Deregulation Or Re-Regulation

Grower Constructions Of Risks That Arise From Regulatory Change In The New Zealand Pipfruit Industry.

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ABSTRACT

This thesis seeks to combine two political economy of food perspectives stemming from food regimes analysis and concepts of food networks for the purpose of identifying and examining grower constructions of risks arising from regulatory change in the New Zealand pipfruit industry. While the food regimes framework has received some criticism from the post-structuralist camp, it is difficult to conceive how a clear understanding of agri-food networks in New Zealand, particularly post-1984, could be proposed without focusing on the momentous political and economic events associated with the structural adjustment experiment which fundamentally changed the productive, investment, economic and socio-political landscapes. Food regimes analysis, with its focus on investment axes and comparative trends in global food restructuring, represents a powerful theoretical tool in situating historical and current industry challenges and structural conditions. The research uses focus groups as the primary participatory research vehicle and through this has identified grower defined, risk matrices. These matrices have been built in four separate pipfruit growing regions. Each prioritises risk events in terms of likelihood of occurrence and seriousness of consequence, in the orchard business enterprise context. Regionally specific risk construction and definition can assist in the prediction, and analysis, of the effects of deregulation (re-regulation), and influence future development trajectories for the New Zealand pipfruit industry and the regional communities where the industry is a major economic driver.

Key Words: food regimes; food networks; qualitative method; focus group; risk; construction.

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Chapter 1

Introduction

1.0 Research Context

During its annual general meeting in 1999, the Southern Hemisphere Association of Fresh Fruit Exporters (SHAFFE), of which New Zealand is a member, stated that the global apple industry was in financial crisis. Chronic conditions of oversupply by Southern and Northern Hemisphere producers, static or declining demand in traditional and high-value consumer markets, retail consolidation and competition from new food forms (nutraceuticals, functional foods, 'munchies' and 'sippies') have combined to make the situation for apple growers and marketers a difficult one.

Examined in broader context, the real retail prices for apples have been declining for almost two decades. Over this period, New Zealand has been only partially exposed to the implications of oversupply and price decline owing to an overall trend of a drop in the relative value of the New Zealand dollar. As international market conditions for apples have declined particularly over the past five years, increased political tension and financial strain have characterised domestic industry operations and structures. Growers and rural community residents dependent on pipfruit industry production and viability have staged public marches both for, and against the continuation of controlled channel marketing legislation. In November 2000 the Minister of Agriculture announced a review of the industry, its regulations and its performance. Signals indicate that it will be very challenging for the statutory exporter ENZA, to retain controlled channel marketing legislation.

International and domestic structural and political events conspire to make the restructuring dynamics of New Zealand's pipfruit industry complex and contested. The industry's current challenges are also shaped by unique historical and locality attributes – both cultural and biophysical. The research presented in this thesis centres on the former

attributes of change – cultural dynamics capturing the shifting balance between place, production and people. Food regimes notions, food networks and locality concepts provide the theoretical bases for investigation. The aim is to gain better insight into agri-food restructuring issues, examining how understandings of globalisation are best made by incorporating locality dynamics in the initial stages of thinking about changes to commodity chains within the world food economy.

1.1 Why the New Zealand Pipfruit Industry?

Research into the contested politics of pipfruit industry restructuring and socially-constructed perceptions of grower risks associated with this restructuring process took place over a twenty-four month period between July 1998 and August 2000. The focus groups which form the basis of empirical work in Chapter 6 were conducted early in 2000. Earlier involvement with grower advocacy and pipfruit industry restructuring was not specifically conducted with a view to contributing to this thesis process. However, working with growers and rural communities for 12 to 16 months prior to the formal focus group activities being conducted, contributed to a wide structural and contextual knowledge of industry restructuring impacts and perceived 'threats' to the pipfruit sector's overall viability.

Another aspect that has influenced interest in the New Zealand pipfruit industry is my professional involvement with the industry. Between 1993 and 1999 I worked, concurrently, as a pipfruit orchardist and a MAF Policy Agent. The latter role being on the fringe of Central Government policy development for the agricultural sector. The author's role involved intelligence gathering and issue identification, with the primary focus being toward the horticultural sector. This period saw, arguably, the greatest restructuring pressure applied to the pipfruit industry, under the neo-liberal deregulation banner. My position meant that I could observe Central Government imposing change into the pipfruit industry with little, if any knowledge of grower capacity to accommodate such change. This new research project has permitted me to take initial steps in

uncovering and documenting grower perspectives on deregulation or re-regulation, particularly how they see risks acting on their businesses.

1.2 Thesis Organisation

Following this short introductory chapter, the thesis is organised into six subsequent chapters. Chapter two comprises the literature review. Here key theoretical concepts are examined that are relevant to the political economy perspective adopted for the research. Specific attention is given the attributes of food regimes and food networks as useful starting points for understanding the multi-dimensional and spatially complex processes of agri-food restructuring. The notion of 'locality' is also introduced in this chapter as a key concept in examining the general and unique aspects of New Zealand's economic, social and political globalisation. Locality is also an important conceptual lens through which the limitations of metropolitan theory can be addressed.

Chapter three offers an historical overview of New Zealand's pipfruit industry. An historical look at industry structures and regulations reflects on the unique characteristics of pipfruit production and marketing in New Zealand which have significant bearing on the restructuring debates and challenges faced by the contemporary industry stakeholders and managers. Building on this historical knowledge, Chapter four outlines some key contemporary global-local challenges for New Zealand's industry as it competes in international fruit markets. Chapter five reflects on research methods, and argues for the importance of qualitative and quantitative analysis in building a more comprehensive understanding of the processes shaping agrifood restructuring. The methods chapter centres on qualitative research methods, in this case focus groups, as a tool for evaluating how risk and restructuring experiences are socially constituted. Chapter six provides an overview of the field research – looking at the results of study conducted in four of New Zealand's nine apple growing regions. Finally, Chapter seven engages in some reflection about the usefulness of theory, the role of different methods in exploring key research

questions and possible directions for future research concerned with agrifood restructuring.

This research makes an important contribution to understanding social and economic development in the New Zealand setting - clearly a developed society and economy. Understanding that development is about processes of change, has direct relevance to the New Zealand situation. With the political swing to neo-liberal economic ideology in 1985, change was imposed with speed that had not been witnessed before in a developed country (Kelsey 1995). If the neo-liberal path to embrace globalisation and a world system is continued to the point of deregulating the New Zealand pipfruit industry, then developing an understanding of potential impacts on production and producers on the periphery of the system, is critical to enable the state to act effectively in its 'new' development role, within that gambit of neo-liberal theory. This research then, by building a grower perspective on what such change could mean, can contribute to managing future change in a manner that maximises social and economic continuity.

Chapter 2

A Review of Agri-Food and Globalisation Literature

2.0 Introduction

This chapter aims to review key agri-food and globalisation literature in the process of situating the restructuring dynamics of New Zealand's pipfruit industry. A seemingly straightforward task, a cursory scan of the range of literature on fresh foods, globalisation and restructuring reveals a vast and sometimes divergent sets of perspective and conceptual frameworks used to explain the interrelationships between food, production, consumption and geographies of change within New Zealand's rural communities. Indeed, many of the basic taken-for-granted concepts such as what constitutes 'rural' and how 'restructuring' policies are implemented encompass considerable debate.

To that end, the review presented here will necessarily draw on a selected theoretical range of perspective including political economy frameworks, food networks and some relevant post-structural critique of the notion of food regimes. In terms of general organisation, the chapter proceeds from more general discussions of 'globalisation' to more specific debate about the position of fresh foods, New Zealand's structural adjustment experiment and the pipfruit industry. This is relevant in a development context, where development is predicated on an assumption of beneficial change. The theoretical approaches discussed here are helpful in unpacking 'globalisation' and benefits of 'globalisation' are distributed within this New Zealand pipfruit industry context.

2.1 Globalisation, Food and the Globalisation of Food

Globalisation has become one of the most commonly used terms in social scientific debates about consumption, production, culture and food. Its meaning however, remains imprecise and its impacts on regional, national and international policy and communities remain difficult to describe, is often contested and constantly fluctuating.

One of the key questions explored in later chapters, and relevant to initiating theoretical discussion of agri-food networks is, 'what specific implications does globalisation have for the daily operations and lives of orchardists'? Following on from this question is another one concerning how New Zealand (at a national strategic level) and relevant industry bodies (at the industry strategic level) can contain, mitigate or initiate certain policies and actions to maximise 'local' competitive advantages in an intensely difficult 'global' market place where the rules of entry and sale of goods are uneven and variable.

Examining these questions still begs a clearer understanding of 'globalisation' as a concept and/or set of processes interacting with particular sites or levels of spatial organisation. Some would argue that globalisation defies a clinical definition (Makinda, 1998; Hirst and Thompson, 1996; Clark, 1997) and represents an extensive and longitudinal form of Western colonisation which has its roots in early European trade expansionism dating back several centuries. In other words, globalisation is seen primarily as an historical economic process. While historical economic imperialism was certainly a key driver of global integration, arguments in this chapter follow Makinda's (1998:4) notion that globalisation is a term that '...describes the intensity and breadth of interactions within the political, technological, economic, social and cultural domains'.

Further, it is important to note that 'geographies of globalisation' represent a vital conceptual/analytical component of this broad understanding of a pervasive, contested and spatially differentiated set of processes. For example, the availability of technology, socio-cultural norms, political systems and economic structures can vary dramatically between countries. Often, assumptions are made about globalisation processes that implicitly include only industrialised and new industrialising countries, and relegate the role of less industrialised nations as 'victims' or passive observers of globalisation. While it is the case that less developed nations are significantly structurally disadvantaged by the contemporary (and historic) dynamics of globalisation, it is vital that the term 'globalisation' is geographically and temporarily 'unpacked' to expose the reasons why globalisation represents specific outcomes and challenges. In this way, it may be possible to expose globalisation 'myths' of inevitability

and homogenisation as conceptually inadequate in the course of resisting the terms of local incorporation into the 'world economy'.

Traill (1997) contends that globalisation literature has developed broadly to encompass three lines of investigation. The first view focuses on international trade economists' concern with the growing importance of global-level trade in promoting economic growth. The second view revolves around international business economists who elevate the importance of multinational enterprises (MNEs) in trade and foreign direct investment (FDI). This camp argues that "...a truly integrated (global) economy is one in which firms make production and distribution decisions without reference to national boundaries: the terms 'international' and 'global' are not used synonymously" (Traill, 1997:390). What this means is that 'internationalisation' refers to the extension of activities across national boundaries and 'globalisation' includes these activities plus a wider, intended project where functional integration between geographically dispersed processes and resources is the chief goal. The third view draws its origins in marketing literature. Here, globalisation is explained in terms of consumer markets and analysis centres on the problematic of whether consumer markets are converging, and the extent to which this allows firms to target consumers through global marketing strategies (Traill, 1997).

Clearly, none of these three lines of investigation can be separated. Indeed, understanding the breadth and operational dynamics of agri-food globalisation demands an appreciation of how multinational food companies, retail interests, investors, consumers and producers are all inexorably linked in a world-scale 'chain' of supply, demand, circuits of capital and political-economic contexts. The position taken in this paper is that world-scale integration of economic, cultural, consumption and political processes is at the same time an undeniable reality which is complicated (possibly resisted) through 'local' constructions of place, culture and regulation. This latter point is important in discussions of several unique structural characteristics of New Zealand's pipfruit industry, growing conditions and grower involvement in perceiving and responding to acceptable levels of risk in their business operations and sense of community.

Including notions of resistance, place and culture in discussions of globalisation suggests that world-scale integration of economies, nations and social expectations are contestable. Indeed, Friedmann (1995) contends that food and agriculture have, throughout history, often been the focal points of social and international conflict. One of the reasons for this is that food (involving socio-culturally constructed behaviours of consumption) and agriculture (complex systems producing commodities) represent fluctuating moments of social organisation.

If the production of food and the commodification of land and labour is historically conceptualised along a continuum of self-regulation by markets and self-protection by society (Friedmann, 1995) common-sense dictates that actors along this continuum will constantly contest and attempt to shift the balance between 'more' and 'less' market regulation. In the mid-1980s, New Zealand enacted a radical policy shift along this continuum and moved significantly from 'more' regulation to a position where 'free market' ideology was promoted and pursued with mixed success. Powerful world-scale forces which precipitated this historical shift included a power shift, post World War II, from farmers who initiated agricultural policies towards corporations and foreign consumers. In this sense, the agri-food economy in New Zealand and other industrialised nations shifted from self-employed farmers to waged workers in manufacturing and service activities (Friedmann, 1995).

The results of these historic, geographically layered processes point to corporations, agri-food workers and consumers as the new 'power brokers' behind regulating agri-food production commodity chains. In essence, mutually recursive processes of 'globalisation' in the production and manufacture of food have clearly led to the globalisation of food production, politics and policies. How these processes are interpreted, conceptualised and best managed is destined to be the subject of ongoing debate. Further, the manner in which 'nature' is included in policy directives centred on agricultural sustainability, environmental quality and food safety will likely receive increased attention in globalisation theory as regionally-based trading blocs pursue greater levels of integrated 'free trade'.

In summarising this brief section on globalisation and food, several important points should be made. First, globalisation represents a range of statements and views about processes that represent 'world-scale' changes in the ways humanity, nature and technology interact and are mutually transformative. It remains debatable whether the range of opinion on globalisation processes constitutes 'theory'. Second, globalisation processes are spatially uneven, inequitable and place-specific. This is important in the discussion of agri-food commodity chains in general, and 'fresh' foods in particular. Third, globalisation is not an inevitable one-way process moving from the top down - proceeding from greater to lesser levels of spatial organisation. Ontologically, 'global scale' does not pre-exist as a stage where specific events unfold. Similarly, 'local scale' does not represent a smaller container of space where individuals influence and react to events that filter down from greater levels of organisational aggregation. 'Global-local' concepts are fundamentally social and political in nature and mutually constitutive. This understanding is key to any informed discussion of the nature of New Zealand's political-economic restructuring in the mid-1980s, and current industry debate about marketing regulation.

2.2 The Political Economy of Agrifood Restructuring and Globalisation – Food Regimes, Food Networks and Locality

In an introduction to the discussion of agrarian orders, food relations and the world-economy, McMichael (1994) notes that world-systems analysis and developmentalism has been associated with industrialisation on a country-by-country basis. Further, developmentalist analysis usually displays an 'urban' bias which tends to dichotomise urban versus rural issues and processes. In short, McMichael argues that a rigorous and comprehensive academic and institutional focus on food and agriculture is overdue given contemporary debates about social and environmental sustainability. Concern with sustainability issues could also be extended to include recent debate over biotechnologies and food safety. These latter topics necessarily involve the complex ways 'nature' and social life

continues to be commodified and assigned exchange values in the context of economic and dietary 'Westernisation'.

Addressing the problematic of agrifood restructuring and globalisation in New Zealand demands some understanding of the types of structures and networks that characterise meta-theoretical 'food regimes' and global commodity chains. In so doing, it is vital to understand that social forces and relationships and place-specific factors add to the complexity of contemporary mechanisms of agrifood restructuring.

This sections provides a brief overview of important concepts and literature relevant to examining the relations of food production and consumption that condition the restructuring dynamics of specific industries – in this case, New Zealand's pipfruit industry. Consistent with McMichael's (1994) position about the importance of coming to grips with how the world is constituted and reconstituted around agrifood systems, this section explores critical links between globalisation, state restructuring and industrial/community change in New Zealand.

2.2.1 Sets of Perspective on Agrifood Restructuring

Recurrent themes in contemporary agrifood literature examine the shifting relationships between globalisation, regulation and locality (McKenna, 2000). Global agrifood restructuring literature itself draws on earlier literature centred on agrarian political economy (Buttel, 1996). One of the key advances of the former over the latter is that agrifood literature is not limited to the agricultural production sector. Consumption, production, regulation and increasingly environmental histories are key components of agrifood debates. Another important general observation about this body of research is that agrifood analysis proceeds in an environment where the reorganisation of agriculture is occurring at a time of declining national regulation (Burch et al., 1996).

The ways and rates at which national regulation changes has a significant bearing on how regions and countries pursue agricultural liberalisation in light of World Trade Organisation (WTO) principles and how the state/capital nexus combines to change the structure and function of places, people and production (Le Heron, 1996). In light of this interpretation, the agrarian question which initially involved a national focus on nationally-based production systems, has been recast to include new and more complex sets of perspective (McMichael, 1996). Current processes of globalisation re-focus the agrarian question in challenging new ways to involve political events, evolving state systems and geographies of change. This chapter argues that in the absence of explicitly included geography and spatial accounts of restructuring and change, theorisations of agrifood restructuring risk oversimplifying the complexity and dynamism of food production, consumption and distribution.

