Davey concluded that these various technologies and systems would result in cost reductions estimated at between \$3 to \$5 per carcass, industry savings of between \$60 to \$100 million a year. He emphasised that industry viability could lead to the retention of jobs which might otherwise be lost.

As an illustration of potential employment impacts, the staffing level on Alliance's conventional chain is currently 51 compared with 38 on the experimental inverted chain. This chain is operating with the following machines:

- wide to narrow spreader
- fore trotter cutter
- brisket drill
- shoulder puller
- final puller
- final hock cutter

However, it is important to emphasise that a number of factors, as well as the purely technical, determine the actual level of staffing.

The Meat Industry Association notes that in the 1980's right up until 1986 - which is the period of new chain mechanisation and the push towards further cutting and boning - there was no significant reduction in industry manning numbers. Companies were redeploying displaced workers into areas of further processing (Warrington, pers. comm., 1987).

Industry manning levels in 1986/87, however, have probably declined by 10 per cent through closures and redundancies caused by lower market returns, lower farm investment, and lower numbers of livestock available for slaughter.

As well as being labour-saving, new technologies can also increase the quality and marketability of products, replace repetitive and unpleasant tasks and remove the need for heavy physical labour. For example, at Oringi 35 freezer hands use palletisation and mechanisation to shift carcasses in freezer areas where temperatures reach -18°C . In contrast, at Longburn 80 workers handle a similar volume by traditional manual methods.

9.5 Further Processing

Further processing of meat² has the potential to add value to the product. Moreover, if this work is carried out in New Zealand it creates alternative employment for displaced workers as occurred at Waitaki's Pukeuri works. Since new slaughtering and dressing technologies increase productivity substantially, but jobs are lost, what opportunities are there, then, for displaced workers to be employed in further processing work?

The limits to further processing are not technical, but market- and cost-related. Even if markets can be found, the decision to carry out further processing depends on crucial investment factors. For example, capital investment for further processing is high, primarily for the land needed to put up new buildings. Moreover, market demand is highly variable. For these reasons industry observers see a need for two shifts to offset capital investment costs. In addition, processing offshore carries with it significant reductions in labour costs. For example, a senior executive in the industry spoke of seeing Korean women "tearing carcasses apart" processing meat for the Japanese market, working 16 hours a day, seven days a week, earning \$NZ 200.

9.5.1 Chilled Meat Technologies

Dr Colin Gill of MIRINZ argues that further developments in further processing must be in the chilled products area using the newly-developed chilled meat technologies. In the past, the industry has been able to put frozen goods into the market at a large enough reduction in price to make the product attractive and acceptable to the consumer. Now there is no cost differential on the UK market between frozen New Zealand goods and fresh local meat.

Chilled meat is however, "microbiologically unstable". This means that the more you break down the product the more contamination can occur. Dr Gill believes there is an urgent need to change management and worker attitudes towards quality control and quality assurance. With the chilled meat process, the degree of contamination, time, temperature, etc., must be controlled all the way through the killing, dressing and processing of the product.

According to Dr Gill "there are simply not enough technically competent people in the industry experienced in handling food. As far as they're (management) is concerned, it's a numbers game rather than quality. If existing structures are maintained and commodity prices remain the same, the industry will collapse. But if commodity prices increase that will push the industry back up to a numbers game".

9.6 Future Research Needs

This paper had provided a preliminary assessment of some key issues associated with technological change in the meat industry. As has been shown, projections have been made about substantial cost savings which can be anticipated from the wide-spread adoption of the inverted chain and mechanised technologies. Plants are expected to become more economically viable as a consequence, and jobs lost on the slaughterboard could be replaced downstream in the boning and cutting rooms as companies develop new products to meet changing market requirements.

The Discussion Paper (produced as Stage I of the Meat Industry Study) provided an important preliminary analysis of the economic, political and technical context for the current restructuring of the meat industry. Feedback to the Discussion Paper is now being sought from workers and union officials in eight regional seminars throughout the country. Feedback is also being sought from other key interest groups in the industry.

Preliminary data from the regional seminars and field visits to meat works suggests that a detailed case study is also needed. Its aim should be to provide a systematic analysis of the introduction of the new mechanised and chilled meat technologies so that investment decisions, trade union and worker involvement and government responses can be informed by a greater understanding of the costs and benefits of the technologies.

For example, preliminary data suggests that the PCEK Report and MIRINZ projections of labour savings underestimate the costs involved in implementing and maintaining the technologies. One freezing works in the Otago/Southland region provides a useful illustration. An experimental inverted chain was installed in 1985 but lay idle for the following season until a satisfactory Technology Agreement was negotiated between the company and the sub-branch of the Meat Workers Union. During the initial stages of trial operation "gaps" or down-time reduced production by an average of 48 per cent. After two months on full tally (same chain speed as conventional chains), down-time still totals about 1.5 hours out of a 7 hour shift. Carcass damage rates on the hind legs (which are used to produce prime cuts) are 12 per cent compared with 0.3 per cent on a conventional chain. The rate of

contamination is twice as high (14 per cent compared with six to seven per cent average over the year on a conventional chain).

Without detailed analysis, it is not possible to assess to what extent, if at all, these are a consequence of engineering design faults; the nature of the product being processed; training inadequacies; resistance by workers to new methods and machinery; poor communication between design engineers, line management staff, fitters and electricians, and freezing workers on the chain; and/or other factors.

The evidence which is emerging from the regional seminars also suggests that attitudes towards new technologies are likely to be more positive if union officials and workers

- (1) are able to appreciate the contribution the technologies can make to industry viability and,
- (2) can have input into decision being made nationally, and within individual meat works, about technological and other changes.

The meat industry unions' decision to commission the current study is itself a reflection of the unions' attempt to adopt a more positive approach, than in previous years, to change within the industry.

A detailed study at the plant level would address itself to the following interrelated research areas and issues:

1. Analysis of Economic Costs and Benefits

- e.g. - productivity increases achieved
- costs incurred initially during trials, and longer-term
 - * engineering modifications
 - * increased need for maintenance staff
 - * "gaps" - down-time
 - * carcass damage
 - * contamination
 - processing work that could be mechanised/automated to reduce labour costs and replace heavy physical work.

2. Analysis of Management of Transition

- e.g. - what role did employees play?
- engineering/slaughterman interface
 - retraining?