Literature focused on New Zealand and Australia clearly demonstrates the importance of national histories, capital-labour relations, colonisation processes, culture and the role of the state in organising and mediating agricultural production and marketing (Burch et al., 1996; Lawrence 1996; McKenna 2000, 1999; Le Heron 1993,1996; Moran et al, 1996; Roche et al., 1992; Campbell, 1994; Pritchard, 1996). Taking these 'local' factors into consideration to understand regional change, points to the utility of case studies of agrarian structures and agrifood strategies in the context of those explanations seeking to characterise processes of global restructuring (Burch et al., 1996). In this way it is possible to examine how globalisation literature is dominated by selected 'core' industrialised nations, and assess ways in which Australasian perspective and experiences of globalisation differ from and are similar to those described by metropolitan theorists. This is an important precursor to public policy development aimed at relevant, effective measures designed to optimise public good in a contemporary 'globalising' world.

At least two broad approaches characterise theorising about New Zealand's and Australia's fluctuating processes of globalisation and agrifood restructuring. On the one hand, global-local interactions can be usefully described in the context of macro-level frameworks,

like food regimes (Friedmann and McMichael, 1989; McMichael, 1996). On the other hand are notions of 'food networks' (Arce and Marsden, 1993) representing meso-level concepts and centring on agency in constructing negotiated relationships between food producers, distributors and consumers. These two broad approaches to agrifood restructuring deserve further comment given the vigour with which they have been explored.

Food regimes are an historical concept and link production and consumption to forms of accumulation and regulation in the capitalist system since the 1870s (Friedmann and McMichael, 1989). The first food regime had its origins in white settler colonies and lasted to around the First World War. It centred on supplies of unprocessed and semi-processed food from colonial settlements to 'core' societies in the industrialising Northern Hemisphere (Le Heron and Roche, 1995). The second food regime emerged after World War Two, and revolved around durable foods and livestock, and lasted into the 1970s (Friedmann, 1993; Friedmann and McMichael, 1989). No clear third food regime has emerged, although some speculation about its existence as defined by 'fresh' concepts has been outlined (Le Heron and Roche, 1995; McKenna et al., 1998). In general, food regimes represent different relationships between capital, regulation and production-consumption systems. The main advantages of food regimes is that they provide a structural-analytical architecture facilitating the historical (and incorporated) comparison of different world food producing and consuming regions. Food regimes facilitates evaluation of the historically and geographically uneven processes of agri-food development and capital investments/disinvestments.

Food networks concepts have often been cast in opposition to food regimes, although that imposed dichotomy represents a limited understanding of the main differences (and points of possible convergence) between the two approaches to agrifood restructuring. The notion of a network incorporates negotiated relationships and multiple subjectivities between food producer, distributor and consumer – explicitly including agency into the theorising process (Arce and Marsden, 1993; Marsden and Arce 1995; McKenna, 2000). Food networks also focus on subjective constructions of quality and the ways food delivery, access and the role of food in reproducing everyday life are becoming increasingly differentiated (Arce and Marsden,

1993). Proponents of food networks also argue that value is added to food by 'naturalising' it, rather than industrialising it – which is particularly relevant to fresh products like fruit and vegetables. Given the holistic approach of food networks to linking consumption and production, Arce and Marsden advocate comparative study between different nation states, revolving around regulatory dimensions and the significance of contextualised human agency and culture.

Critics of food regimes (Moran et al., 1996a,b; Campbell and Coombes, 1999; Goodman and Watts 1994) argue that adherence to macro-level structural thinking obscures valuable clues in agrifood systems about the regional specificity in the value construction of food, farm practices and industry regulatory mechanisms. Food networks on the other hand offer only limited insight into historical comparative trends and the useful lessons that can be gained from evaluating the simultaneous movements of capital/state restructuring in different world regions. In other words, the focus on 'networks' can obscure the importance of political-economic structures in shaping regulation, production and consumption patterns.

Geographers have used the notion of 'locality' to negotiate common ground between food regimes research and food networks analysis (McKenna, 2000; Roche et al., 2000; McKenna et al., 1998). Locality facilitates the discussion of complex place-specific dynamics of food production, consumption and valorisation with the aim of expanding understandings of food as socially embedded. Thus, an important space for agency emerges in contributing to the restructuring process. Here, the earlier work of Friedland's (1984) commodity systems approach (CSA) – a precursor to Marsden and Arce's concepts – helps provide a balance between explanations of change at the point of production (including socio-economic and political phenomena) with broader events shaping the processing, distribution, marketing, regulation and restructuring issues connected to specific industries (McKenna, 2000).

In the case of New Zealand, 'locality' and geography play an undeniably important role in shaping the nation's globalisation and restructuring experiences. With reference to agrifood systems, Le Heron and Roche (1995:25) point out that from the New Zealand perspective,

"...the enormity of the globe is an ever present and costly fact. Selling to Europe is to venture half way around the planet; to trade with Japan is still to travel across a quarter of the world's surface". It stands to reason therefore, that New Zealand-based agro-commodity chains are elongated which gives specific local expression to globalisation and investment dynamics. Reading 'locality' into food regimes analysis therefore allows a balance to be struck between the structural and post-structural determinants of agricultural production and consumption. Further, locality also allows food regimes analysis to be expanded to incorporate the experiences of non-core (semi-periphery) ex-colonial nations in discussing changes to the global food order.

2.3 Deregulating the State and Re-regulating Agriculture – 'Placing' New Zealand

In the mid-1980s, New Zealand engaged in a profound 'structural adjustment experiment' (Kelsey, 1995) that was thought to be a finite process with a beginning and end. Rather simplistically, overcoming a legacy of economic problems was linked to improving New Zealand's 'global competitiveness' through fiscal and monetary response-and-stimulus 'solutions' (Le Heron and Pawson, 1996). Paradoxically in a so-called era of 'globalisation', the restructuring process was seen as originating at the national level and being driven by individual politicians (Le Heron and Pawson, 1996). New Zealand's recent, and ongoing restructuring 'experiment' has been shaped by a strong ideological current of neo-liberalism which in turn, has had some profound and unanticipated political, social and economic impacts. Many would argue that these impacts have had negative and inequitable material and social consequences for the majority of New Zealanders (Kelsey, 1995, 1999; Easton, 1997). Moran, 1996 (387, 391) claims that:

> New Zealand embarked on its neo-liberal, regulatory experiment with a frightening theoretical certainty that assumed the path was right before any other nations or groups of nations had moved anywhere near as far...in implementing the reforms, democracy has been eroded in three main ways. First, in the actual process of restructuring itself...second the social contract

> maintained by both Labour and National governments since the 1930s was broken [and] third, the geography of democratic participation and access to government has changed

New Zealand's restructuring process was characterised by secrecy, uneven distributions of and access to social services, and diminished opportunities for people to participate in local/regional management of health authorities and environmental resources. Similar trends were apparent in other 'first world' regions during the mid- to late-1980s where 'internationalising' the state was thought to be inseparable from processes of 'globalisation'. While this might be viewed as an effort by states, including New Zealand, to function as effectively as possible in the global arena, little priority seemed to be given to what impacts more limited forms of democracy might have for people and communities.

These less tangible ideological impacts on state and social policy and community structure and function are significant. Some have argued that a cult of individualism has usurped community and collective activity and identity (Kelsey, 1995, 1999). Conversely, others suggest that restructuring has fostered greater self-reliance and more efficient uses of resources and services. Whether an advocate or adversary of New Zealand's structural adjustment process over the past fifteen years, several points can be made relevant to any analysis linking pipfruit sector restructuring, rural community change and industry regulation.

New Zealand's structural adjustment programme has been predicated on regulatory change to the economy, civil society and political structures. Exploring approaches to regulation, particularly through agricultural producer board structures, is a key theme of this thesis. Considerable debate has occurred particularly since the mid-1980s, over the most appropriate regulatory arrangements for New Zealand's primary industries. In many ways, these debates reflect ideological tensions about how to best define and manage New Zealand's ongoing structural adjustment programme. They also reflect growing dissatisfaction with neo-liberal, 'deregulationist' approaches to national level socio-economic policy.

Although globalisation is often portrayed as a vast, totalling process, unpacking the concept and exploring how analytical scale, political contestability and social processes can inform 'global theorising' is crucial to understanding contemporary regulation debates within New Zealand's pipfruit industry. In their overview of twentieth century capitalism, Le Heron and Pawson (1996) suggest that the mid-1970s in New Zealand characterised the end of the 'long boom'. A brief overview of the five principle periods of global capitalist development in the twentieth century point to five periods shaping New Zealand's current restructuring trajectories (Le Heron and Pawson, 1996):

1) **pre 1930s** - which saw the internationalisation of trade create conditions for 'frontier' expansion and capital inflow to white settler colonies like New Zealand, Canada and Australia, with Britain remaining a hegemonic global economic, political and social power;
2) **1930s -** the 'Great Depression' of the late 1920s and '30s witnessed a financial restructuring crisis characterised by increased financial discipline. In turn, this led to greater state involvement in, and regulation of, national economic and social institutions;
3) **Post WW2 'Long Boom'** - centred on the internationalisation of production, including the establishment of branch plant economies and further state involvement in managing internal and export expansion. The world hegemonic role of British capitalism clearly wanes in this period with the rise of the US economy and international capitalist expansion;
4) **1970s-1980s** - marked the beginning of the end of the 'long boom' with the oil crisis in the 1970s, rapid inflation in the US economy, financial crisis and reorganisation of production - particularly through the 1980s. The role of the state is pared back with the rise of neo-liberal market-regulating governance frameworks. State institutions are significantly reformed with a goal of reduced interventionism in the economy and civil society;
5) **1990s -** a decade of significant international integration of finance, trade and production networks. The role and position of the state in enforcing 'national regulatory options' becomes increasingly complex in the face of world-scale agreements on trade regulation, environmental accords, human rights issues, food safety standards and related issues of production quality.

To this list may be added a sixth, speculative period based on the claim that we are currently at the end of the fifth phase, and therefore in a state of transition to another period of world capitalist development. The nature of this period remains undetermined, but is based on preliminary movements among many 'first world' nations towards increased state interventionism in national economies and a return to Keynsean-like monetary and fiscal management practices. The late 1990s for example, witnessed a subtle but significant shift of the World Bank away from the promotion of structural adjustment programmes predicated on neo-liberal market ideology, towards good governance through a more regulationist approach to national economic and social development (Kelsey, 1999). One of the major factors complicating the characterisation of an evolving sixth period of late twentieth century capitalism is the emergence and importance of large-scale regional trading blocs. For instance, the North American Free Trade Agreement (NAFTA) and the collective identity of a 'European Union' complicate the meaning and role of 'nation states' in promoting, regulating and restructuring national socio-economic development.

New Zealand's position in the global development of western capitalism generally proceeded from its role as a settler colony of Great Britain. British capital played a significant role in the first, pre-1930s period of agricultural settlement, development and expansion. The second and third periods of capitalist development saw branch plants of multinational companies being set up in New Zealand behind the state's 'protective walls'. Import substitution industries formed an important part of this process (Le Heron and Pawson, 1996) and continued through to the late 1970's. Examples of import substitution are car assembly plants, the manufacture of footwear and clothing, and the 'think big' projects of the 1970's such as the Motonui synthetic fuel plant and urea fertiliser production. In short, state-led and state-supported demand was crucial to the long boom (Easton, 1997).

To a large degree, the long boom in New Zealand was ended by Britain's entrance into the European Economic Community (EEC) in the mid-1970s. In general terms, what this meant for New Zealand's heavily agricultural, export-driven economy was an interruption in guaranteed access to lucrative British markets. The point to be made here is that the fourth

period of twentieth century capitalism in New Zealand precipitated a profound, rapid and untested neo-liberal 'experiment' based on a radical withdrawal of the state from economic and social development. It was in this era that the term *globalisation* began to gain common currency.

The extent of this restructuring was arguably the most significant among first world countries in general, and New Zealand in particular. The profound nature of state devolution in the economy and civil society led to uneven, unpredictable and uncontrollable 'results' in the fifth stage of capitalist development. Macro-economic indicators of individual and national economic well-being suggest the experiment has been a heavily flawed one (Kelsey, 1995, 1999; Easton, 1997; Moran, 1996). New Zealand's 'free-market' and 'deregulated' approach to integration into international financial, trade and production networks in the 1990s has not been as successful as projected by the advocates of radical structural change (Kelsey, 1999). Growing dissatisfaction with the 'experiment' and a global shift away from radical neo-liberal ideology may signal a new period of capitalist development in New Zealand as it heads into the next century. The national election results of November 1999 saw a centre-left coalition government come convincingly to power on a platform of economic moderation, social spending and selective regulation, after more than a decade and a half of governments promoting right-wing free market economic public policies.

In describing generalised periods of capitalist development, it is crucial to note that each phase represents temporary 'moments' of hegemonic economic expression. Capitalist processes and developments have been contested throughout history, and have clearly locational expressions, implications and impacts. The preceding superficial review of capitalist development was meant to demonstrate that connections between 'global', national and local levels are dynamic, and that each phase of internationalisation has different impacts at various levels of organisation. It is important to reiterate that there is no hierarchy of importance as capital circulates between global, national and local scales. While it is true that some influences are more significant than others, Figure 1 attempts to summarise the interplay of 'global-local' processes in the context of dynamic restructuring forces.

Figure 1 Diagram showing the mediating role of orchards and where outcomes of the mediation process are experienced.

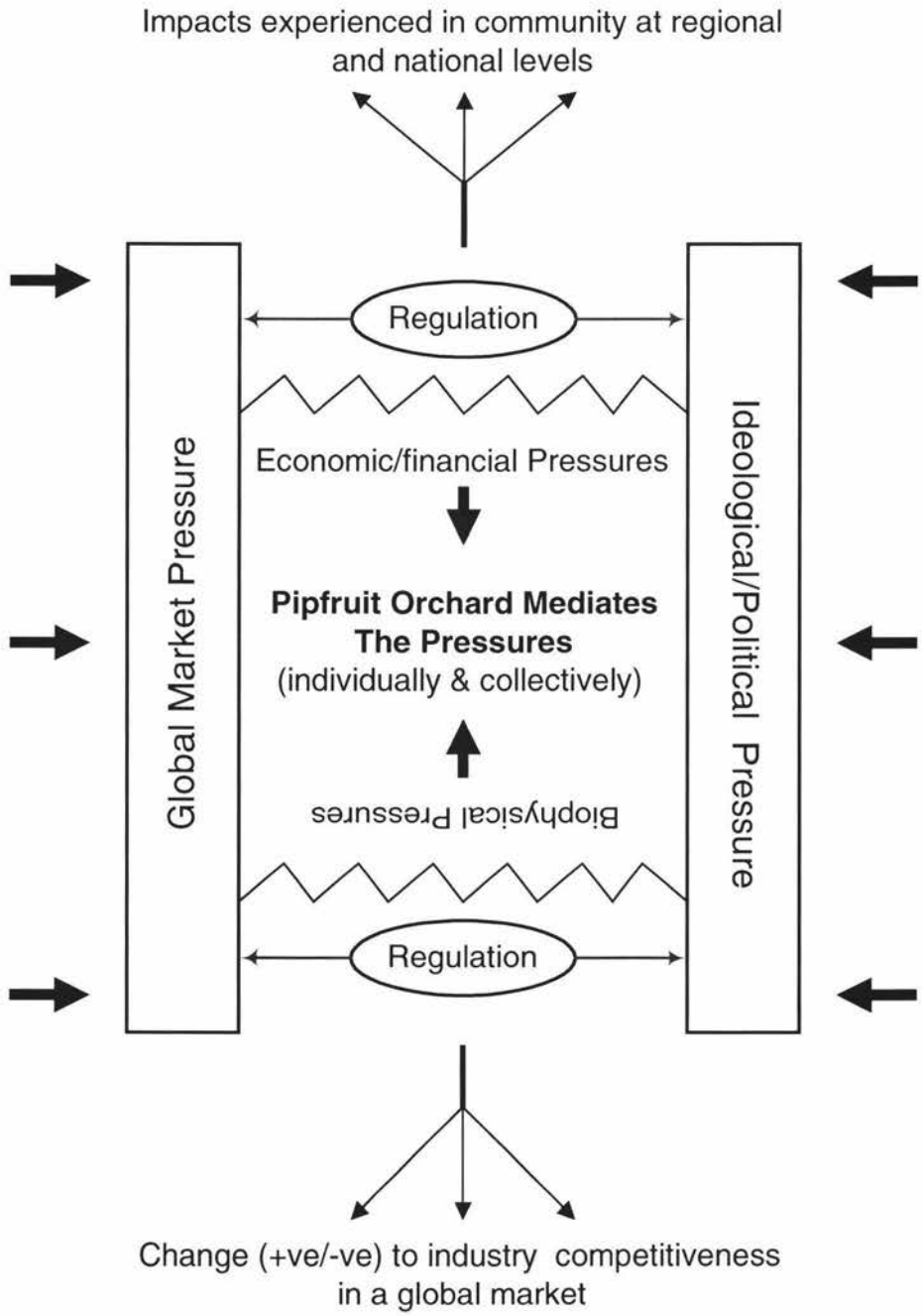


Figure 1 shows links between spatial scales, capital circulation and socio-economic and environmental processes. The diagram also attempts to represent the mediation that occurs at different economic, social and spatial scales as a dynamic process that is constantly adjusting to changes in the pressures that are being exerted into a given point of mediation. Regulation

is represented in the dynamic as a buffering presence that is important to shaping and directing the interconnections between processes at the various spatial scales. Regulatory arrangements reflect cultural choices about how to promote and/or mediate the benefits and costs of capitalist development. Regulatory forms, whether obvious or subtle, have always been important throughout the history of capitalist development.

In detailed discussions of regulatory change in New Zealand, Cloke (1996) suggests that a more exacting and 'placed' discursive account of the transformations that have occurred since 1984 may give rise to more reflexive and insightful explanations of state deregulation and agricultural re-regulation. At the outset of any such analysis it should be made clear that specific agricultural policies were only a part of wider economic reorganisation (Le Heron 1993; Cloke 1996). However, given the dominance of agricultural production to the Gross National Product (GNP), it was anticipated that farmers would be among the groups most significantly effected by state deregulation and agricultural re-regulation. Cloke (1996) suggests that the terms of New Zealand's incorporation into the global economy through rapid and profound liberalisation had a more significant impact on agricultural restructuring than the removal of agricultural subsidies in 1984.

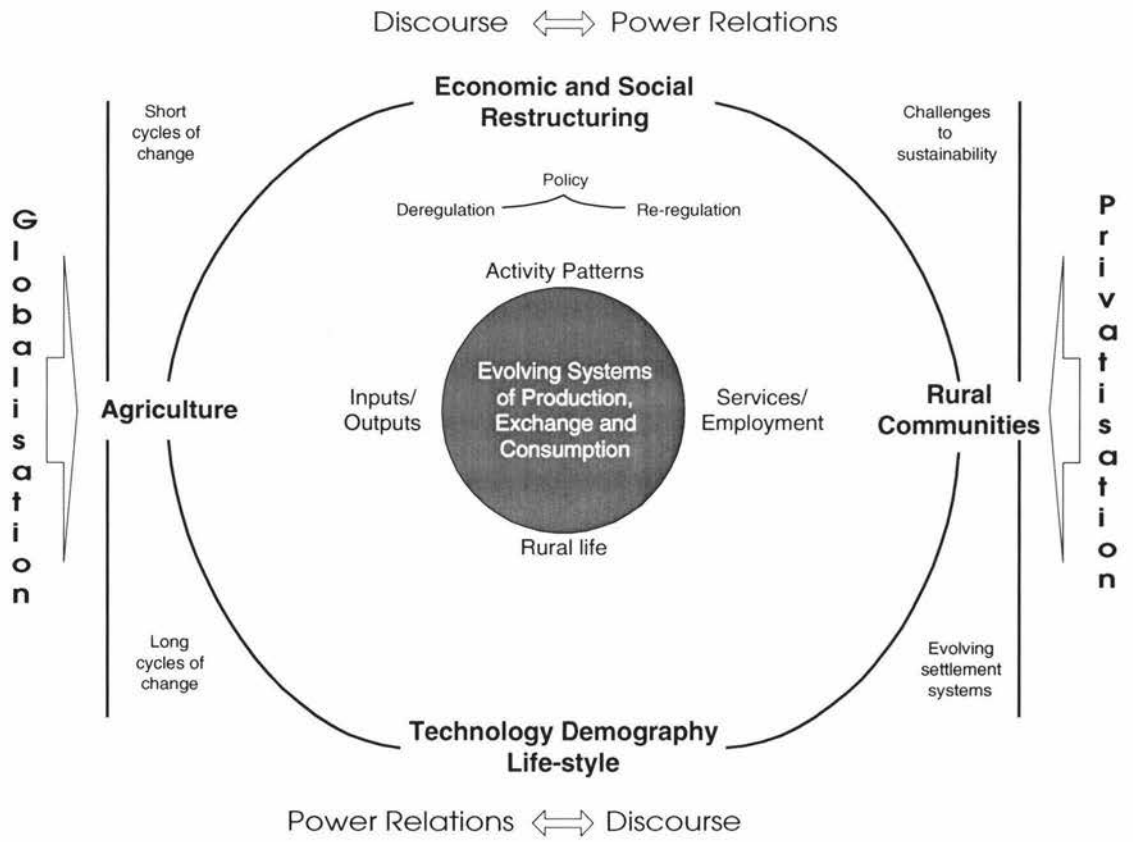
While it is beyond the scope of this section to review the significant and divergent body of literature that exists on the processes, impacts and outcomes of New Zealand's neoliberal experiment in economic reform, several key points should be made by way of setting the scene for a more focused examination of pipfruit industry restructuring. First, while it may be the case that few farmers and growers wish to return to a production situation dominated by subsidies (Cloke, 1996; Roche et al., 1992), that should not be confused with a view that farmers and growers supported the pace and direction of economic liberalisation. Second, despite a largely deregulated macro-economic environment and a restructured state sector aimed at technocratic and functional efficiencies, there are continuing forms of regulation. The two largest fresh fruit exporters (apples and kiwfruit) and the nation's largest industry and foreign exchange earner (dairy) export under statutory protection. Third, the language of neoliberalism and techno-economic ideology of 'new right' proponents has become firmly

embedded in successive governments' policies, plans and goal setting. Productionist discourses – focused on profits, not people – have dominated New Zealand's political landscape for more than a decade and a half.

Policy devoid of a 'peopled' understanding of the profound economic change faced by New Zealanders since the mid-1980s presents a very limited view agriculture and rural regions as productivist and somewhat mono-functional. Nothing could be further from the truth – particularly at the end of the 1990s where both agriculture and rural communities are more differentiated and complex (Joseph, 1999). Discussion throughout this chapter has attempted critical exploration of concepts like globalisation, agri-food restructuring and locality in the course of arguing for the socially constituted, and geographically differentiated nature of 'economic' and productive change. As much as changing the regulatory dynamics of agro-commodity chains, restructuring experiences also shape attitudes, beliefs, social networks, technology and life chances.

This knowledge is vitally important to forming a more comprehensive, richer understanding of pipfruit industry restructuring and grower perceptions of risk in New Zealand. Change and development in rural areas involves complementarity between the social and economic capital of these regions. Building on this view of rural community and agro-commodity change, Joseph (1999) devises a descriptive model of the interrelated dynamics of change in agriculture and rural communities shown in figure 2.

Figure 2 Interrelated Dynamics of Change in Agriculture and Rural Communities



Source: Reproduced from Joseph (1999:3)

The model provides a useful visual summary of many of the key arguments in this chapter. Figure 2 represents an intersection of theoretical and empirical lenses through which it is possible to pursue topics of agrifood restructuring, globalisation and risk in New Zealand, post-1984. While power relations and discourse analysis have not figured prominently in this largely political-economic structural approach to agri-food issues, these factors are critical to understanding the complexity of Marsden and Arce's 'food networks'. Also, neoliberal economic discourses were the vital driver of New Zealand's restructuring experience and remain embedded in the commodification of the landscape and in the language of government and resource management. The balance between 'short cycles of change' (those brought about by the 1984 restructuring push) and 'long cycles of change' (the future directions of sustainable agriculture and socio-economic development) are evolving and contested. The

focus group data presented in Chapter Six explores some of the contested and evolutionary nature of regulatory, rural, industrial and productive change relevant to the pipfruit sector.

By way of conclusion, it is important to note that concepts like 'food regimes' and 'networks' or 'globalisation' and 'privatisation' (Figure 2) are not mutually exclusive. Rather the point is to understand that people, places and productive practices are fluid, and that any attempt to characterise specific arrangements of socio-economic and political factors represent temporary moments of power relations in the social landscape. The agricultural and rural community spheres are never separable, as some would suggest. They are however, mutually constitutive and constantly shifting to break off some historic points of contact only to reform at other points which can represent new/renewed relationships and analytical challenges.

Chapter 3

Historical Development of The New Zealand Pipfruit Industry

3.0 Introduction

The statutory powers controlling the sale of export pipfruit currently held by the New Zealand Apple and Pear Marketing Board (NZAPMB) shape industry structure, functions, strategic operations and future development directions. This section describes the evolutionary history of the current regulatory structure, traced from the early 1900s to the present day. Understanding the foundations of the NZAPMB provide some insight into the complex politics surrounding tensions between different factions of the industry and its presence in the global fruit market.

3.1 From Federation to Board - Evolution of the 'Single Desk'

Fruitgrowing has been carried on in New Zealand since the arrival of early European settlers, with the Government drawing attention to the potential for commercial fruitgrowing in the 1890s. However, it was not until 1906 that any marked developments in commercial fruitgrowing and industry organisation occurred. At that time, improved knowledge of pest control and marketing methods gave New Zealand's fruitgrowing industry - notably apples and pears - a significant boost (Monigatti, 1966). In pre-WW1 years, New Zealand apple growers were shipping mainly to South American markets and their product was being compared favourably to world-leading apple growing regions in the United States and Canada.

Important in the history of the New Zealand Fruitgrowers' Federation was establishing the Orchard Tax Act in 1916. In an historically unique request to be taxed, fruitgrowers petitioned the government in 1915 to impose a tax on all orchardists at the rate of one shilling annual for each acre of planted orchard. The proceeds went to the 'New Zealand Fruitgrowers Federation Limited', and as of October 1916 fruitgrowers had an official body to represent their interests, industries and commercial prospects. Some early debate occurred within the Federation whether it would concentrate its representative

functions on the export apple industry or on all fruitgrowers, with the latter option being chosen.

Between 1910 and 1914, the apple export trade burgeoned from 5,650 cases to 68,000 cases and instigated a planting boom under the slogan, "grow apples for export" (Monigatti, 1966). Much land, previously thought worthless for grazing or mixed cropping (particularly around Nelson's Moutere Hills) was subdivided, cleared, planted and sold by companies to absentee business owners looking for good investment opportunities. Indeed, growing apples was considered a 'patriotic act' as proceeds from national apple shows raised money for war efforts. Early Federation directors also highlighted the health benefits and 'high quality' characteristics of New Zealand apples claiming that the world could not find superior fruit in terms of 'colour, quality, flavour and texture' (cited in: Monigatti, 1966:13).

The Federation's initial constitution promoted the principles of industry co-operation to "... foster and protect the fruit industry throughout the Dominion" as well as encouraging industry growth and development within New Zealand (cited in: Monigatti, 1966:13). To that end, efforts were made to establish provincial co-operatives throughout New Zealand fruitgrowing areas that acted under the auspices of the Federation to market all fruitgrowers' output. The aim was to equalise prices nation-wide, simplify distribution procedures and mitigate against unnecessary financial loss from inter-provincial competition. Otago fruitgrowers were the first society to form a co-operative company in 1917 as they were "thoroughly dissatisfied with the existing methods of marketing their produce" (Monigatti, 1966:14). Other provinces followed suit, and shortly afterward industry decisions on a national scale were being taken to promote smoother logistics within the industry - for example, standardizing the size of packing cases in 1918. At this time, it was also noted that national post-harvest facilities, particularly cool storage in each major city, needed to be increased.

The apple orchard planting boom slowed down between 1917 and 1918, but increased again after WW1. Pipfruit exports picked up by 1920, but both growers and the Federation recognised that the industry was at a critical stage of development in terms of potential for export growth, and demanded "...some proper scheme for the distribution of

fruit, both locally and abroad" (Fruitgrowers Federation Conference, 1920). Increasing pressure for co-operative organisation of the apple industry came from the Nelson Provincial Fruitgrowers Council from 1920. Eventually, the New Zealand Fruit Export Control Board was established under the Fruit Control Act of 1924, and had the power to control all fruit intended for export, leaving provincial industry societies to control domestic fruit production, distribution and pricing. As early as 1926, intense discussion surrounded the branding of New Zealand apples and other fruit. It was decided that export fruit be branded as 'New Zealand' fruit (rather than showing various provincial labels) given that the 'national' brand was better recognised and perceived to represent exceptional quality in overseas markets.

Throughout the 1930s and 1940s, several important trends emerged in the pipfruit industry that built on marketing changes from the previous decade. First, more emphasis was being placed on research and development concerns in variety development, pest and disease control and post-harvest technology as ways to encourage a more robust export and domestic industry. Second, continued political pressure was exerted by growers and the Federation to co-ordinate the export of fruit to maintain maximum profit for New Zealanders in economically constrained times. The historical heartland of the industry, Nelson, adopted a leadership role in promoting co-operative industry action.

In 1946, the Federation directors decided that a proposed Apple and Pear Council should have full powers to regulate and control that industry's domestic and export crop, and after two years of negotiating with the Government, the Apple and Pear Marketing Act was passed in 1948. This act formed the basis of industry operations up until the end of 1993[1], by giving statutory powers to the Apple and Pear Marketing Board to acquire and market all apples and pears grown in New Zealand. From 1948 to 1953 however, final marketing decisions about disposal of the pipfruit crop were made by the central government's Marketing Department. In a milestone decision in the history of New Zealand fruitgrowing, the Apple and Pear Marketing Board took over from the Marketing Department in 1953 in the direct and exclusive control of the purchase, assembly, distribution and marketing of the apple and pear crop. Also of significance in 1953, was

[1] Amendment of the New Zealand Apple and Pear Marketing Act in 1993 constrained the board powers to export fruit only and 'deregulated' the domestic market.

the Orchard Levy Act, which transferred to power to levy orchards from the Department of Agriculture to the Fruitgrowers Federation.

The 1950s and 1960s were decades of varied prospects and developments. Financially, the Apple and Pear Board had some difficult and unpredictable years owing to occasionally heavy Northern Hemisphere crops, and keen competition from Southern Hemisphere producers including South Africa, Argentina and Australia. Some positive steps were made by the Board in establishing local fruit processing factories, coolstores and transportation networks to better service a rapidly growing industry. While strong political support existed for the Board, a vociferous minority of growers complained that Board operations were inefficient and that its exclusive crop control was hindering overall industry development. Criticisms of this sort had existed on the fringes of the industry since the 1920s. However, the vast majority of industry participants and government officials resoundingly supported the principle of statutory control of the pipfruit crop for reasons of economic return, industry stability and growth.

In the 1960s, the varietal mix characterising the national crop was (compared to contemporary standards) extremely varied. Included in the 1963 harvest for example, were 141 varieties with 109 of them making up 2 per cent of the total volume. Sturmer and Granny Smith were the most plentiful varieties, with Delicious, Cox's Orange Pippin, Jonathan and Golden Delicious also being important in the export profile. Debate over this issue highlighted the potentially powerful role of the Board in shaping crop characteristics for effective overseas marketing. These debates have continued and expanded to date where managing crop profiles, characteristics and varieties are among the most important determinants of international marketing success.

Between the 1950s and 1970s, the Hawkes Bay region became a nationally significant growing area, second only to Nelson which remained the historical 'core' of the industry. In 1978, Hawkes Bay surpassed Nelson in terms of overall production volumes and export prominence. Despite increased production, the development of new varieties (Gala, Splendour, Spartan) and international demand for New Zealand pipfruit, the 1970s were crisis years for the Board. With the United Kingdom entering the EEC, duty free access to Britain was lost to New Zealand. Some disastrous financial years in the late

1960s, combined with increasing production costs, unregulated production and non-demanding grade standards, caused intense speculation whether the pipfruit industry would survive. However, significant Board reorganisation, capital development and some good financial years in the late 1970s saved the industry from near collapse.