3. Analysis of Social Costs and Benefits

- e.g.
- job viability of plant
 - job creation and loss, opportunities for redeployment.
 - boredom increased?
 - heavy work alleviated?

4. Analysis of the Changing Political Structure and Culture of the Industry

- e.g.
- the implications of the piece-rate system of wage payment for technology change
 - the likely impact of the new Labour Relations Act
 - the nature of relations of conflict and alliance among and between different union, worker and management groupings over technology issues.

NOTES

1. The Meat Industry Research Institute of New Zealand (MIRINZ) is the industry's central research and development agency. The Institute is funded by meat proceeding companies, the New Zealand Meat Producers Board and the government. It is involved in virtually every technical facet of the industry's operation, from basic muscle biochemistry to practical mechanical engineering.
2. Traditionally, processing a sheep for export meant quite simply stripping it to its pelt, removing internal organs, and exporting it as a frozen carcass.

Further processing can refer to the following:

- i) Primal cuts (common form) - legs, loin, rack, half shoulder, etc., for the individual consumer.
- ii) Specialised cuts - e.g., HRI (hotel, restaurant, institutional) cuts.
- iii) Consumer cuts - e.g., individual chops in packs (for two to three people).
- iv) Restructuring meat - not whole tissue (most highly processed). This involves taking the meat itself and combining it with fat to form reconstituted products.

ADDENDUM

OBJECTIVES AND BACKGROUND

The Meat Industry Study was commissioned in August 1986 by the following Unions:

Electrical Workers
PSA
Auckland and Tomoana Meat Workers
NZ Meat Workers
Engineers
Engine Drivers
Carpenters
Painters
Food and Chemical
Hotel Workers

The study is both a process as well as a means of producing information. It has three objectives:

- a) to help meat workers understand what is happening in their industry and why.
- b) to develop options for change which keep the industry viable, protect and promote the interests of workers in the industry and minimise the social costs of the changes.
- c) to get a mechanism in place to manage future changes in the industry.

The DSIR supports this project for three main reasons:

- a) the meat industry is a key New Zealand export industry at the centre of economic activity and employment in many provincial town and regional centres.
- b) the method which the project uses can be applied to other industries undergoing industry restructuring.
- c) the project is a case study for developing applied techniques for technology and social assessment.

In addition to FOL/CSU backing, the government has given some support to the project. The Meat Industry Association and some companies, while recognising the difficulties, also see the study as potentially advantageous to the industry.

STUDY DESIGN

The study is designed in three stages:

Stage One: Preparation of an initial research and discussion paper looking at the history of the industry, the economic environment, technology, social impacts of closures and union strategies to deal with the issues involved. The discussion paper provides background to the current problems in the meat industry and forms the information base from which options for change can be developed.

Stage Two: Taking the research and discussion paper out to the workers in the meat works to get their input. To begin with, this stage is taking the form of a series of regional seminars for works delegates with some condensed material to go out to all union members.

The main purposes of this stage are to propagate the research information already put together, and to amend/add to the analysis by concentrating the knowledge that exists among workers.

Feedback is also being sought from other interest groups in the industry, in particular the meat companies themselves.

Stage Three: The working out of the real options available to meat workers and strategies for meeting the challenges of the next few years.

THE RESEARCH TEAM

The PSA Research Division, as the executive agency for the study, has responsibility for overall co-ordination of the project. Two researchers, Peter Harris and Maire Dwyer, were responsible for the historical and economic analysis of the meat industry. In their union role, these researchers also contribute an in-depth understanding of union structures and functioning.

DSIR's interest and involvement in the project arose out of the basic and applied research being done on technology and social change by members of the Department's Social Science Unit. As independent consultant to the study, I am carrying out a combination of analytical and action research roles, including:

- Advice on research design.
- Technology assessment.
- Data collection and analysis.
- Facilitator, able to liaise between the different interest groups within the industry.

DATA SOURCES AND METHODS

The Discussion Paper was developed using the following data sources and methods:

- a) A review of published and unpublished material.
- b) Key informant interviews with representatives from a range of interest groupings, including:
 - researchers from the New Zealand Planning Council, Massey University's Centre for Agricultural Policy Studies, and Lincoln College; and researchers involved in research on plant closures, particularly within the meat industry;
 - various meat industry union officials and delegates;
 - meat processing company personnel;
 - Meat Industry Association;
 - New Zealand Meat Board;
 - Officials in the Ministry of Agriculture and Fisheries, Meat and Economic Divisions;
 - Members of Parliament
- c) Field visits have been made to freezing works and to the Meat Industry Research Institute of New Zealand (MIRINZ).

David Steele of the Trade Union Education Authority (TUEA) took part in the editing of the discussion paper. Stage II of the study (the Regional Seminars) was organised by a committee comprising:

David Steele (TUEA)
 Ross Evans (Auckland and Tomoana Meat Workers)
 John Bush (Engineers)
 Roger Middlemass (NZ Meat Workers)
 Peter Harris (PSA)
 Maire Dwyer (PSA)

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CHAPTER 10

CHANGING ROLES OF WOMEN¹

by Robyn Grigg
Farmer
Hickory Bay

10.1 Introduction

The role of farm and rural women has been changing apace for the last 15 years, the process having been speeded recently by the downward turn of New Zealand's farm economy. It is these changes, the forces behind them, and their possible outcomes that I plan to deal with here.

For this paper some data have not yet been formalised except piecemeal in the press and other sources. As a consequence, reliance has been placed upon personal interviews and notes taken from meetings with women's organisations. People from Northland to Southland were canvassed for information. Past studies have been used, as has my personal experience as a farmer, wife, community leader and advocate of increased involvement of women in the many aspects of rural living.

Although I am speaking specifically of New Zealand farm women, the issues covered are relevant to all rural women. I would also point out that mine is a pakeha's viewpoint, and I urge that full attention be paid to the role and views of Maori women in New Zealand agriculture.

Throughout, my goal is to recognise the role of farm women as respected and effective partners in the management of their farms' and their families' future. They contribute many on-farm skills as well as other skills economically and politically recognised in the community and in off-farm employment. Recognition may come in many forms beginning with self-confidence, their husband's and family's acknowledgement and inclusion, and the community's awareness of their potential contribution.