Building on changes from the previous decade, the 1980s witnessed a far-reaching programme of product differentiation and development. Orchardists were encouraged to plant varieties specific to New Zealand, such as the Braeburn and Gala strains. Growers replanted about 10 per cent of their trees each year to keep up with changing market preferences and to anticipate the development of new varieties (ENZA, 2000). The mid- to late-1980s were also a time of profound political, economic and social restructuring in New Zealand, which included significant reorganisation of sub-national/local governing structures and deregulation of the economy (Le Heron and Pawson, 1996). From the 1980s on, orchardists have received no direct government subsidization for their production. Indeed for the last twenty years, New Zealand has had the lowest producer subsidy equivalents within OECD nations - placing the pipfruit industry under greater pressure to operate efficiently and for growers to accept and manage increasing personal risk.

This wide scale restructuring effort in the apple industry buoyed production and exports in the early 1990s. Although these conditions were not sustained in the mid-1990s (owing partly to depressed international prices and a devastating hail storm in 1994), overall production of higher value varieties will double by the end of that decade. Between 1985 and 1995, New Zealand's pipfruit production base expanded from roughly 7200 ha to 15,900 ha - a large proportion of this being in-fill in the Hawkes Bay region. In 1993, the Government acted against organised criticism of producer board structures (Apple and Pear, and the Dairy Boards) by exempting them from the pro-competition ideology that had characterised the economic and social restructuring period starting in the mid-1980s. The decision to protect the NZAPMB in 1993 was accompanied by opening up the domestic apple market to full competition which attracted interest from British Columbia Tree Fruits Ltd. - North America's largest fruit exporter and periodic exporter of fruit to New Zealand (Le Heron and Roche, 1995).

By 1998-99, the loud but limited calls for deregulation within the industry had been matched by the central government's plans to deregulate those producer boards with statutory control over export goods - including the pipfruit, dairy and kiwifruit sectors. The government had chosen to interpret the financially constrained circumstances within the pipfruit industry as an indicator that the single desk structure was non-competitive, lacked transparency and accountability, constrained innovation, discouraged outside investment, was an inefficient user of resources, as well as demonstrating inappropriate management. The Treasury (1998) advised Cabinet :- "Competitive marketing should improve both efficiency and innovation and turn around the current poor performance of the industry". This was in spite of overwhelming evidence pointing to economic hardship stemming from intense competition and oversupply on the world market and severe crop damage in 1997-98 caused by sunburn and drought. Central government demonstrated ideological opposition to producer board structures. Grower support for the principle of statutory single desk selling of export remained strong, although the need to reorganise and streamline the Board's operational processes and controls had been recognised. With the introduction of another internationally popular new variety, Pacific Rose, and the prospects of an improved selling season in 1999, grower willingness to protect their current industry structure persisted, even in the face of deregulation threats looking more and more likely.

The deregulation ideology has been driven through neo-liberal economic theories that promote the competitive market as the best tool to determine the efficient use and distribution of both resources and the products of resource exploitation. Consistently, the advice being provided to the New Zealand government in 1997 and 1998 was that the single seller producer boards "... impose a significant cost on the economy". (Sinclair and Papesch, 1998). This approach to economics suggests that government (whether at the national or local levels) should have as little involvement as possible in the market place, justified through the premise that government intervention through regulation distorts the market and results in inefficiencies. The down sizing of government departments (e.g. Ministry of Agriculture [and Forestry], Ministry of Maori Affairs, Ministry of Education), the sale of state owned assets (e.g. Rural Bank and Finance Corporation, Telecom, Contact Energy, Government Print) and the corporatisation of other government agencies (Crown

Research Institutes, Metereological Service[2], MAF Quality Management, Valuation Department) are other examples of other neo-liberal driven changes that were imposed on the public sector.

3.2 Current Industry Trends - Building on Histories of 'Quality'

In addition to an expanded production base, other more significant changes to New Zealand's pipfruit industry concern shifting consumer demands, and retail seller requirements stressing food safety and 'quality for money'. New Zealand's reputation for quality early in the century has become one of the pipfruit industry's most strategic assets at the close of the 1990s. Industry research in applied science, marketing and management all point to the need for New Zealand to underpin what some have called its 'psychic premium' (ENZA, 1996b). In a world oversupplied by fruit, consumers in wealthy countries are wanting a fresh food 'experience' when they purchase fresh fruit (Rabobank, 1997). In this context, the market scene of the new millennium will be influenced more strongly by the concerns for personal health, animal welfare, and the well-being of the countryside. New Zealand's present vote of confidence from the rest of the world, in terms of a clean green environment, currently gives it a small window in history on which to capitalise and reposition many of our products (ENZA 1996b)

Stemming directly from demands for 'fresh' and 'quality' is the NZAPMB's activities since 1996 to encourage integrated fruit production (IFP) systems that are recognised by European consumers in particular as providing 'safe' and 'environmentally grown' fruit (see subsequent sections for discussions of IFP). Where European and international buyers of New Zealand fruit have always demanded superior quality, the need to differentiate commodity products (like apples) by creating value added features is increasingly necessary. Given historical and continued patterns of export dependency, it is therefore vital that New Zealand respond to globalised demands for, and awareness of environmental issues in food production.

By the early 1990s, ENZA (the export marketing arm of the NZAPMB) had spread its international risk by developing markets in over 60 countries (ENZA, 1998) - compared

[2] The New Zealand Government was exploring the sale of NZ Metereological Service at the time of writing.

to about 40 countries in the 1970s. With these global diversification strategies, comes a complex set of issues concerning varied market access regulations, international national bio-security priorities and different logistical and presentation requirements for diverse sets of buyers and consumers. The implications for growers are significant and shape options for varietal mix, production techniques, labour processes, management practices and acceptable trade-offs between economic and environmental sustainability.

Integral to shifting consumer preferences for safe foods and the expanded global profile of New Zealand pipfruit is the role of large retail chains as purchasers of ENZA products (ENZA, 1999). Supermarket chains are growing in size and developing extensive international linkages, while at the same time becoming more prescriptive in their fresh fruit requirements. Concentration of the retail sector is particularly pronounced in ENZA's main markets in the UK and the USA which take 30 per cent and 25 per cent by volume, of New Zealand's total crop. The power of retail chains to influence 'environmentally safe' production practices was clearly signalled by UK supermarket Tesco in 1997, which claimed to be the largest single customer of New Zealand pipfruit. Tesco informed growers that not only are they poised to demand that produce be grown under IFP or similar schemes, but that they will not pay a premium for it.

3.3 Summary

From its foundations in the 1870s to its current status as the 'World's Most Competitive Apple Exporter' (World Apple Report, 1999), the New Zealand pipfruit industry has historically been export-dependent and quality-oriented. Key features in the industry's development involved the formation of the New Zealand Apple and Pear Marketing Board in 1948, and more recently, a concerted effort towards new variety development and promoting New Zealand's 'clean green image'.

Historically perceived as an environmental oasis, increasing pressure has been exerted on producers to become involved with formal, documented and internationally recognised growing practices that are environmentally safe. Given its statutory powers, the NZAPMB is advantageously placed to promote coherent and industry-wide 'greening' practices.

However, just as the need for co-ordinated industry action is most vital - in the face of oversupplied and protected world markets - pressures to deregulate the export industry in the late 1990s have grown. The central government appears poised to remove the NZAPMB's statutory powers which, in the estimation of most industry participants, would have deleterious effects on world-leading industry research programmes and the ability of New Zealand's apple industry to take comprehensive and rapid action to implement 'green' growing practices. The following sections explore aspects of industry greening, and briefly review how the NZAPMB is simultaneously contending with competing deregulation and 'greening' factions within the industry.

The New Zealand Apple and Pear Marketing Board was established by the New Zealand government in 1948 but its beginnings were established by the Fruit Control Act of 1924. Each of these applied to apples and pears only, commonly referred to in New Zealand as pipfruit. The main purposes of the 1924 legislation (Hansard 1924) were to provide for (a) orderly marketing of New Zealand export fruit; (b) establishment of standardised fruit quality grading systems; and (c) the negotiation of sea freight charges for exports - which included carriage by boats between ports within New Zealand prior to export. This brought export pipfruit into a consistent regulatory (legislative) arrangement as already applied to meat products (Meat Export Control Act).and dairy products (Dairy Produce Control Act) at that time.

The New Zealand Government has expressed (Hansard, 1924) a strong preference for deregulation of the eight producer boards. In this endeavour, the Government made little distinction between the three boards (the New Zealand Dairy Board (NZDB), the New Zealand Apple and Pear Marketing Board (NZAPMB) and Kiwifruit Marketing Board (KMB)) that export; and the other five producer boards that restrict their activity to promotion and support of the respective product groups they represent (the New Zealand Wool Board, the New Zealand Meat Board, the New Zealand Pork Industry Board, the New Zealand Hop Producers Board, and the New Zealand Raspberry Growers Council).

There is significant work written exploring and explaining food regimes and the globalisation of trade. There is no disputing that there is indeed a global market that has

evolved from an international market that developed from the times of western colonisation and empire building. Even before that, spices, timber, fabrics and people were traded between countries and across hemispheres. Many developments have occurred through this historical period and which are well documented. These include developments in the monetarisation of trade, mechanisation of production, refinement of processing, storage and transportation, advances in biological technologies, and transformation of the manner in which product is presented to the consumer. Arce and Marsden (1993), McMichael (1994, 1996), Buttel (1996) and Burch et al (1996) demonstrate that the evolutionary processes have been market-responsive or market-led. However, there remains some doubt, or speculation, as to whether some of these changes have been market-led or have led the market. In the food arena, the role of trade has changed dramatically over the 20th century. From the trader selling unprocessed or partially processed food products to customers who would prepare meals in the home kitchen, to the current trend of off-the-shelf, heat and eat products that are seen on the supermarket shelf. The role of the processor and marketer is now to anticipate what the consumer can be tempted by and the style of presentation and packaging that transform that consumer temptation into a sale. This challenges the notion that food trade is market-led and elevates the proposition that food trade is attempting to lead the market.

One of the precepts of successful marketing is convincing the consumer that he or she has a need or desire and that the product or service on offer meets that consumer need. Many strategies have been devised over time to achieve this, ranging from snake oil spiels, to the door to door cleaner sales person, to inundation of households with unsolicited promotional mail, to branding and linking of brands and images[3]. Repeat sales through brand recognition is an important part of current strategies. An inherent requirement of a branding strategy is to assure the consumer of consistency in quality and satisfaction. It is these last two aspects that require differentiation between food types when the globalisation of food trade is examined. The differentiation needs to be made between durable and non-durable food types. Durable foods include grains and preserved products such as canned meat, while non-durable foods include fruit, vegetables and fresh meats.

[3] For example the Looney Tunes® promotion used by ENZA in the European and North American markets since 1998 and ongoing with the MilLOONEYum® plan variation for 2000.

Having described important historical aspects of the New Zealand pipfruit industry in a context that has largely adopted a birds eye view of general industry development, the next chapter seeks to present a grower's eye perspective of translating global scale context and challenge, into local level operational strategies for the New Zealand industry and individual growers.

Chapter 4

New Zealand and the International Apple Industry: Global - Local Context and Challenges

4.0 Introduction

The purpose of this chapter is to establish a current context around examination of the grower's eye few of risks that arise from regulatory change that is occurring in the New Zealand industry. This is important because the New Zealand is export focused and must, therefore, mediate international events and trends into local risk mitigation strategies that are developed and implemented in each orchard business enterprise.

The chapter will progressively move through from macro to micro in establishing context. The first section describes the world pipfruit scene, with specific reference to southern hemisphere producers and New Zealand's international competitive position within that global scene. The next sections considers the relationship of global to local by discussing global trends that present challenges to the New Zealand industry, down to the individual orchard level. The final substantive section discusses observations of the New Zealand operating in the new regulatory environment that came into effect for the 2000 harvest season. The chapter concludes with a short summary that will assist in establishing the context that informs the field work conducted with growers that is described in the next chapter.

4.1 The World Pipfruit Scene

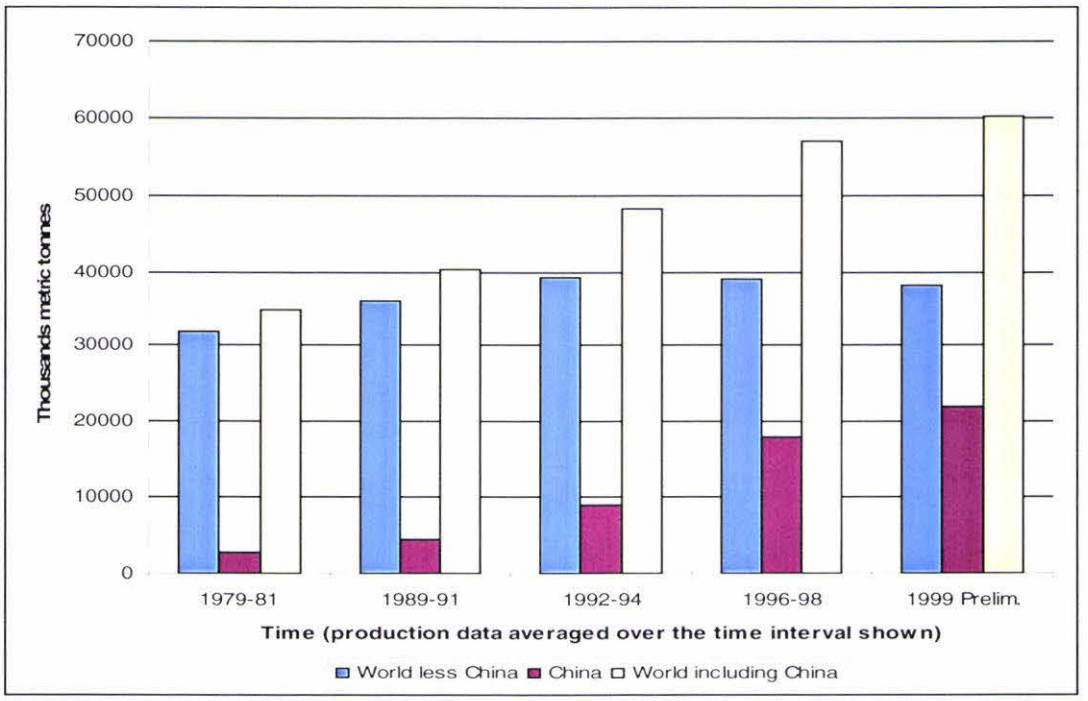
4.1.1 Global Production Trends

In a nutshell, the global fresh apple market is difficult. The market is over supplied, per capita consumption is declining and global production is increasing. There is nothing new in that for the New Zealand industry which gathers intelligence information as a normal operational process. Yet even within oversupplied markets there are profitable opportunities and it is these that the New Zealand industry seeks and which it must compete with other southern hemisphere producers to secure. The following graphs

(Source: World Apple Review 2000) display the trends in world apple production and consumption over recent years.

The first (figure 3 below) demonstrates the changing patterns of production in the world. This shows that production outside of China has remained reasonably static over the last eight years, with preliminary estimates for 1999 suggesting a 2% reduction. China, on the other hand has demonstrated exponential production growth and, with 1999 preliminary estimates indicating that China accounts for nearly 37% of total world production, China's contributions means that global production has grown 22.8% between 1998 and 1999 (World Apple Review 2000:7). This shift has implications for the dynamics global trade in apples, that will be discussed later in this section.