10.2 The Rural Women's Movement

In 1970, a new wave of New Zealand women's liberation groups emerged, but it was not until 1976 that rural women are recorded as putting in an official appearance when a

1. Adapted from Chapter 25 in "Rural New Zealand - What Next?" L.Tim Wallace and Ralph Lattimore (eds.) 1987, AERU, Lincoln College

small group in the Wairarapa surveyed the women in the Tinui district and presented a paper to the United Women's Convention 1975 entitled 'What is a Rural Woman?' That study described her many attributes and competencies but, at the same time it acknowledged that while the nation could not get along without her, it also regarded her as the cheapest unit of labour in the nation!

In 1976, the Women's Division of Federated Farmers (WDFF), in conjunction with the University of Canterbury, undertook a national survey of rural women. Those were heady days when farm women suddenly moved from being just somebody's wife to the status of a recognized national statistic.

A prime motivating force behind women who came forward in the 1970s was the need for better rural services. As one woman reflected: 'it was the injustice of it all. Why should our children have a second-best deal at school? Why all the red tape surrounding school bus services? Why can't our business have a 'phone that works?' As a result of these concerns women collected data, wrote letters, lobbied, and learnt to work the political system effectively.

The object of the rural women's movement was to increase women's awareness of their rightful place in society. However, just to become aware and effective lobbyists was not sufficient. Next came the realisation that to effect change women must become part of the decision-making process. At that time few women sat on county councils, and even fewer attended Federated Farmers' meetings.

The successful Women in Agriculture (WAg) was launched in 1981. WAg is a network of women who wish to increase women's participation and reward in agriculture because in order for women to succeed in their on-farm and off-farm roles many would have to develop new skills and confidence. Seminars and workshops are held with the support of REAP organizers (Rural Education Activities Programme), the Ministry of Agriculture and Fisheries, and various community colleges throughout the country. WAg seminars are held in all corners of New Zealand, usually in the local hall or woolshed. The topics may be practical or political, and are varied to suit the needs of local communities. They can range from instruction in tractor driving to self-awareness sessions.

WAg is said to be the fastest growing rural organisation in the country with over 3500 current members who keep in touch through a newsletter put out under the auspices of the Ministry of Women's Affairs. WAg has done a superb consciousness-raising exercise among rural women. It has been able to do so because energy is concentrated on the cause and not expended on an internal bureaucracy.

In the past, two traditional formal structures have served rural women: WDFW and CWI (Country Women's Institute). However, both were created in times of differently perceived rural need and are now maintained by a predominantly older membership. While both organisations still have roles to fill in our communities, there is a growing indication from younger farm and rural women that these established organisations do not fill today's needs. Many women feel that existing rural, social, economic and political structures are at odds with inevitable changes in the wider community.

Perhaps the solution is more complex than a simple remodeling of these existing organisations, which, it seems, prefer to have power and recognition for farm women come in the form of traditional nurturing and supportive roles. The feeling among many women is that this does not fully address the issues of what women's future economic base is to be, or the reality of achieving recognition as competent and reliable political partners.

Attempts may be made to keep women to one side by asking them to form 'ginger groups'. However, neither of these is likely to come to grips with the desired integration of power. This leaves only benign neglect of the existing structures or their usurpation - neither is desirable.

A more contemporary approach to attaining these feminist goals, i.e., real equal economic and political opportunity with men, is through education about what sex role integration means and how it can be brought about. Part of the problem is that many women exhibit a lack of esteem as a direct result of sexism in our society. This is predominant in rural New Zealand as much role stereotyping and prejudices are held over from the past. Many farm women have become aware that there is an alternative, and they strive for a respected place alongside their men in the rural power structure of producers' organisations, county and regional councils, as well as in rural services such as education, communication and health.

10.3 Legal Changes

A significant force behind the change in farm women's roles has been two legal changes which have done much to raise the status and effective self-esteem of farming women. They are:

- (1) The Matrimonial Property Act of 1976 entitles both marriage partners to an equal share in their matrimonial property, making for a equal division of that property should the marriage end.

- (2) The 1983 Income Tax Amendment Bill, which enables the formation of farming partnerships between spouses without incurring taxation, gift or stamp duty, thereby minimising the cost of redistributing legal ownership of resources within marriage partnerships, and spreading income tax and estate duty liabilities.

The 1976 legislation covered the situation when a marriage dissolved, but did not adequately cover the situation of the majority who remained happily married and wished to form a legal and equal business partnership. This anomaly was corrected by the 1983 Tax Amendment Act. The cynics referred to this law as a tax dodge, yet in reality this new found legal status did much to improve the self-perceived worth of farm women.

While the Matrimonial Act gave a fairer resolution between marriage partners, it has also encouraged fairer provision for daughters in wills and estate settlements than had previously been the case.

10.4 Elected Representation

Few leadership positions are held by rural and farm women. The percentage of rural women on most county councils is increasing at a lethargic pace despite the fact that most who have stood have been successful. The upward trend did not begin until 1977, much later than in urban areas which have seen rapidly increasing numbers of women stand for election since 1962. For example, the level of women's involvement in rural counties and districts in 1980 was about the same as it was in cities and boroughs in the mid-1960s. That puts rural New Zealand light years behind. Until rural women are encouraged to have the confidence and then take the initiative to put themselves forward for decision-making positions, they are likely to continue to be ignored.

A summary of the 1983 elections in terms of women's seats, finds that county councils fall into three groups: about half have no women members, about one quarter have between 1-19 percent female membership, and the remaining quarter have more than 20 percent. The proportion of rural women appointed by Government to quangos is no better. A 1983 analysis of the 57 boards and committees under the agriculture portfolio shows that of the 464 positions available, only seven were held by women.

Although the 1986 triennial election statistics are not yet available, some facts are quite clear. Several large counties such as Ashburton and Southland still have no women on their councils. However, one county has taken a quantum leap. In Golden Bay County four of the eight councillors

are women, and they have New Zealand's only current county chairwoman.

While the question of female/male ratios on boards and committees is important, there is also a need to reassess the entire spectrum of public board roles and objectives. It is highly appropriate that in this reassessment, the portfolio of potential issues is addressed as well as an analysis of the sex composition of the boards.

Why are women not standing for public office more often? One factor must be that the effort required to break down all the stereotypical barriers that have entrenched us for generations is, for any one individual, almost overwhelming.