Figure 3 Changing Balances in Global Apple Production

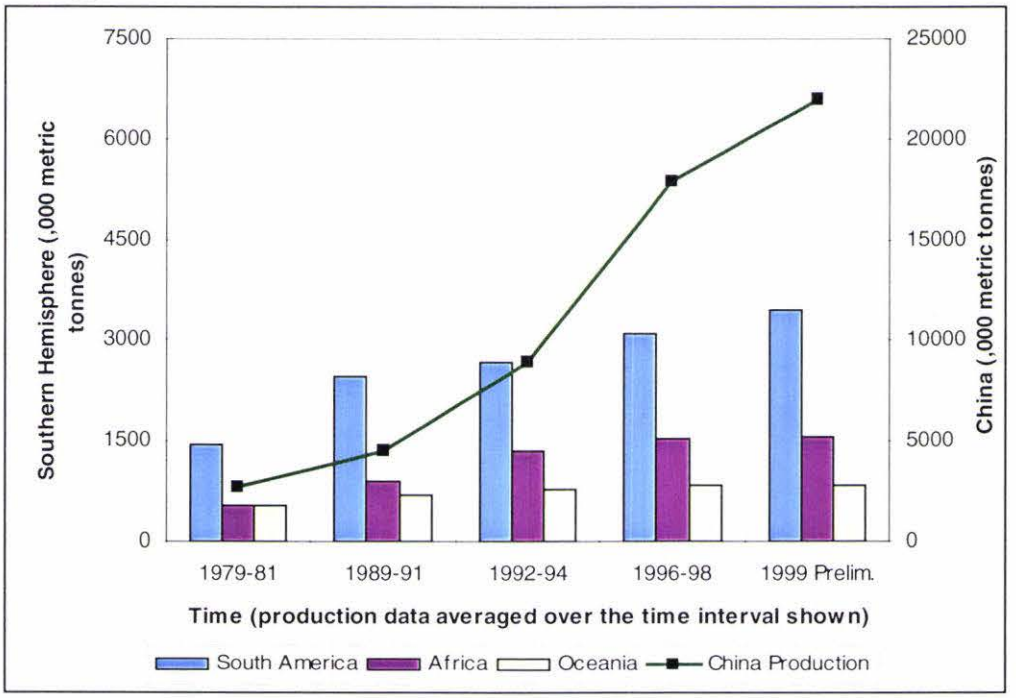


Source: World Apple Review 2000

The second graph (figure 4 below) focuses attention on Southern Hemisphere production and again provides comparison with China. Note that the China data is graphed against the second y axis and uses a markedly different scale from that used to display Southern Hemisphere data. The statistics (World Apple Review 2000:8) indicate that production growth in South America and Africa is continuing to grow at the rate of 12% and 1% respectively between 1998 and 1999, while Oceania production has shown decline

of -2% between the same period, and China has recorded 23% growth. Given the much greater base production volume the Chinese growth is calculated from, this spectacular growth in the Chinese apple volumes has particular relevance for New Zealand and is discussed in the next section.

Figure 4: Growth in Southern Hemisphere Apple Production compared with Growth in China Apple Production



Source: World Apple Review 2000

The China statistics must be treated with a degree of scepticism, as it is doubtful whether China has the infrastructural resources to gather and analyse industry statistics in a reliable manner. However the World Apple Review states 'Even allowing for substantial errors in the Chinese data reporting system, this indicates the colossus China has become in the world apple market.' (2000:17)

4.1.2 The China Connection

New Zealand has a significant historical link with the development of China's primary production farming industries. New Zealand expertise and technology has been provided for the sheep, dairy and apple sectors and there was a growing market for New Zealand apples, until the Tiananmen Square crisis of 15 May 1989 severed access for New

Zealand to that market. In a limited way, this market resumed in 1994 and had grown to about one third of its pre 1989 volumes by 1996. New Zealand exports to China are shown in the table below.

Table 1: The increasing importance of the Asian market region in selected years between 1988/89 and 1995/96 – volumes displayed as metric tonnes

Year	1988/89	1992/93	1993/94	1995/96
Total New Zealand exports	177,895	236,611	208,836	310,170
Exports to Asian region (including China)	16,534	36,833	43,633	67,086
Exports to China	831	0	55	257

Source: Ministry of Agriculture and Forestry, (unpublished)

The figures used in table 1 are the official market statistics for the Asian region. Anecdotal comment from ENZA personnel familiar with the machinations of fruit marketing in the Asian region suggests that statistics of trade with China should be treated with a degree of scepticism. Comment identifies a strong blackmarket trade of New Zealand fruit, ostensibly sold into the Hong Kong market, is destined for sale into China.

Another important connection with China is its proximity to, and affinity with, the Asian market region. Over the 1990's decade, as New Zealand export production expanded, Asia became the third largest export market by volume, behind the European Union (including United Kingdom) and North America (ENZA Statistical Supplement 1999:16).

Table 2: Percentage distribution of the New Zealand export crop by market destination

	1990 - 92	1993-95	1996-98	1999
European Union	68%	60%	58%	60%
North America	16%	15%	20%	21%
Asia	9%	19%	19%	16%

Source ENZA Statistical Supplement 1999

The spectacular growth in Chinese production has now reached a point where domestic production exceeds domestic demand and China has become a net exporter of apples, supplying product into the Asian market region. This development has changed the dynamics of the Asian market, reducing apple prices generally and making it a less

attractive market than it appeared in the mid 1990's - "Only in South Asia were North America and Southern Hemisphere losing the competitive battle. Asian suppliers for the first time supplied more of the fresh apple exports to that region. The main source was China ...." (World Apple Review 2000:36). It is estimated that by 2008, China will produce close to 50% of global production (World Apple Review 2000:41). "Thus in the rest of the world, competitors will have to deal with the same competitive pressures they have faced in the past and with the new threat from China." (World Apple Review 2000:41-42). Yet this threat of China may not come to pass. So rather than being preoccupied with China as the global apple industry wild card, let us now look at what is happening in the traditional apple production and market regions.

4.1.3 The Rest of the World

In developed countries the prospects for apples is not rosy with consumer demand being stubbornly flat (World Apple Review 2000:1), matched with downward pressure on price. The retail trade around the world is increasingly dominated by fewer, larger entities, aggressively pursuing lower purchasing cost per unit as a strategy to maintain profit margin in an otherwise stagnant food market (World Apple Review 2000:64-65). Other factors that are driving rapid change in retail food systems are:

- changing eating habits - more people eating on the run, purchasing and consuming it away from home where fresh apples are less acceptable;
- expanding variety of fresh fruits in both traditional and exotic varietal mixes, competing for both shelf space and the consumer dollar, at the expense of apples; and
- changed store formats where non-food products are more important contributors to retail trade profit than fresh produce.

Consumers, particularly in more affluent markets, are presented with increasing choice of products that directly compete with the traditional fresh fruit segment, such as nutricuticals, 'health' snacks, snacks and drinks, where 'healthy' aspects may or may not influence purchase decisions. In the United Kingdom, France, Scandinavia, total per capita consumption of fresh fruit and vegetables has remained static over the 1980's and 1990's, and apple consumption has declined.

Although international rhetoric supports and calls for greater freedom of trade between nations, the reality is that in agriculture trade sectors, extensive protectionist policies abound in the countries that form New Zealand's major apple markets. These restrictive policies complicate trade of apples and take two general forms - either forming barriers to market access, or providing subsidies that manipulate domestic production, supply and demand dynamics and farmer returns.

One or both of two mechanisms are usually employed to restrict access to a market, either tariffs, or sanitary and phytosanitary quarantine standards. There has been some reduction in tariffs arising from the Uruguay Round of GATT, but tariffs still remain high (World Apple Review 2000:26). Arguably tariffs, although imposing costs on trade access, are more easily managed than quarantine standards, because tariffs are predictable, defined, and calculated on a clear formula. Sanitary and phytosanitary standards, on the other hand are problematic because they rely on processes of inspection to determine and certify the presence or non-presence of organisms, and like all manual inspection processes there is a risk of detection failure that will trigger the application of non-compliance measures in the receiving country. The risk and consequence correlation can be illustrated using the Brown Headed Leaf Roller moth as a native New Zealand apple pest species and the United States as a receiving country. The Brown Headed Leaf Roller moth is one of about 65 actionable pests[1] for which the United States Department of Agriculture has established a zero tolerance for entry. If, during inspection of a shipment on arrival at the point of entry into the United States, a Brown Headed Leaf Roller moth is found then that complete shipment (i.e. whole ship load of between 100,000 and 200,000 cartons) will be returned to sender - subsequent action is the exporter's responsibility. Typically such a shipment would be diverted to an alternative market. And although this sounds a simple enough strategy, the reality is that the marketing plans (for New Zealand apples) for each market region are developed and agreed with supermarkets and other customers, up to a year ahead of each marketing season. Therefore, a shipment diverted from one market to another market poses a significant destabilising threat to those marketing plans. Particularly given that markets that are already over supplied and delivering lower real returns to producers

[1] Actionable pests are organisms that are considered to pose a significant threat to the importing country, as defined by the importing country, and are not permitted entry.

(World Apple Review 2000:11). Another facet to the quarantine standard as a mechanism to control access into markets, is the influence it exerts over the production process in the exporting country. Continuing with the New Zealand to United States example, the New Zealand industry developed a specific United States market strategy that imposed procedures and standards that dictated agrichemical pest control measures (to attempt elimination of pests in the orchard), rigorous on-orchard checking and monitoring procedures (to detect presence before fruit leaves the orchard), inspection and detection procedures in packhouses (a second step in detection before entering export inventory), and finally a procedure to assemble 'blocks'[2] of USA market suitable fruit for pre-shipment inspection by both USDA and New Zealand export inspection and certification personnel. Typically, and despite the extensive efforts in each step of the production and post harvest chain, around 30% of these 'blocks' fail to pass this final inspection step. However, with the fruit still in New Zealand at this stage, the industry is able to anticipate and manage for a degree of failure, allowing greater flexibility to determining alternative market destinations than if the fruit was at port of destination. This does impose additional cost in the production chain, that can be argued as a market access cost. With the apparently continual growth in the actionable pest list, some would argue that creating barriers to market access is a major purpose of this mechanism.

Before moving on to examine challenges for New Zealand, the current scene for fresh consumption apple trade in the world can be summed up as characterised by, expanding production, over supplied markets, stable or reducing levels of consumption in developed western markets, facing increasing competition from alternative food products, downward pressure on price, and increasingly restrictive market access practices. The World Apple Review (2000:111) identifies the four major issues facing the global apple industry - stimulating demand; freeing trade; biotechnology; and food safety. Each is important but from New Zealand's perspective, increased demand and freeing of trade hold the greatest potential for increasing the profitability of the New Zealand industry.

[2] 'Blocks' are an amalgamation of between 10,000 and 60,000 cartons of fruit that nominally meet all US market access criteria.

4.2 Global - Local Challenges for New Zealand

For the New Zealand pipfruit industry to be successful, it must mediate the factors and characteristics of the global apple scene into strategies that allow New Zealand fruit to competitively and profitably participate in the global market. That is a fairly obvious statement, yet inherent within that statement are challenges as to how the New Zealand industry should be structured to maximise it potential opportunities beyond it's shores into the world market arena. In chapter 3, the historical development of the New Zealand industry was discussed, with particular focus on the evolution of regulation that contributed to shaping the industry to what it is today. This section then, looks at the implications of global market characteristics for the New Zealand industry.

4.2.1 The Market and New Zealand

With few exceptions, global market conditions have rarely favoured New Zealand apple growers since exports began in the 1890's (Monagatti 1967; 1993) Even in the earliest days of counter-seasonal selling to the British market - the 'Mother Country' - South Africa had an advantage in terms of better logistics, cooling technology and proximity to market. On top of these factors, the biophysical and financial risks associated with orcharding, transport costs to market, rising production costs, and efforts to continually improve and monitor quality, have historically characterised apple production. So what is new? Even when advocates for deregulation of the New Zealand industry claim that the industry of today is a different beast from times past. The fact that supply chains are now more numerous, complex and cost competitive, and that buyer consolidation is intensifying in every global market are all reasons why New Zealand must look at the real market issues facing the New Zealand pipfruit industry and define the best commercial solutions for success.

4.2.1.1 Polarised Positions On Deregulation

All too often debates over regulatory change for the pipfruit industry appear polarised and almost diametrically opposed (status quo or deregulation). Each position tends to indicate a lack of understanding of the regulatory change that has helped shape

industry development, in both economic and social (community) contexts, and recognition of the level of contention that has surrounded regulatory change through that development history, expressed from grower level to central Government (Monagatti 1967; Hansard 1924; 1948). Essentially the New Zealand pipfruit industry of today is a product of individual and collective endeavour in a regulatory framework that has changed over time. The current debate is about changing the regulatory environment to enhance New Zealand's competitive position in the market - re-regulation, rather than deregulation. Another aspect absent from regulatory change debate is 'wide' analysis of implications stemming from regulatory change. Analysis has generally been limited to export market performance, without analysis of consequential implications that regulatory change could pose to regional communities, regional economies, and the overall national economy. Such narrow analysis is consistent with the analytical and ideological approach that drove the New Zealand structural adjustment process (Kelsey, 1995). It could be argued that breaking down the single desk seller producer boards (deregulation) is a reflection of residual neo-liberal ideology momentum within the bureaucratic agencies that advise government and influence national policy.

4.2.1.2 Seasonal Employment Contribution

Apple production occurs in locations that combine important social and physical geographic characteristics. The production process is a biological process, rather than industrial. Consequently, the New Zealand's growing regions have consolidated in locations where the physical geographic characteristics of soils and climate are conducive to the biological process, minimising the climatic risks posed by frost, hail, flood and wind, albeit that management of some of the climatic risks requires technological intervention, such as frost protection.

The production system remains labour intensive (Bird 1995), with most tasks that occur in the orchard (as against after harvest) being only moderately mechanised through, for example, use of tractors, and hydraulic work platforms. To date, in New Zealand apples have resisted all attempts to develop successful mechanised harvest and pruning technology. Because of this, the major growing regions are supported by urban population centres for which pipfruit production is a major of the local regional economy (YAF

Consulting Ltd 1998a; BERL 1997; 1998). The labour demand is seasonal, matching the biological cycle of the apple tree. The table below is an analysis of the model orchard wages cost from the MAF Horticulture Monitoring Report (2000) and displays indicative seasonal labour distribution for the 1999/2000 season, compared between the Hawkes Bay and Nelson regions. Labour required to carry out thinning can vary markedly between years and is influenced by the efficacy of natural and chemical thinning processes. Variation in efficacy is common between regions and this is likely to be a factor explaining the difference in paid labour shown in the table.

Table 3 Indicative distribution of paid labour input to the 1999/2000 apple production cycle.

	Hawkes Bay	Nelson
Pruning (Winter)	14%	17%
Thinning (Spring/Summer)	16%	21%
Harvest (Autumn)	70%	62%

Data: MAF Horticulture Monitoring Report (July 2000)

Orchards and packhouses are major employers in Hawkes Bay and Nelson and for many of the seasonal work force, orchard or packhouse employment is their only paid employment each year. The Hawkes Bay Seasonal Employment Task Force estimated that with a total Hawkes Bay pipfruit crop of 14 million cartons (equivalent to an export volume of around 7.5 million cartons), between 10,000 and 11,500 employment positions were generated. Extrapolating this labour input over an entire New Zealand export crop of say 18 million cartons, between 24,000 and 27,500 employment positions are generated. The Hawkes Bay sensitivity table on which these projections are based is shown in table 4 below.

Table 4: Sensitivity of estimated total seasonal staff numbers required to harvest and pack the Hawkes Bay pipfruit crop, based on employer estimates of employee productivity.

Output (cartons) Per Seasonal Employee	Hawke's Bay Crop Volume - Cartons				
	10,000,000	12,000,000	14,000,000	16,000,000	18,000,000
1,220	8,197	9,836	11,475	13,115	14,754
1,245	8,032	9,639	11,245	12,851	14,458
1,270	7,874	9,449	11,024	12,598	14,173
1,295	***7,722***	***9,266***	***10,811***	***12,355***	***13,900***
1,320	7,576	9,091	10,606	12,121	13,636
1,345	7,435	8,922	10,409	11,896	13,383
1,370	7,299	8,759	10,219	11,679	13,139

Source: Bird (1995:14)

This discussion of labour creation has identified employment position creation, rather than full time equivalent employment labour units. This is a departure from common representations of labour statistics and was done intentionally. The justification is that the pipfruit industry relies on the number of hands doing the tasks, rather than time input. The harvest period for apples is dictated by biological characteristics of the fruit that are controlled by physiological processes with the fruit, which in turn are influenced by environmental and climatic factors. The 'window' to harvest a given variety bears no relationship whatsoever to the processing capacity of post harvest activities. So when the fruit is ready to harvest, it must be harvested or lost to export, with consequential decimation of value. The industry accommodates these crop risks and has evolved employment practices that permit a numbers approach through employment conditions that will usually accommodate an individual's availability for work, rather than prescribing fixed times of work.

Yet seasonal employment in orchards and packhouses is only one aspect through which the industry contributes the regional and national economies. The horticultural sector, of which the pipfruit industry is a major player in both Hawkes Bay and Nelson, is supported by and provides impetus to a range of other economic and social activities. An analysis of the pipfruit industry needs to recognise the complexity of the industry. Business and Economic Research Limited (BERL) uses a the economic driver cluster approach in its analysis and commentary on regional economies.