At another level, the 1984 election saw the number of women M.P.s representing rural provincial seats rise from two to four. Future representation is unclear for a number of reasons. While rural New Zealand would likely traditionally support the return of the National Party, political pundits should consider the impact which the vote of rural women had in the last election. Feminism is a philosophy which in New Zealand fits more comfortably with Labour traditions, and consequently ideological shifts by rural women may well have contributed to the success of Labour in provincial seats in 1984. To date, the National Party has done relatively little to woo back that independent female rural voter, and the Labour Government is attempting to maintain its attentive concern.

10.5 On-farm Decision Making

Two main factors have encouraged farm wives to participate in management decisions about their farms more fully than in the past. First are the changes in the law providing women with the opportunity to move alongside their husbands as legal partners; and second is the grave economic situation in which most farm families now feel embedded.

The 1975 Survey of Rural Women in New Zealand indicated that on the whole, farm women had more years of formal education than their husbands, and that they often brought a keener sense of business to decisions. Increasingly, the idea of farm women being only bookkeepers and/or unpaid family/farm labourers is giving way to their being full-fledged members of a management team. The pendulum is swinging in favour of women's recognised and rightful place at the planning and decision table.

During the production driven period of the 1970s, farm women did not have first claim on the farm dollars to be spent. Today, that situation has changed, the priorities are different, and more farm women are sitting beside their husbands and accountants as financial planners. Younger

women especially are defining where farm spending ends and family spending begins. Farm women are asking that economic and social considerations be also weighed up when decisions are made. Off-farm investment decisions, the possibility of off-farm employment for one or more members of the family, and identification of time spent working only on the farm versus time spent only with the family enter the decision-making process more and more.

Increasing numbers of women are attending the Kellogg computer courses at Lincoln College. Share groups are flourishing in rural areas.

These are all indications that in the future women with new found financial skills will be the effective managers of off-farm investments.

A Rural Bank officer summed up the situation with, 'Women are becoming involved in management to a far greater degree; they are not accepting a second-class partnership'.

Yet despite these advances there are husbands who still believe that keeping the books, but not signing the cheques, is involvement enough. However, it is clear that, in the last few years, greater numbers of women consider themselves actually involved with their husbands in making economic decisions about the present and future of their farms. There are also indications that when financial pressure is placed on the small one/two labour unit properties, women have increased their management involvement. The involvement of women on larger properties has not increased to the same extent. But there is still a need for greater emphasis to be placed on coordinated family discussions of farm and family goals and objectives.

10.6 Off-farm and On-farm Employment

In the last decade an increasing number of farm women have sought off-farm employment. The 1975 National Survey of Rural Women reported that only about 11 percent of farming women had off-farm employment. However, in 1985, the Southland study found that that number had risen to approximately 21 percent. Present indications are that it has increased significantly since, and that many women are driving considerable distances to off-farm employment.

One accepted way to stem the tide of farm people seeking alternative ways to supplement their incomes is to expand income opportunities on their existing farms. Diversification was the catch-cry of the early 1980s. The motivation for it was simply that additional farm enterprises were expected to increase incomes, thereby offsetting disappointing traditional income (due in part to

falling prices) or establishing a base for future farm investments that would lead to increased income also. Women were a part of this integral plan.

However, a study of the impact of horticultural development on farm women in Canterbury paints a very sombre picture. While most of the women had been involved in the decision to diversify into horticulture, providing work for these women was not a significant factor in that diversification decision. In most cases, the expected income was not realised. Increased returns did not cover the extra costs incurred in the venture. Women had to increase their hours of work without offsetting compensation, and, indeed, the financial success of the enterprise often depended solely upon the voluntary input of women and other family members.

Farm women who live near urban centres and choose to seek full or part-time off-farm employment have relatively few problems in finding jobs but for those women who live in the backblocks it is much more difficult. Research undertaken in the Taranaki hill country in 1986 provides a pattern of female employment which might apply to the rest of New Zealand's hill country. The study reports that the proportion of women who are employed off their farms, as recorded in the census, is well below the national average.

A serious effect of this situation has surfaced. The 1975 National Survey of Rural Women indicated that 73 percent were involved in physical on-farm work. The Southland Survey of 1986 gave an estimate of 87 percent. All indications are that most women who remain on farms have increased work loads. Concern must be voiced that as their work may be unpaid and not explicitly recognised in a farm partnership, the compensation paid would not be adequate to cover their responsibilities in the home and on the farm, should they be involved in a serious accident.

10.7 Money Isn't Everything

What was initially perceived as a simple decision for farm women to gain off-their-farm employment has many implications. In the short run it is relatively easy for women to consider the pay packet as 'ours'. The consideration of whose it is in a longer term situation is one not yet fully addressed by many farm families.

Women who have decided to go out for a short-term job and who have a definite target for their earnings, have had less conflict within themselves and with their husbands than those women who have opted for long term off-farm employment. 'The power of the pay packet is substantial', not only for the dollars it contains but for what the

dollars represent to the woman who earned them and the family who sees her go to work.

Some of the questions to be resolved are: How much of a say in the spending of her wages does the woman have? Do her earnings get lost in the ongoing farm expenditures? Does she have independent control over all or even a portion of the money brought in for purchases she thinks are important to her life?

The concerns are real. If the woman's wages or salary is continually used to prop up a failing farm business, an inbuilt resentment eventually arises. On the other hand, if the woman works with a mutual understanding that her income will pay the school bill or go for a house remodeling, then there is a different feeling.

Further, as a good business employee, she may begin to develop goals for herself in the new opportunity, and begin to support her employer's interests and management techniques. The job can also be intellectually stimulating, drawing on innate talents not touched by farm work. One teacher who went back into the classroom to help pay the mortgage said, 'I missed the farm but it was great to be back in the classroom where my skills lie. Since coming back (to the farm), I'm suffering the most awful withdrawal symptoms. Thank God for an understanding husband'.

When both partners seek off-farm work the complexities increase. One woman suggested, 'Our roles are not unlike those of cohabitators who share a family and a household to run, but who are separate breadwinners. The farm is now our capital investment that we need to discuss and make decisions about - it is no longer 'our life'.

The people interviewed had many pertinent observations about how their community viewed their efforts. For example, one community's perception about changing roles for a farm woman and her husband was reported as: 'If a woman is employed off-farm they are still farming. If the man works off-farm, the woman is looking after the farm. If both work off-farm they have abdicated their right to be farming!'