4.2.1.3 Pipfruit as an Economic Driver Cluster

The economic driver cluster approach for economic analysis acknowledges that no one industry or sector exists in isolation of other support entities or activities. BERL has used this approach to identify important driver clusters in both the Hawkes Bay and Nelson regions.

Both these studies identified the horticultural cluster as the second most important source of full time employment, only marginally behind the pastoral products cluster. These findings are reproduced in table 5 on the next page.

Table 5 Hawkes Bay (1996) and Nelson (1997) driver industry clusters - Employment

Hawkes Bay						Nelson				
Support infrastructure	Specialist suppliers	Product suppliers	Export sector	**No FTE's total**	**Cluster**	**No FTE's total**	Export sector	Product suppliers	Specialist suppliers	Support infrastructure
24	1458	4000	3358	**9040**	Pastoral products	**2232**	547	1365	246	74
78	1165	1060	6550	**8853**	Horticulture	**3652**	2840	510	274	28
	45		120	**165**	Forestry	**1613**	1030	210	373	
3	75	195	60	**333**	Seafood	**3755**	2210	1218	229	98
25	224	380	857	**1486**	Engineering technologies	**955**	844	18	93	
	45	90	300	**435**	Aviation	**488**	464		24	
			670	**670**	Tourism	**2277**	1460	572	245	
	82	637	896	**1615**	Information technologies	**218**	53	15	150	
130	3093	6362	13011	**22596**	Sub total Driver Clusters	**15190**	9448	3908	1634	200
3676	2446			**6122**	Supporting industries	**6507**		70	4528	1909
3806	5540	6362	13011	**28718**	Sub total Driver and Indirect	**21697**	9448	3978	6162	2109
				2547	Other primary and secondary	**689**				689
				23115	Other services	**9989**			902	9807
				54380	**Total**	**32375**	**9448**	**3978**	**7064**	**11885**

Source: BERL 1997; 1998

Table 6, defined under the New Zealand Standard Industrial Classification (NZSIC) categories, demonstrates the types of employment that characterise the industry. This also introduces the notion of multiplier effects that represent the dynamic nature of an economy - where input stimulates activity that is greater than the nominal value of the original input. In this case the multiplier factors that are used were developed by MAF (1992-93) in relation to the Nelson region. MAF and other economic analysts (Kearney 1998; McKenna 1998) consider that these multipliers are conservative and consequently able to be applied to the Hawkes Bay region, shown in table 6 with little risk of over calculating multiplied contribution. The employment multiplier is 1.5 times.

Table 6: Employment derived from the horticultural cluster in Hawkes Bay, 1996

NZSIC	Description	Employment (FTE's)	Multiplier Effects (FTE's)
Export Sectors			
141117	Fruit Growing	4940	7410
31130	Fruit and Vegetable Processing	1420	2130
31219	Starch Manufacturing	190	285
	Subtotal	**6550**	**9825**
Local Product Suppliers			
11115	Horticulture	930	1395
11116	Cropping	130	195
	Subtotal	**1060**	**1590**
Specialist Suppliers			
112	Crop and Hort Services	675	1012
351	Chemicals and Fertilisers	55	82
354/6	Packaging	324	486
3822	Agri. Machinery Manufacture	48	72
61821	(part)	43	64
92030	Agri. Machinery Wholesale (part)	20	30
	Fumigation/Pest Control	**1165**	**1747**
	Subtotal		
Support Infrastructure			
93200	Research Institutions (part)	78	117
	Subtotal	**78**	**117**
	Total Horticultural Products	**8853**	**13275**

Source: BERL 1997

Tables 5 and 6 show the depth that the horticultural sector penetrates into the communities in which it is located. Because of this then, regulatory change must be

scrutinised to identify possible and likely effects and consequences that could stem from such change, for the broader community the industry is located in.

4.2.2 The Community Speaks Out

When producer board deregulation was announced in the budget of 1998 by the Treasurer Winston Peters, the move was predicated on neo-liberal ideology. Government, in making this policy announcement, under estimated the reaction that this move would elicit in horticultural growing regions. The Hawkes Bay and Nelson communities mounted public demonstrations to protest the Government action. Personal experience of the Hawkes Bay protests and anecdotal accounts of the Nelson protest suggest that the governing National Party (traditionally known as the farmer's party) lost significant voting support from the rural constituency. United Fruit and United Kiwi were two community organisations that formed, funded by voluntary donation, as a direct result of the community disquiet over the deregulation announcement. Membership was open to anyone in the community. Research funded by United Fruit and United Kiwi led to two discussion documents being produced that sought to broaden the debate and firmly place wider community concerns on the deregulation agenda (McKenna 2000). It is important to note that each of these bodies was not ideologically opposed to deregulation, but willing to consider and accept change, should thorough and robust analysis indicate that it is in the best interests of the industry as a whole. This is demonstrated by United Kiwi Trust Chairman, Bruce Abrahams' letter to Prime Minister Shipley:

> "United Kiwi seeks, in writing, a commitment from the National Party stating that deregulation of the single channel export seller will not occur without a 75% or greater majority of growers indicating that they want the industry single channel seller deregulated. In other words, the aim is to ensure industry operations reflect kiwifruit grower and industry interests and sentiments and are not initiated by the National coalition government." (YAF Consulting Ltd 1998:10).

The New Zealand pipfruit industry, philosophically shares a similar approach to the value of the regulated single channel export marketing body - ENZA - as does the Kiwifruit industry toward ZESPRI. However, as events have unfolded since 1998, and the

pipfruit industry come under greater financial pressure due to the global market factors already described, growers are increasingly less able to make a stand on principle about retention of the single desk. In many ways the industry is in crisis and in others it is at a cross roads.

4.3 Industry Crisis or Crossroads?

The Apple and Pear Export Regulations 1999 became operative in the 2000 export season - a regulatory change that supposedly enhances the regulatory efficiency governing the pipfruit industry. The key changes were (Apple and Pear Export regulations 1999, Part 5 section 40):

- The establishment of ENZA as a company with all shares held by and tradeable between grower suppliers only. ENZA must be permitted to export apples and pears and becomes the single channel exporter for the industry, with point of procurement being free alongside ship (FAS), thereby making all onshore activities contestable in a competitive market environment. Formerly these functions were either directly managed by ENZA or managed under contract to ENZA.
- The former New Zealand Apple and Pear Marketing Act was repealed and the 'old Board' dismantled.
- A 'new' New Zealand Apple and Pear Board was formed as a body corporate to act as the industry regulatory vehicle. Amongst its functions are: (a) to authorise the export of apples and pears; (b) to monitor and enforce the non-discrimination rule, the non-diversification rule, the information disclosure requirements; (c) appoint members of the export permits committee - an independent body to authorise exports via independent exporters under defined criteria.
- Industry good functions - e.g funding and commissioning research, lobbying, etc - to be managed by an independent grower group (subsequently Pipfruit Growers New Zealand).

Arguably the most contentious regulatory change is the establishment of an independent Export Permits Committee, independent of the Board and ENZA. All export permit applications must satisfy three criteria which are (Apple and Pear Export regulations 1999, Part 3 section 18):

- The application must complement the current marketing activities of ENZA; and
- The application must not be likely to result in any adverse effect on ENZA's reputation in the relevant overseas market or markets.
- In this regulation, 'complement' means 'not undermine'.

Ostensibly, these regulatory changes offer the industry greater freedom for self determination as the industry is no longer administered under Act of Parliament, a regulatory institution that has been exposed to the full parliamentary political process and has proven cumbersome to negotiate when industry driven change is called for. The old Act also provided for other political agendas to be imposed on the industry that appeared more focused toward party political point scoring than strategic concern for industry good. Under the new regulations, change can be effected by Order in Council, which avoids the political risks of the parliamentary debating chamber. So why is the industry not satisfied with the changes and getting on with the job of competing effectively in the global market place?

Essentially, the theory and the practice does not correlate, in the minds of many growers, and consistently amongst the focus group participants who have taken part in this research. Export permit fruit that the applicant claims are differentiated from ENZA marketed product, and destined to be complementary to the marketing activities of ENZA, shared the same shelf space on the supermarket shelf in the United States of America. In Brussels, competing fruit wholesalers Van Assche (handling export permit fruit) and Van Dijk (handling ENZA fruit) occupied trade display space facing each other across the corridor of the CEEC Market Hall. One of the export permit lines handled by Van Assche claimed to be 'kosher' fruit destined for the niche Jewish market, yet the fruit sat side by side with conventional lines of fruit, from New Zealand and other countries. On supermarket shelves in France, Belgium, and Germany, export permit fruit was mixed in with ENZA fruit. (YAF 2000a, b).

As a tool to add value and revenue to the overall New Zealand pipfruit industry, it appears on the evidence in global markets, that the criteria for expert permits are not being complied with. That was in the first year of operating under the new regulations with

approximately 1.5 million cartons of apples approved for export through the permits process. In 2001 the indications are that permit volume will increase to around 5 million cartons and there appears to be no mechanism by which permit holders can be held to account for performance and compliance with permit conditions. It is understandable that growers see the industry at a crossroads and in crisis. Grower understandings of presenting a united negotiating presence in the global market through ENZA, while allowing judicious opportunity for independent exporters to gain benefit from market opportunities that do not undermine ENZA's activity or performance, are apparently being subverted to the benefit of a few growers and cost of the majority.

4.4 Summary

New Zealand pipfruit growers are a long way from export markets and even though the New Zealand industry has been ranked by the World Apple Report as the world's most competitive apple industry for four consecutive years - 1996 to 2000 - the industry is under intense financial and political pressure from within New Zealand. World apple markets are characterised by over supply, stable to reducing consumption, consolidation of retail entities, increasing competitive pressure from other fruit categories, and reducing real grower returns. Retail consolidation means that retailers exert greater power in trade negotiations, that typically translates to reduced purchase costs per unit and more exacting product quality specifications.

The New Zealand orchardist is part of the global market as the first link in the product chain, ultimately any increases in costs beyond the orchard gate and decreases in market returns will be met by the grower. The risk mitigation practices adopted in the orchard enterprise, ultimately attempt to mitigate the international market factors that have already been discussed. And under the new regulatory environment, the arrival of export permit fruit in an ENZA supplied market will probably result in disruption to the planned ENZA sales programme in terms of both volume sales and sales value. Because the ENZA grower is paid market receipt nett of all costs to market, any unsettling or disruption to sales programmes in fragile over supplied markets will almost certainly translate in added costs and reduced prices.

Grower understanding of global risks has a big influence over local responses to calls for change. It could be argued that grower understanding of the global risks is limited due to the historic success of the single channel seller producer board. As will be seen in chapter six the Board (a grower euphemism for the New Zealand Apple and Pear Board, or ENZA) has meant that growers have not needed to develop special marketing or market analysis skills and instead have become, arguably, some of the best growers in the world. But first, the next chapter discusses research methodologies that can be used to uncover the orchard-eye view of how growers construct, define and mediate the risks that threaten their orchard enterprises, as part of the global to local challenge.

Chapter 5

Research Project Design and Methods

5.0 Introduction

This chapter critically discusses the methods used in empirical study and outlines the main components of the research design. The context for the research design is set in the first section through a discussion of 'counting women' which includes a brief review of feminist epistemology, empiricism and the politics of knowing. The relevance of a feminist geographic approach to this study lies in its exploration of multiple courses to knowledge and the valuing or validating of information that is derived through non-empiricist, qualitative means. The overall study design aims to create a reflexive approach to social theorising and, in so doing, self critical comments are made concerning the implications of choosing various methods and approaches to explanations. The second section centres on identifying key research assumptions and proposes ways to evaluate processes and mechanisms of change central to the theoretical goals. The third and final section highlights the main components and phases of empirical study and reflects on data uses and limitations.

5.1 The Politics of Method - Feminism, Criticism and Geographic Explanation.

In the absence of self-aware and self-critical theorising, the applicability of geographic explanation is limited. Among other things, the strength of feminist geographic critique lies in its inherent role to challenge accepted theoretical norms and categories of analysis and relationships forming the basis of explanation. Increasingly, geographers are being drawn into debates over how methodologies act as powerful extensions of epistemological and ontological positions (Hodge, 1995). Recognising the fact that even the simplest method of investigation is imbued with meaning and assumptions about how a 'thing' can be known, is instructive because it allows us to reflect on what can be learned from different types of information collected. From the outset, it is important to clarify that no matter what approach to research is taken, the most we can hope to achieve is only ever a partial perspective, where the researcher explicitly positions him/herself within the matrix

of social and political power relations in respect to the object of study (Mattingly and Falconer-Al-Hindi, 1995).

The challenge of 'what' can be known brings us back to the starting point of 'how' we can know. The following sections critically review selected literature in feminist geographic research. Although this review is superficial, it touches on several important aspects of quantitative analysis and feminist research objectives relevant to this study.

5.2 Where Does The 'Grower' Count? - A Methodological Balancing Act.

Much recent feminist geographic literature has centred on the role of quantitative methodology in research. These debates are relevant to this study in general because of the use of quantitative techniques in the analysis of changes in production and industry restructuring.

Early feminist geographical work sought to redress the absence of women and later, the importance of gender, by counting women to increase their visibility and significance in empirical and theoretical work. Feminist empiricism, quantitative research highlighting the spatial dimensions of women's inequality, has been based on the idea that women are overlooked or misrepresented in mainstream science due to oversights of male and/or non-feminist researchers (Mattingly and Falconer-Al-Hindi, 1995) According to McLafferty (1995),

> The many examples where researchers interpret the same 'facts' differently, or where disaggregation of data reveals completely new patterns, or where the choice of scale or place affects what we see, confirm the lack of complete objectivity in quantitative research (p437).

and

> Quantitative methods are well suited to describe and probe the measurable aspects of women's lives, to analyse spatial associations, and top document spatial and temporal inequalities (p438).

In terms of 'counting women', quantitative methods are applicable to those aspects of women's lives that can be measured and that show spatial or distributional inequity

(such as income, labour force participation, etc). The point here is not whether women should count, but that only certain types of questions can be answered using traditional quantitative methods. In respect to imposition of restructuring reform in the New Zealand pipfruit industry (post May 1998), government policy development appears to have relied on measurable research methods only.

The feminist approach questions the social construction of knowledge and its role in explication and transformation of gendered power relations (Staeheli and Lawson, 1995; Moss, 1994; Lawson, 1995; McLafferty, 1995). Applying this approach in this study as it enables questioning of how the 'knowledge', that informs and drives government regulatory reform, is constructed. In terms of theorising and methodological choice, claims to objective truth, must be called into question on the grounds that, when built solely on quantitative data, they reproduce and reinforce incomplete constructions of power and identity. In knowing something, it is impossible to separate oneself from what is being investigated. However, where feminist theory represents a significant departure from structural analysis, is the questioning of Marxism's broad and abstract categories explaining social and economic processes. Explaining industry inefficiency (under current regulatory structures) in terms of class theory, for example, overlooks the reality and complexity of the pipfruit orchard as a social and economic structure and process operating simultaneously at the local and global levels.

Achieving a 'feminist standpoint' in analysis demands an agenda for research that sorts through our positions as researchers and those of the researched in order to build narratives that are inclusive of the researched , while maintaining a commitment to clarify how knowledge is socially constructed. Moss (1994, 1995) calls this agenda betweenness and argues that it can be achieved in reflexivity and self-critical analysis. Methodologically, the claims of feminist standpoint theory are difficult to reconcile with quantitative research, unless the limitations and use of data are clearly outlined at the start of the investigation.

In terms of the practice of science and the generation of knowledge, standpoint theorists suggest that all we can ever work with is a partial perspective on understanding phenomena. Our embeddedness in multiple positioning of power, truths, facts and

conditions, must be drawn out and incorporated into our explanations. Rather than dismiss quantifying methods as generating knowledge that is inappropriate to valorising the orchardist's or industry's way of knowing, criticism should be kept to exposing the false notion that quantification leads to a monopoly on truth.

> There is no presupposed vantage point in the search for truths in poststructuralist thought. Objectivity is not equated with *a* truth, rather such thought permits the possibility of *multiple* truths. Care must be taken to assure that the subject is not split via choice of method into an object separate from its subject. What multiple truths means for quantitative methods is that counting must be situated within a partial account of an indivisible subject/object (Moss, 1995 p.444)

Based on the above review, feminist critiques of ways of knowing, does not invalidate quantitative methods but requires quantitative geographers to think critically about their research and carefully specify its place. The lessons drawn from adoption of a feminist approach that are especially relevant to this research design concern the need to carefully examine the collection and quality of data and question what is being measured, through examination of whether qualitative avenues have been adequately explored, to fully inform the appreciation of how regulation shapes the New Zealand pipfruit industry as a simultaneous participant in global trade and local economy.

Related to this discussion on the use of quantitative data in feminist research are questions concerning how the quantitative : qualitative dualism in methodological development perpetuate artificial divisions in geographic explanation. Particularly in analysing the social construction of knowledge, qualitative methods such as intensive interviews, focus groups and participant observation, are employed because they can document and expose the 'irrational' relations that qualitative methods cannot capture. Qualitative data facilitates the deconstruction of 'categories' to make sense of social and biophysical processes in a way that is opposite to how quantification involves building categories and fixing social and biophysical relations in order to stabilise them for analysis. This is not to suggest that using both qualitative and quantitative methods is counterproductive. Indeed, both approaches to analysis and explanation are employed in this study, guided by the fact that counting is used to understand how geographical

placement shapes construction of the political, economic and social identities and structures of the industry.

The challenge in this study of political or regulatory restructuring in the pipfruit in industry is to think carefully about how what has been 'seen' and 'quantified' in the policy development process of Treasury and how that reflects that which is theorised and imagined in locations such as Hawkes Bay and Nelson which are each, a partially visible construct with material 'measurable' manifestations.

Here the qualitative : quantitative dualism is vital to measuring how aspects of industry structure (through production and participation characteristics) contribute benefit to the regional and national community. The qualitative aspects will enrich the project by encouraging the subjects to have a voice that will add depth to the quantitative aspects that provide a sense of where the research fits in, socially, economically, politically and spatially (McLafferty, 1995). The choice of methods, therefore, represents a balancing act between feminist ontologies, theorising and empirical research objectives. Following Lawson (1995), it is difficult to negotiate a compatible relationship between feminist ontologies and quantifying research methods. What is considered legitimate is subject to pervasive power relations surrounding the process of knowledge production in all academic departments. However, the difficulty of resolving tensions between various feminist methods and ways of knowing in geographic analysis, only reinforces the importance of exposing these issues by engaging in challenging, reflexive research designs.

5.3 Research Reflexivity - Importance and Implications.

The preceding review of feminism and quantification sets the scene for defining this research plan in two ways. First it introduces some important debates on the quality and use of data relevant to examination of the pipfruit industry. Secondly it touched on the notion of reflexivity which is a key component of the research plan.

Before outlining the research plan, some discussion of the methodological goals is necessary to clarify the particular choice of techniques and overall approach. To begin with, the research is feminist in that it seeks to develop a comprehensive and critical

understanding of regulatory restructuring through recognition of the grower perspective that gives meaning to the social, political and economic structure that has evolved over the history of the industry, and that government seeks to change to improve industry performance. An essential part of this task is to contribute to a kind of social theory where self-understanding is made explicit and is also extended, challenged and verified in the continual process of refining explanation. In other words, because of the feminist approach, the research is inherently reflexive in making the research known and in contributing to informing the industry and government.

A second point is that the feminist approach to analysis does not constitute a gender study. Feminist analyses of regulatory reform differ from non-feminist analyses because the conceptual, methodological and political goals are based on a different set of values (Moss, 1994). Recognition of distinct local political economies demands historically and spatially specific explanations of industry change in light of the social, economic and political relations of everyday function of the industry (Mackenzie 1988, Moss 1994).

In terms of overall strategy and drawing on Moss' (1994) analysis or economic restructuring, three central tenets underlie this research design: (1) the industry is both a relation and a process that is conceptualised with other sets of relations and processes - regulation, production, location and labour; (2) the industry is constitutive of individual experience and adaptation to changing economic, market, biophysical and political conditions; and (3) individual industry participants are separated conceptually only in order to comprehend entwined sets of relations. Theoretically, feminist critique based on these tenets contributes to elaborating change in the way relations and processes are conceptualised. Methodologically, the goal is to combine different techniques to facilitate an alternative and critical view of events and industry experience. There is nothing feminist about a method, rather it is the feminist use of the method that is significant (Moss, 1994).

The next principal aim of this section is to engage in critical self reflection by discussing how methodological choice can influence the way a problem is understood through research and addressed through policy. A variety of choices have been made in formulating this research design which shape the potential for explanation and alternative

policy options. In general there are three parts to the empirical work - a detailed macro level statistical phase, combined with focus groups and a series of intensive interviews. Aspects of the research are a mix of historical and temporally specific (focus groups and interviews) that enables some degree of generalisation. There may be a tendency for critics to identify it as a dual location case study. However to make this criticism would be a short-sighted dismissal of the aims and methodological contribution of the research.

Given the industry focus, it should be recognised that there is no 'standard' experience and although there is a consistent regulatory environment, different social, economic and biophysical dynamics act differently in the different locations. The combination of the three approaches combined with thoughtful integration of information, can provide insight into the sources and implications of restructuring change for the industry that would otherwise be difficult to obtain. Further, the explicit recognition of the strengths and limitations of different procedures enhances the value of explanation in that it helps to better understand the practices of theorising and, consequently, the value of explanation.

A final point to consider is that methodological choice has associated with it certain political interests regarding the type of policy recommendations that are possible. Ultimately, this study is aimed at informing government policy concerned with an improves understanding of the different influences regulatory restructuring can have on the industry as a whole and individual orchardists. As part of this goal, the research results will be made available to participants of the focus groups and interviews and also to the political organisations that serve the industry. It is hoped that this will add to informing the industry voice as it makes representation on continuing economic and regulatory reform. It is also hoped that this study will highlight the negative consequences of not creating a sense of social responsibility in economic decision making and influence public policy makers in this direction.

5.4 Research Questions and Assumptions

The following hypotheses and assumptions focus on interpreting processes of change, beginning with an examination of key statistical trends. The role and importance

of interview and focus group data is introduced in this section and developed further in discussion of research design. There are inherent limitations in some of the statistical data pertaining to the seasonal employment contribution of the industry. This stems from the timing of data collection that is not reflective of the periods of high labour input into the production process.

5.4.1 Restructuring in the pipfruit industry is associated with changes in production practices.

This statement encompasses two concurrent processes. The first is relatively straightforward and involves measuring the level and location of production over time relative to structures of industry organisation, representation and capitalisation at the industry wide co-operative level. This can be realised from published information sources within the industry, such as national agricultural statistics, industry production statistics and records of industry political bodies. The second set of changes is more difficult to ascertain from statistical sources alone. It involves characterising orchardist experience of the factors that have shaped decision that deliver changed production practices.

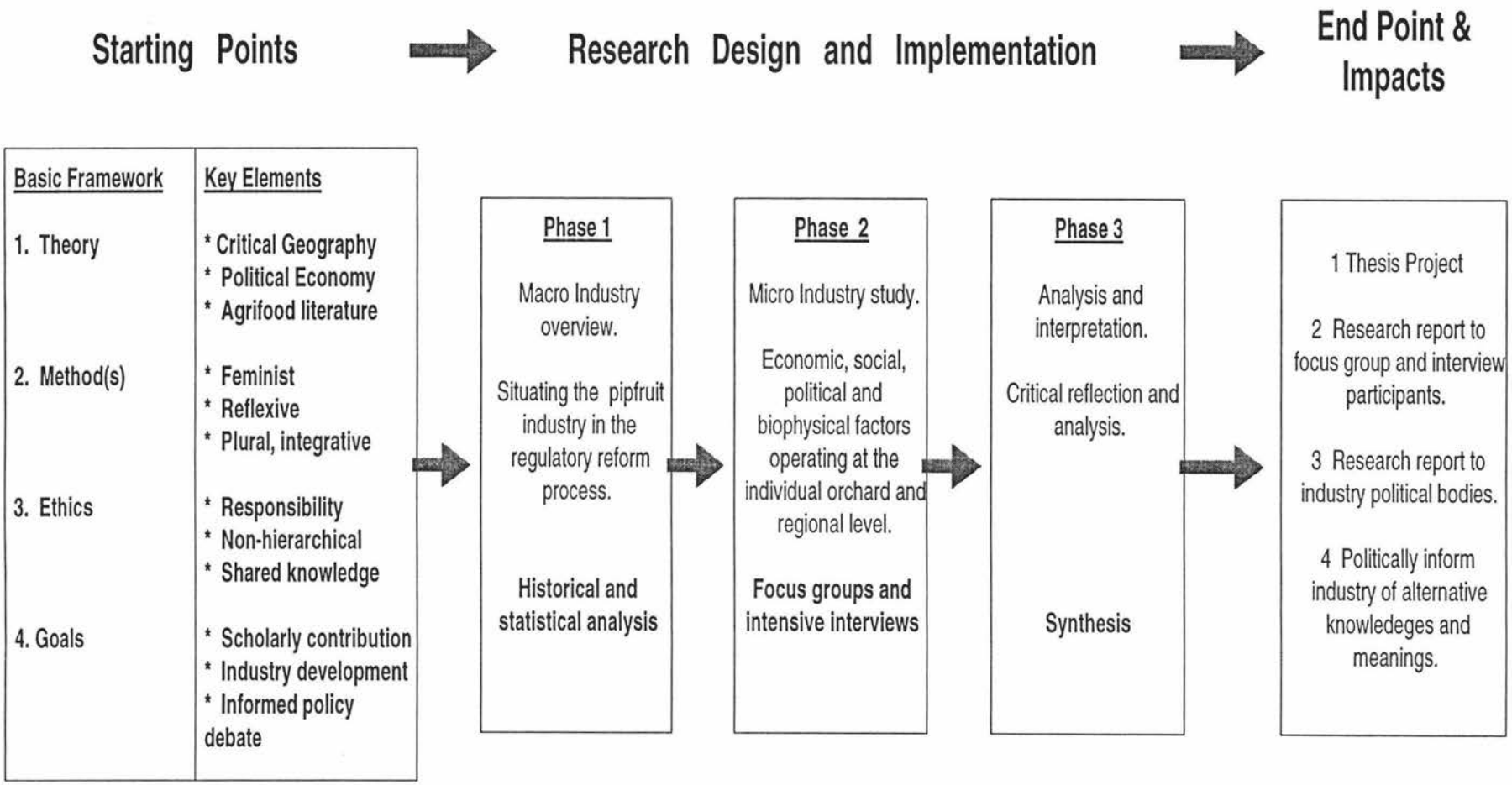
5.4.2 Restructuring is associated with changes in the global : local dynamic.

This assumption recognises a direct link between organisation and activity in international marketplaces, and the local production regions and units within New Zealand.

5.5 Research Design - Objectives and Tasks

This section outlines the research plan and identifies the central objectives associated with each of the three phases that are shown in figure 5. This provides a progressive structure that allows analysis beginning in the theoretical aspect, then advancing to testing at the orchard level where theory is blended with the orchardists view of the world and interpreted into actions and processes. Included in this outline is a brief rationale concerning the uses and constraints of the principal methods involving historical and statistical analysis, focus groups and intensive interviews.

Figure 5: Flow progression of research design and the research process.



Phase 1: Macro-Industry Overview - situating the pipfruit industry in the regulatory reform process.

The emphasis in this phase is to build on chapter three which established the background and context for this study. The purpose is to provide a description of how those historical events lead to the establishment of regulatory processes and structures in the industry. This level of inquiry will rely on secondary sources including industry statistics, national agricultural statistics, the Ministry of Agriculture and Forestry[1] and historical records of the industry and New Zealand Government. This establishes the industry as a continuance of overlapping processes and contested decisions incorporating social, economic and political spheres and demonstrates that it has a significant history of participation in the international trade of fresh fruit products. The analysis will introduce three main themes that will be tested in the micro level inquiry of phase two. These three themes are: (a) grower involvement with historical events that established the first 'regulatory' regime in the industry; (b) the influence of biophysical aspects on orchard decision making processes, in respect to investment and operational flexibility; and (c) the influence of regulatory regimes on New Zealand orchard viability in the 'global' market.

Phase 2: Micro-level Industry Study - Economic, social, political and biophysical factors operating at the individual orchard level.

The purpose of this phase is to gain orchardists' insight into the practical operation of the orchard production unit. This is a 'bottom up' perspective that attempts to understand how the orchardist simultaneously mediates economic, social, political and biophysical factors operating at the local level; while securing continued participation in global markets. Utilising a 'bottom up' perspective is useful because it endeavours to capture in greater detail, translation of multiple factors affecting orchard operation, that

[1] The Ministry of Agriculture and Forestry has gone through several changes since 1984. Among these have been two major name changes. From 1984 through to 1995 it was the Ministry of Agriculture and Fisheries. In 1995 Fisheries was split off to its own Ministry of Fisheries while the old organisation became that Ministry of Agriculture. In 1997 the Ministry of Agriculture and Ministry of Forestry were amalgamated to become the Ministry of Agriculture and Forestry. However, throughout these changes, the acronym of MAF has remained with the Ministry of Agriculture (and ....).

macro level analysis is unable to do. For example, the 'family farm' business has, at times, been accused of 'irrational' decision making, due to the prevailing neo-liberal economic theory on the mobility of capital to investment areas that provide best rates of return. The approach brought to phase two is to assume that the action of the orchardist is rational and then discover what builds that rationality for the orchardist.

Seeking understanding (or depth of knowledge) is why qualitative research methodology is adopted in preference to the quantitative approach that was used to establish trends, in phase one. Gaining an understanding of what specific factors mean to the individual orchardist, can inform questioning of the theory behind policies that affect orchard operation at the individual level. These findings can then be expanded out to test policy effect at the industry level and allow analysis of how that may affect participation in and contribution to regional socio-economic activity.

Drawing on the themes identified in phase one, two processes will be developed that will guide, or focus inquiry in the two fora of (a) intensive interviews of individual orchardists, and (b) focus groups. The guides will be developed with growers in the Wairarapa region, which, although generally considered a 'marginal[2]' production region, allows the inclusion of non-dominant voices to balance, critique or test much of mainstream industry reporting. Using the Wairarapa region is anticipated to provide two significant benefits. The first is that although growers are few in number, they have a wide range of industry participation experience, diverse operational scales (orchard size) and varied length of involvement in pipfruit growing. Part of the latter aspect arises from the fact that Greytown, one production pocket in the region, has a long history associated with pipfruit and is where the Gala variety was developed, which has subsequently given rise to a range of mutation derivatives such as Royal Gala, Imperial Gala and Brookfield. The second benefit arises from the region's active participation in industry political processes, particularly over the last fifteen years.

[2] The Wairarapa is a marginal production region in that it produces less than 5% of the national pipfruit crop and **no** specialised industry support infrastructure such as exists in Nelson and Hawkes Bay has developed around the production base. For example, there is no permanent ENZA field service, no specialised orchard machinery or agrichemical sales businesses and no specialised pipfruit industry advisory services.

The small size of the Wairarapa and the absence of well developed industry servicing infrastructure should allow examination of a less complex industry, than could be expected in the dominant regions of Nelson and Hawkes Bay. This simpler level, allows easier identification of key factors that govern entry to the industry and continued participation. The mere fact that the Wairarapa is a small growing area means that growers will have probably considered the industry as an investment option in a more non-normative manner. In other words, the decision to invest in or enter the industry should be shaped less by orcharding being a common or typical land use activity and more by influences that bear closer linkage to social, economic and biophysical factors of orcharding. Then extending this level of consideration to the dominant regions will allow verification and expansion of the factors in the Wairarapa, to include the influences of tradition and the presence of specialised infrastructure support. It is for this reason that a mix of interview and focus group methods has been selected and these are discussed more fully in the following section.

Focus groups have been selected as the primary tool to gain the grower perspective, in preference to other methods such as individual interviews, or questionnaires. This is because focus groups, as a qualitative research tool, permit a structured interaction amongst participants, that at once accepts each individual participant as autonomous; and allows expression of group knowledge and understanding. Where interviews and questionnaires can effectively draw out each individuals perspective they do not permit each perspective to be both evolved by group interaction (through memory jogging for example) nor enable a snapshot of the diversity of the opinions, perceptions, and positions that make up the perceived reality for each individual that exists at the time the group activity occurs.