With the changes in employment, other aspects of rural life are also affected. The traditional church fellowship groups are already almost non-existent. The Red Cross Society, the Plunket Society, and even the mid-week Ladies' Golf days no longer receive the patronage they used to. One consequence has been a rise in the number of community jobs that are now paid; for instance, the work covered by community recreation officers may well have been voluntary a few years ago. It used to be considered essential to our status and standing in a rural district to be active in voluntary groups. That is no longer true. In fact, one

suspects that paid employment is now the status symbol or is it merely that a crisis such as a war or the present economic downturn gives women permission to seek off-farm employment?

Whatever the motivating force to seek off-farm work, rural communities are no longer self-sufficient islands even though many relish that nostalgia. New rural social concerns will have to be faced, be it the replacement of essential voluntary work in the district and community, or the consequences of many farm partners spending endless working days alone. The changes are numerous. One must acknowledge them and turn them to our families' and the community's advantage.

10.8 Conclusion

In the past, physical effort has been the prime factor in our agriculture production and acknowledgement of physical ability has been the prerequisite for its leadership. Not so tomorrow. The prerequisite for New Zealand's future leaders of agriculture is that they be more highly trained, more market aware and more competent managers.

- Communication and information access will be the keys to on-farm profitability and informed leadership. It will be essential that rural women become familiar with new learning concepts and new communication systems.
- Women and men must make decisions together about the challenges that face them.
- The traditional barriers of discrimination against women and their role stereotyping can no longer be accepted in rural society.
- New political structures must not only include women leaders, but adequately reflect women's perceptions of what the policy agenda should be.
- Rural development, a conscious effort to develop the countryside, should involve women and reflect their considerations about what that development is or should be.

An almost unidentifiable but potent thread ran through the interviews for this chapter. It was perhaps best described by one woman who referred to her marriage as a three-way partnership: the man - the woman - the land, and to thrive all must be kept in balance.

Many of the conflicts identified by those seeking off-farm employment were acknowledging these links, while those

seeking a recognised role in the farm business were also acutely aware of those ties.

This triangle defies any computer analysis, is incomprehensible to Treasury economists, and baffles politicians. New Zealand will prosper if the worth of farm women in that vital triangle is recognised, sustained, and given equal economic and political opportunity with men.

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CHAPTER 11

THE LAND, THE MAORI, AND HIS ECONOMIC BASE YESTERDAY

by Trevor Howse
Ngai Tahu Maori Trust Board
Christchurch

Maori land has several cultural connotations for us. It provides us with a sense of identity, belonging, and continuity. It is proof of our continued existence not only as a people, but as Tangata Whenua of this country. It is proof of our tribal and kin group ties. It conceptualises Turanga Waewae. It is proof of our links with the ancestors of our past, and with the generations yet to come. It is an assurance that we shall forever exist as a people, for as long as the land shall last.

The economic strategy adopted by the Maori in his early development relied on his ability to control the natural resources of the sea, lakes, rivers and to pursue practices of cultivation (kumara). Those wise chief of Maoridom knew that control of the resources raised the mana of himself and his tribe.

Also, the ability to display his wealth of food to visiting chiefs showed his power. Of course this could also be a disadvantage as the visitors would go away envious of abundance of food in the district, and they would plot the downfall of those people.

The migration and dominance of the different tribes in their historic periods is proof of this. So the natural resources and the control of them was of vital importance to the Maori in his effort to survive. The fact that the South Island Maori used such a wide-ranging area to gather his food supplies, before the advent of European settlement, showed how vulnerable he became under colonisation.

The loss of access to rivers, lakes, sea, etc., which was guaranteed to him (or so he thought) under the Treaty of Waitangi was the beginning of his slide to obscurity and lowering of this well-being. The fact that the Maori practised conservation in such rigid regard to his survival, also showed that he had the ability to control his economy in harmony with nature. His kaupapa (or creed) was, or still is, preservation for the generations to come.

This means that ownership, or better, custodianship, is not individual but determined by the social structure of the tribe. The control of these food gathering areas was controlled by the use of "rahui" the principal philosophy being that there was a time to take these resources and a time not to take. From the

time the potato appeared on the agricultural scene in New Zealand the Maori adapted to the new way of life.

This he partially succeeded in, but found that he did not have the amount of land required due to the small allocations of land granted after the agreements espoused in the Ngaitahu Deeds.

The Maori in most districts were restricted to ten acres per head and this land soon became overworked and in poor condition. The combination of the Maori's inability to pursue his traditional food gathering, because of denied access to those bush and birding areas, as well as the poor condition of what little land he did have allocated to him by the Crown, soon began to show in the poor living standards and conditions of the Maori. So his value system was based on survival, but not on the basis of individualism, which is the basis of the European Economic System.

The fact is that the tribalism was his protection and influenced his lifestyle, to the extent that although he had an individual right to usage, he did not have the individual right to ownership. Ownership belonged to the tribe. It was legislation that allowed individual title which hastened the breakdown of tribal ownership and protection.

It is with great anticipation in 1987, in view of the decisions handed down by the Appeal Court and with the ability of two races to negotiate their differences with dignity and honour, that we will eventually come to recognise our true New Zealand heritage.

To live life is to live with nature. To appreciate life is to understand nature. To know eternal life is to have communed with nature and to know the Gods of the forests, sea and air.

CHAPTER 12

INTRODUCTION TO GROUP DISCUSSIONS

THE PROBLEM-SOLVING PROCESS

by L. Tim Wallace

Professor of Agricultural Economics and Co-operative Extension;
University of California

"The problem of problems is to identify the problem". We've all been in meetings where nothing seems to get done, where people give a range of heated opinions that seem to generate only additional rhetoric, where no decisions are made, and where progress is limited by people offering solutions before there is consensus about what the issues or problems really are. The purpose of using the Problem Solving Process is to separate into parts the problem identification process, focusing attention on finding the core concerns and goals so that useful analysis can be done.

The steps outlined here are simple ones, though sometimes difficult to use. The process is iterative and open-ended so that it's all right to make changes as additional insights and information are discovered, or stated goals need to be redone. It's all right to have different values, different concerns and therefore different solutions to the same problems. In fact, different perspectives promote creativity and unleash imagination which can lead to ever "better" solutions. This process offers a way to reconcile different values through learning to trace constructively the consequences of someone's "perfect" way out of a dilemma.

Remember, one point of using this process is to force you to be increasingly specific about your concerns (the things that bother you about the particular topic being discussed), your goals (what changes you'd like to see made), and how you propose to achieve those goals. The more specific and focused you can be, the faster you'll get to the heart of the problem and find a reasonable solution.

Only two guidelines need to be offered: 1) Don't waste time with repetition. Once an idea has surfaced, a value or position stated, no one needs reminding about it. Besides, not being able to repeat may increase creative thinking and listening. 2) Be positive even if you don't agree with the point. Resolution of different values comes when you decide which proposed solution is the "best".

Step One: The Concerns (the "what is" part)

List all your concerns about the topic you've picked. Try to describe the situation as you see it: facts, beliefs, values, perceptions, history - all are relevant. Do not feel you have to justify or explain your point of view. There will be plenty of time later if you're asked for clarification.

Step Two: Desired Goals (the "is to" part)

This is where you specify the changes you want made in the situation you've just described. It's positive because it's what you want, not what you don't want, and it's active because it remains to be done. More than one goal may surface so it would be useful if you prioritize them, arranging them from the most vital to the least important. Phrase them as "the goal is to"

Step Three: Problems (the "how to" part)

This is the problem statement section, and is easy now because of all the work you've done. The problem, since you've identified the goal, is simply how to attain the goal? It is a question: "how to (do, achieve, attain, change, etc?)"

Step Four: Alternative Solutions (the quest for solutions)

Since the problem is a question there will be many possible solutions. Your task is to list as many possibilities as you can knowing that the more you list the greater the chances are of finding a key one. Also, hearing other solutions than the one you had in mind will broaden your perception about what is possible, and about how you might ask different questions about ways to resolve almost any problem.

Once you've listed "enuff" possible solutions, shift them to shake out most of the chaff. The principal criterion will be whether in fact the proposal will attain the goal. Other criteria are usually budget, people and time limitations.

The alternatives left after sifting need to be analysed in order to determine their further priority. Analysis is simply looking at them (admittedly superficially at this point) in terms of IF we took this option, THEN what would be the consequences vis-a-vis cost, time, price effects on consumers, government budget, rates, quality of services, available information, employment, resource, etc. - the key criteria will evolve naturally from the topic. Once the THENs are probed a little, you begin to get a set of consequences that allow for comparison of alternative solutions which further analysis can make even more meaningful.

Remember that since the process is open-ended and iterative, you can recast anything without doing damage. Besides, recasting is almost inevitable if learning takes place. Don't be afraid to make changes if you find the course you're on doesn't make as much sense as you thought when you first set out.

Step Five (the Decision part)

Here is where the difference in personal values is articulated. Once the solution comparisons are made it is time to decide which path should be taken. As in any democratic election by an informed public, differing values are resolved by majority vote with the right of minority dissent.

1 Steps five and six were not undertaken during this symposium, but these steps are included here to provide a full account of the problem-solving process (editor)

Step Six (the Evaluation and Revision part)

The results of the decision can be evaluated by reviewing the concerns stated at the outset, these concerns thus becoming the criteria for evaluation. To the extent that concerns are lessened the solution is an effective one; to the extent that they remain unchanged or are heightened the solution is a poor choice. Thus, the opportunity for revision presents itself, and the process can be repeated.

Evaluation and revision brings the process full-circle. The results are checked in terms of the initial stirrings which gave rise to the problems in the first place. The judges are those who have participated in the planning process, or those who have monitored the events closely enough to understand and follow the process to its "conclusion".

CHAPTER 13

REPORT OF PARTICIPANTS' CONCERNS, GOALS, PROBLEMS AND SOLUTIONS

The first of a series of three group meetings involved seven groups of about eight or nine people meeting in separate lecture rooms under the guidance of a facilitator. During discussions each group raised a number of concerns and from these the groups each made a final selection of the most important concerns. The following list of the main concerns shows the six topics which emerged, and for each topic there is a set of qualifying comments:

- (1) Rural decline:
 - remedial actions needed in many areas
 - low community viability, lack of confidence
 - rural class structure seen as a block to farming entry
 - declining job opportunities, fewer job skills available
 - large outmigration of rural people - youth, middle age
 - decline in number, kind and quality of rural services
 - increased costs for rural services
 - need for understanding of causes rather than symptoms.
- (2) Deteriorating rural/urban relationships:
 - limited understanding of each other's problems/concerns
 - intolerance of each other's expressed needs
 - unwillingness to see other's point of view
 - problematic concepts of urban/rural, part-time. and small holder.
- (3) Coping with change:
 - question effectiveness of rural support groups
 - farmers don't seem able to accept "reality"
 - getting farmers to adapt to change is difficult
 - difficulty in coping with trauma (foreclosure, etc.)
 - increased burden on rural women, rural men can't cope well.
- (4) Rural powerlessness:
 - feeling of inability to influence Government policy makers
 - decision-makers lack understanding of rural areas/people.
- (5) Low farm/rural incomes:
 - aren't making the best use of resources available
 - need help "marketing".
- (6) Information:
 - media unduly selective (negative reporting)
 - availability/cost
 - lack of relevant research/timeliness/no rural data

For the evening group session, participants chose one of the six concerns and formed a group of people who wished to consider that concern in detail. Each group went on to focus

on desired goals for rural economy and society and on the problems associated with achieving each goal. The same groups met on the next day to consider the alternative solutions to the problems that they had identified. The lists on the following pages show the findings of each group.

CONCERN: RURAL DECLINE

Facilitator: Ralph Lattimore

GOALS

1. *To increase farm income and profitability.
2. To retain voluntary social services/minimum service levels.
3. *To develop a strategy for rural politicisation.
4. To develop viable retirement options.
5. To move schools to the country.

* Priority goals

PROBLEMS

ALTERNATIVES

A. For increasing farm profitability.

1. Do nothing; no subsidies.
2. Stimulate small community development by:
 - a) Local investment incentives (from ratepayers)
 - b) Government-funded regional development assistance, conditional for job creation.
 - c) Remove import protection.
 - d) Assessment and promotion of local resources with new or enlarged enterprises.
 - e) Encourage the development of corporations regionally.
 - f) Explore flexibility with unemployment benefit.
 - g) Create local competition for investment money by tendering.

B. Develop a strategy for rural politicisation.

1. Revamp and improve rural organisations especially Federated Farmers.
2. Develop an organisation that works.
3. Distribute a summary of symposium proceedings to key people.

**CONCERN: DETERIORATING URBAN-RURAL RELATIONSHIPS (Poor
 RELATIONS)**

Facilitator: John Elvidge

QUALIFYING COMMENTS

1. Not urban/rural but farming, other rural, small town, urban.
2. Not deteriorating but inevitable and persisting conflict because of each group's differing interests and values.
3. Conflict develops in an unhelpful way because of task orientations rather than the application of process skills.
4. 'Scapegoating' turns attention away from unrecognised and/or unresolved conflict.
5. Ignorance of others' situation fuels negative conflict.

GOALS

1. To improve relationships.
2. To identify different groups.
3. To develop processes which understand, recognise and resolve conflict.
4. To improve transfer of information.

PROBLEMS

ALTERNATIVES

1. Identify common interests shared by different groups and use this information to highlight interdependence.
2. Use independent but knowledgeable facilitators for group interaction.
3. Undertake school exchanges, job exchanges.
4. Develop use of media, encourage discussions, and improve written, oral, and visual communication. Tailor information to audience.

CONCERN: COPING WITH CHANGE

Facilitator: Terry Gourley. Notes from Allan Levett.

QUALIFYING COMMENTS

1. Levels of concern e.g., personal, community, society.
2. Stages of response to change:
 - a) awareness of the event that forces change
 - b) absorbing the meaning of change
 - c) reacting and acting.

GOALS

1. To maximise response capability at each stage of response to change.
2. To anticipate changes and have maximum information and understanding.
3. To develop support and services to help in understanding what is happening.
4. To move confidently and skillfully in new directions.

PROBLEMS

1. How to anticipate change.
2. How to absorb the impact of change.
3. How to acquire skills, confidence, strength and resources to move in new directions.

SOLUTIONS

1. To improve education, especially for the bottom ten per cent to achieve adequate levels of numeracy and literacy.
2. Develop education programmes for major life crises and for communities trying to adapt to change. Recognition that others have had similar experiences.
3. Undertake research into social change, into optional solutions, and into identifying and describing solutions that work. Identify resources. Identify imminent changes.

4. Communicate models of successful adaptation.
5. Develop support networks and skills for new options (e.g., marketing and management skills).

CONCERN: RURAL POWERLESSNESS

Facilitator: Philip Donelley

QUALIFYING COMMENT

1. Powerlessness based on lack of understanding.

GOALS

1. To undertake research that is relevant and effective.
2. To improve lobbying techniques.
3. To achieve open debate with the public on rural policy.

PROBLEMS

1. How to personalise the issues.
2. Impossible to identify problems at the regional level.
3. How to define avenues or actions needed to achieve solutions.
4. Change is either too fast or too slow.
5. How to prepare for change.
6. Flow-on effect of change.

SOLUTIONS

1. Test theories regionally.
2. Develop effective decision-making.
3. Develop improved communication technology.
4. Increase the amount of anticipatory research.
5. Provide equitable services to rural areas.
6. Support the Beattie Commission Report.
7. Devolve decision-making to the regions.
8. Remove blockages to development.
9. Assess local talent.

CONCERN: LOW FARM/RURAL INCOME

Facilitator: Linda Wiltshire

QUALIFYING COMMENTS

1. Low prices for lamb, milk and arable products.
2. Delivery overseas.
3. Marketing and signals.
4. Cost of production too high.

GOALS

1. To improve income from products on a per unit basis.
2. To make our products more desirable and to improve our marketing and promotion.
3. To meet the demands of the market and to get clear signals of what the market demands.
4. To ensure that our meat is marketed in the most profitable manner.
5. To be better informed of the real value of meat, bi-products, and pelts.
6. To have more efficient production.
7. To lower the costs of inputs such as diesel, machinery, chemicals, labour and power.
8. To improve monetary reserves.
9. To decrease the risk in marketing.

PROBLEMS

SOLUTIONS

1. Develop product packaging to suit and appeal to consumers.
2. Undertake research into consumer requirements. Use skilled marketers. Operate globally. Market investigations by Producer Boards, meat companies and the Meat Industry Association. Publish research findings widely. Monitor technological change overseas.

3. Promote advertising nationally and globally. Emphasise health aspects, cooking instructions, cultural preferences, and provide product information on package.
4. Examine the issue of single selling versus competitive selling.
5. Foster collaboration and cooperation among all parties involved in production process.
6. Push competitors for removal of subsidies and tariffs.

CONCERN: INFORMATION/INFORMATICS

Facilitator: Rupert Tipples

QUALIFYING COMMENTS

1. Information is power.
2. Two subsidiary concerns:
 - i) information use, and,
 - ii) media coverage as selective and biased.

A. USE OF INFORMATION

GOALS

1. To link or make available information sources to where people are.
2. To have access to a base of quality public information, independent of ability to pay.
3. To identify key information gaps and to have the resources to collect, distribute, and utilise desired information cost effectively.

PROBLEMS

1. Who assembles the information?
2. What information should be made public?
3. Who pays for information? Who can afford information?
4. Who initiates the needed research?
5. Who makes the decisions about the information process?
6. How to educate people to use information?

SOLUTIONS

1. User pays and taxpayer pays. Consider alternative financing like lotteries.
2. Use alternative data sources (but there may be unwillingness of private bodies to reveal information because they believe they also give up their power).

3. Change curricula in education and business to permit hand-on experience with access, interpretation and use of data by students.
4. Set up coordinating mechanisms by:
 - a) Monitoring role of regional planning authorities.
 - b) Department of Statistics or Department of Information Services with internal and international linkages.
5. Influence the political process to make these solutions possible by:
 - a) lobbying
 - b) use of media
 - c) collect own data.

B. SELECTIVE MEDIA COVERAGE

GOALS

1. To obtain more objective, rigorous reporting.
2. To use the media to serve rural interests.
3. To find out and change editorial policy.

PROBLEMS

1. How to educate media personnel.
2. How to gain access to media.

SOLUTIONS

1. Affirmative action for rural New Zealand in all media.
2. Join with other interest groups to lobby the media.
3. Acquire conscience money for funding information research.

APPENDIX 1

LIST OF THOSE PEOPLE WHO ATTENDED THE SYMPOSIUM

Allen, Vivienne
Ayn Davar
Charlton
RD 4
GORE

Armstrong, George
Piako County Council
PO Box 266
TE AROHA

Armstrong, Rosie
Limestone Glens
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CHEVIOT

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AUCKLAND

Bennett, Neville
History
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Bilek, Ted
School of Forestry
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CHRISTCHURCH

Brooking, Tom
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Animal Sciences Group
LINCOLN COLLEGE

Wood, John
Agricultural Economics and Marketing
Lincoln College

Woods, Marlene
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SHEFFIELD

APPENDIX 2

PROGRAMME OF THE SYMPOSIUM

RURAL ECONOMY AND SOCIETY STUDY GROUP

Supported By the

SOCIAL SCIENCE RESEARCH FUND COMMITTEE

TWO-DAY SYMPOSIUM ON RURAL RESEARCH NEEDS -

ECONOMY, SOCIETY AND DEVELOPMENT

Lincoln College, July 7 and 8, 1987

PROGRAMME

Day One, Tuesday 7 July

- 9.00 Registration
- 9.15 John R Fairweather, Agribusiness and Economics Research Unit, Lincoln College, Welcome, Introduction, Statement of Objectives.
- 9.30 Richard Le Heron, Department of Geography, Massey University "Global Processes and Local Adjustments: Understanding Changes in Food and Fibre Production in New Zealand".
- 10.15 Tea break
- 10.30 Ralph Lattimore - Agricultural Economics and Marketing, Lincoln College, "New Zealand Farming in an Increasingly Interdependent World".
- 11.15 Questions and Discussions
Chair: Rupert Tipples, Horticulture and Landscape, Lincoln College
- 11.30 Research Around the Country. Self introductions and statement of research interests.
- 12.15 Tim Wallace, Cooperative Extension and Agricultural Economics, University of California, Berkeley, Introduction to group discussions: The Problem Solving Process.
- 12.30 Lunch. Refectory.
- 1.15 Group discussion: Each group to prepare a list of principal concerns.
- 2.30 Some Factors Influencing, and Possibilities for, Rural Economy and Society Chair: Terry Loomis, Social Science Research Fund Committee, Wellington

Pat Devlin, Parks, Recreation and Tourism, Lincoln College
"New Land Uses".

- 3.00 Tea Break
- 3.15 Mary Gray, Department of Social Welfare, Christchurch
"Trends and Problems in Rural Social Service Delivery".
- 3.45 Questions and Discussions
- 4.00 John R Fairweather,
Report of major concerns expressed in group discussions and
preparation for evening discussion.
- 4.30 Residential arrangements finalised.
- 5.30 Pre-dinner drinks.
- 6.00 Dinner.
- 7.30 Discussion of desired goals for rural economy and
society, and identification of associated problems.

Day Two, Wednesday 8 July

Some Factors Influencing, and Possibilities for, Rural
Economy and Society: Continued
Chair: Rupert Tipples

- 9.00 Robin Johnson, CAP, Massey University
"Government Influence - Past, Present, and Future".
- 9.30 Tim Wallace - "Agricultural Futures".
- 10.00 Neville Bennet, History, University of Canterbury
"Differential Trade Relationships Between Japan and New
Zelaand".
- 10.30 Tea Break.
- 10.45 Roberta Hill, DSIR, Christchurch
"Meat Industry Restructuring and Technology Change".
- 11.15 Robyn Grigg, Farmer and Councillor, Banks Peninsula
"Changing Roles of Women".
- 11.45 Trevor Howse. Ngai Tahu Trust Board, Christchurch
"The Land, The Maori, and his Economic Base Yesterday"
- 12.15 Lunch. Refectory
- 1.15 Group Discussion: Each group to delineate
alternative solutions to the problems identified.
- 2.30 Plenary Session: Reporting back from each group.
- 3.00 Tea Break.
- 3.15 Feedback from David Butcher (M.P.) and general discussion
- 4.30 Close

RESEARCH REPORT

158. **The Optimal Location of Egg Production in New Zealand**, A.C. Beck, J.P. Rathbun, C.D. Abbott, 1984.
159. **The Economics of Irrigation Development of the Amuri Plains Irrigation Scheme**, Glen Greer, 1984.
160. **An Economic Survey of New Zealand Wheatgrowers: Enterprise Analysis, Survey No. 8, 1983-84**, R.D. Lough, P.J. McCartin, 1984.
161. **An Economic Survey of New Zealand Wheatgrowers: Financial Analysis, 1982-83**, R.D. Lough, P.J. McCartin, 1984.
162. **Farmland Pricing in an Inflationary Economy with Implications for Public Policy**, K.L. Leathers, J.D. Gough, 1984.
163. **An Analysis of Production, Consumption and Borrowing Behaviour in the North Island Hill Country Pastoral Sector**, A.C. Beck, J.B. Dent, 1984.
164. **New Zealand's Inshore Fishery: a Perspective on the Current Debate**, R.A. Sandrey, D.K. O'Donnell, 1985.
165. **Land Policy and Land Settlement in New Zealand**, J.R. Fairweather, 1985.
166. **Farm Enlargement in New Zealand**, J.R. Fairweather, 1985.
168. **Market Prospects for Maize**, S.A. Hughes, R.L. Sheppard, 1985.
169. **Factor Cost Analysis of a New Zealand Meat Processing Company**, M.D. Clemes, L.D. Woods, 1985.
170. **An Economic Survey of New Zealand Wheatgrowers: Enterprise Analysis, Survey No. 9, 1984-85**, R.D. Lough, P.J. McCartin, 1985.
171. **An Economic Survey of New Zealand Wheatgrowers: Financial Analysis, 1983-84**, R.D. Lough, P.J. McCartin, 1985.
172. **Biological Control of Gorse: an ex-ante evaluation**, R.A. Sandrey, 1985.
173. **The Competitive Position of New Zealand Fresh Fruit Exports**, M.T. Laing, S.A. Hughes, R.L. Sheppard, 1985.
174. **Marketing Structures for the Horticultural Industry**, N.L. Taylor, R.G. Lattimore, 1985.
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