5.6 A discussion of Intensive Interview and Focus Group Methods as Applied to this Project

An aspect of this research project that sets it apart from the work Moran and Blunden (1995) and YAF Consulting (1998) have done in this area is that it seeks an explanation of continued industry participation that has been interpreted or mediated by the grower. The information or knowledge is predominantly qualitative and the meaning interpretative. The quality and integrity of the research findings relies on the ability of the

researcher to be aware of the strengths and weaknesses of the techniques used and of the personal bias and level of imbeddedness of the researcher in the subject. Of particular relevance to this exercise is the fact that the researcher, although not actively engaged in the business of orcharding, has had significant recent experience and involvement as a participant in the industry. This provides both benefits and challenges to the process of observation that the researcher must address.

There a three major benefits relevant to this study, that arise from the researcher being a former orchardist. These are:

(a) the researcher is known within the growing regions which allows relatively faster establishment of rapport with the research subjects, rather than having to start from scratch, building basic credibility;

(b) possession of a technical and experiential knowledge of production practices, the industry structure and political aspects that exert pressure on the industry from both internal and external sources; and

(c) I am friendly and approachable.

On the other hand, the former involvement can exert influence on the interpreted outcomes of the research. The major challenges arise from:

(a) A positional bias that has been shaped by his/her experience in the industry. Clear polarisation has been evident within the industry over the threat of Producer Board deregulation, with opinions or positions ranging from desiring total removal of regulatory protection, through to return to the regulated single desk seller status in both local and export market arena. The researcher needs to be careful that the focus of the project is not trying to promote one position over another and needs to acknowledge where personal bias might express undue influence.

(b) Being known in the industry may constrain access to and communication with some industry participants. How individual research subjects perceive the researchers position relative to their own, can influence the type and content of communication that takes place. At its most extreme, it can also influence whether research participants will meet with the researcher or attend focus groups meetings. The approaches that will be adopted to manage this will be different for focus groups, from individual interviews: (i) Selection of focus group participants, ensured a degree of commonality in philosophical

position on 'single desk', irrespective of the specific position held in the pro or anti debate. This avoids group discussion becoming constipated by argument of philosophical position within the group, and enable sharper focus on the central thematic hypotheses. (ii) For individual interviews, participants will be provided reassurance that their philosophical position, although relevant to the research, is not a central aspect of the research focus. Although adopting these approaches is anticipated to encourage participation, it does not necessarily assure 'equitable' consideration of the contributions in the analysis and interpretation of phase three of the research process. Bias, therefore is a consideration that must be managed in all stages of the research process.

The analysis of the interview and focus group data is largely interpretative and descriptive. Given that a goal of this micro-level analysis is to help inform understanding of the orchardist decision making process and participatory involvement at multiple levels of immediate community, national and global, the grower responses will be considered as to the relative importance of influence of each theme for the grower at each of these spatial levels. A second goal is to provide evidence that these are important and valid factors to building a grower up perspective on the industry, that can offer an alternative explanation of pipfruit orcharding as a socio-economic process, for consideration as an alternative to traditional economic models that have shaped government regulatory policy in recent times. The qualitative research approach acknowledges different ways of knowing that are built on people's ways of perceiving and validating reality. The extent of subscription to grower reality, the consistency with which this reality is shared is best elaborated using the bottom up approach described here. By firstly exploring the influence of the research themes on behaviour amongst individuals, the grower specific reality can be described, then verified through focus groups.

5.7 Ethical Considerations Relevant to the Research Project

Ethical aspects must also be considered in this research. With people as the research field, the Privacy Act imposes a legal discipline and consideration. Although this provides a framework for governing the use and revelation of personal information there are other matters that need to be considered even if rights under the Privacy Act have been

waived. Where participants request anonymity and respect of confidentiality, then the small size of the industry and the fact that the research brings aspects of location specificity means that options to achieve this that go beyond simply non-revelation of participant names or the use of aliases, need to be considered. Care must be taken in reporting information provided from individuals and focus groups, does not inadvertently reveal the contributor through circumstantial association or linking of participants with non-personal aspects of, for example, the research or the location.

The Massey University policy of ethical considerations for research using human subjects will guide this project. Formal processes of advising participants of rights in respect to revealing and withholding information, confidentiality, withdrawal from participation, use of information, access to data provided; participant consent; and obligations of the researcher to reporting back to participants in a manner appropriate to the participants.

Phase 3: Analysis and Interpretation

The purpose of this phase is to offer discussion of what the findings of the research may mean for the New Zealand pipfruit industry and for the regions where it is a major driver of the local economy. This will explore the presence of similarities that exist between current developments in the global trade of fresh fruit, with historical development events of international fresh fruit trade that the New Zealand industry structured itself to meet, at both the national regulatory and industry political levels. The object is to demonstrate that past industry responses to secure better fruit value returns to the grower are still relevant to the New Zealand industry facing the current set of production and international fruit trade dynamics. The unregulated, competitive market structures of early this century, led to erosion of orchard gate returns. As a strategy to secure better returns, the industry structured itself into a co-operative body that was ultimately endorsed by government and extended statutory protection. The effect of this unifying structure averted New Zealand grower competing against New Zealand grower in the market. This transferred relatively greater share of market power or negotiating power from the buyer, to the seller. Although the terminology and the economic scale and structure of markets may have changed, the need for the seller to preserve negotiating strength in market transactions

has not. This indicates justification to preserve the co-operative structuring of the New Zealand pipfruit industry with a single export selling entity.

The steps in the process of getting to this position follow in the next chapter that describes the research process and the information gathered.

Chapter 6

Field Research Using Focus Groups

6.0 Introduction

The intent of this chapter is to build a picture of risks being managed by the New Zealand pipfruit industry as described from the grower perspective, using a constructionist approach. This approach is founded in the notion that a risk is not a static, objective phenomenon, but is constantly constructed and negotiated as part of the network of social interaction and the formation of meaning (Lupton 1999). This is important because consideration of regulatory change, by the government agencies arguing for and implementing change in the pipfruit industry, has been driven from a neo-liberal conceptual base focused at the theoretical, overall industry level, and excluding assessment of impacts at the grower level. This omission, by government agencies, to consider the grower level impacts of regulatory change fails to recognise the powerful influence of preceding regulatory environments in shaping the development and definition of the industry that is seen today. Without considering the impact at grower level, government cannot answer with any degree of certainty, whether the New Zealand pipfruit industry can sustain the regulatory changes that are being imposed (establishing ENZA as a body corporate with share trading restricted to transactions between growers, and a residual concern that change will ultimately see total removal of the regulated single desk seller status). In particular, this chapter identifies and emphasises the important risks that growers perceive as acting on, or potentially acting on, their orchard businesses and that arise from the regulatory change process that the industry is engaged in.

As has already been discussed, the industry is in a state of change and grower opinions and positions are divided over what change should be effected (for example, introduction of FAS, increased grower accountability for fruit quality in the market, liberalised export consents, establishment of ENZA Limited, distribution of ENZA Ltd shares, and industry representative structures and electoral processes) and how such change should occur. Planning of the focus groups needed to be mindful of these divergent positions that exist within the grower group. Ideally, the research project should attempt to establish groupings according to grower 'position'. However, limited resources meant that

this was not a viable option. Consequently, selection of focus group participants sought to include a more 'middle' position grower. To limit the risk of the focus groups becoming distracted into ideological debates, individuals were invited to participate on a clear understanding that the purpose of the exercise was to build a picture of how they saw the risks from industry restructuring pressures affecting their business. The rationale behind this being that: the research is not about analysing the arguments for or against pipfruit industry deregulation. Rather, the research is about the voices of producers being heard, enabling participants to express the risks that they perceive being imposed on their businesses (by the restructuring process), and having their perceptions recorded, analysed and interpreted as a contribution into the restructuring debate. As discussed in the introduction to this chapter, this is a level of analysis that has been absent and possibly repressed in pipfruit industry restructuring debates thus far. Consequently, restructuring discourse has been limited to the consideration of only a partial representation of the New Zealand pipfruit industry and the dynamic process that it encompasses.

In acknowledgment of the researcher/facilitator having a degree of imbeddedness in this subject and to limit facilitator influence over participant selection, determination of the time and location of each focus group, the issuing of invitations and other meeting arrangements were handled by the local Fruit Growers Association, acting within the guidelines for participation described above. The next section describes the focus group development process and details where focus groups took place, number and gender mix of attendees.

6.1 The Focus Groups - Background

6.1.1 Focus Group Location and Attendance.

A total of five focus groups were convened but only four are directly drawn on in this research. The first focus group that was held in the Wairarapa was primarily a methodology testing and development exercise, that identified the core questions that would be used in subsequent focus groups.

Participants attended voluntarily and at the invitation of the local Fruit Growers Association. Numbers were restricted to no more that ten at each forum, with the rationale being to establish a forum size that would be conducive to gaining input from all

participants. The calendar sequence of focus groups, number and gender mix of participants are displayed in table 7 below.

Table 7: Regional sequence of focus groups, number and gender mix of attendees.

Date	Location	Total Attendees	Female	Male
19 January 2000	Wairarapa	5	3	2
27 January 2000	Canterbury	5	2	3
2 February 2000	Hawkes Bay	8	1	7
11 February 2000	Nelson	5	0	5

Adopting the feminist approach to conducting this research prompts discussion on the relevance of gender mix in the focus groups. The following section discusses this and the implications that arise for the research project.

6.1.2 Gender Participation

In itself, the gender mix of the research subjects is not of high relevance to a feminist methodology, as the methodology is concerned with exploring gendered power relations and in the case of this research, poses questions about how knowledge that informs and drives government regulatory reform, is constructed.

Male and female each bring different perceptions of reality, relationship and importance to a given set of circumstances or events. Therefore, in building a grower construction of risks facing the industry, it is important to capture both the female and male perspective's. Ideally, to achieve this outcome, the focus groups would have had similar numbers of both male and female participants, or multiple focus groups could have been run at times that were more convenient for increased levels of participation by both genders. Due to limited time and finance the four focus groups were all that could be managed, with organisers being asked to encourage participation of both genders However, participation was entirely voluntary, and at the end of the day, the focus groups consisted of those who turned up. This does not bring the focus group questions into question, as the perceptions gathered are those held by individual growers, which the essential outcome of a feminist research approach. Rather, the relatively low numbers of participants means that the research findings reported here should be used as recording the

existence of actual grower constructed perceptions of industry risks. Further research is needed to verify how consistently these findings are held throughout the industry.

In this section, time availability has been identified as a constraining factor to the research. The reasons behind this are discussed in the next section.

6.1.3 Focus Group Timing

The introduction in November 1999of the Apple and Pear Export Regulations 1999, to become operative at 1 April 2000, effectively created a regulatory crossroads. The regulations arose from the Apple and Pear Restructuring Act 1999, which was a product of the Producer Board deregulation (subsequently review) imposed by Government in May 1998. As has been discussed earlier, growers were opposed to producer board deregulation, and were somewhat cynical of the producer board review process that appeared to be driven by the same people in Treasury, the Ministry of Commerce, and the Ministry of Agriculture and Forestry who were advocating for producer board deregulation.

The arrival of this new set of regulations (hence the term re-regulation as against deregulation) presented the industry little more than three months before the commencement of harvest, to adjust to a new regulatory regime. This research was carried out in that window of opportunity where participants were acutely aware of, or discovering the risk realities posed to their industry and their individual businesses, by the re-regulatory changes.

Given constrained orchard profitability (necessitating growers working longer hours), regulatory change (creating uncertainty) and rapidly approaching commencement of harvest (increasing workloads), it is understandable that a lower than expected number of growers attended the focus groups. However, those who did attend entered the focus group process willingly and enthusiastically.

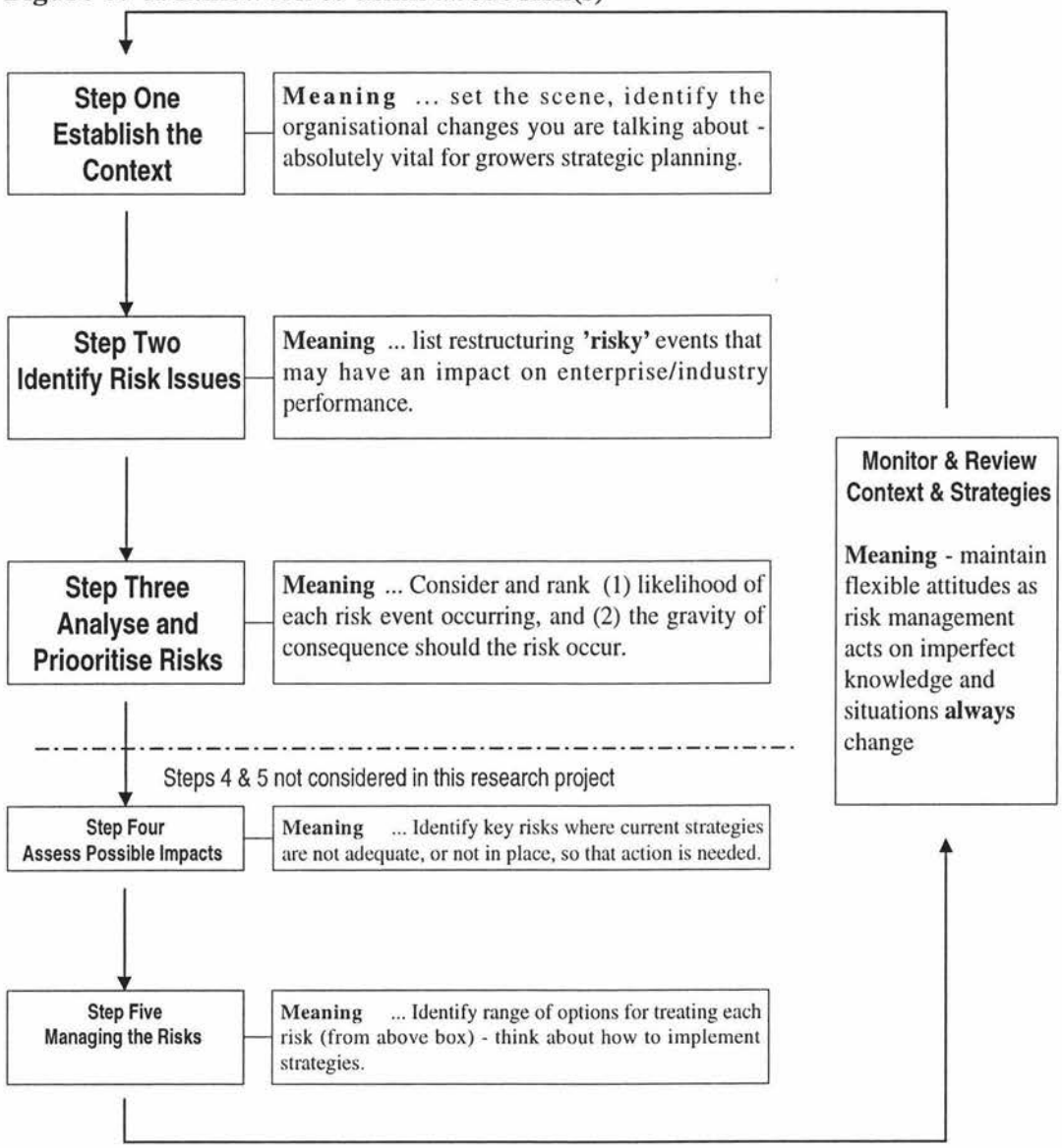
6.1.4 Focus Group Procedure

The focus group exercises that this research project is based on, formed part of a larger research project under the title **Risk Analysis: From Cooperative to Company in New Zealand's Pipfruit Industry**, led by Dr M K L McKenna of Massey University. The

author facilitated the North Island focus groups and arranged for the South Island focus groups to be recorded. The tape recordings have been transcribed by the author to provide primary source data for this project. The initial Wairarapa focus group enabled development of the focus group structure that was used consistently in the four subsequent regional focus groups. This was a five step process with the first three steps being critical to this project and discussed in this chapter. Steps four and five are not specifically discussed here, although content in the form of information or quotes are used where they can add to the presentation of this thesis.

This stepped process established a consistent structure for subsequent groups, yet allowed expression of themes or issues in a regionally relevant manner. Thus allowing analysis of each focus group outputs (a) within a regionally specific context, and (b) across regions. This is an important capacity to enable the discernment and separation of common industry wide issues from locality specific issues. The five steps are illustrated in the risk diagram below:

Figure 6: A famework to think about risk(s)



At the commencement of each focus group, participants were given a short document (appendix 1) that introduced the rationale behind the focus group exercises and what the research study hoped to achieve. In introducing the concept of grower-driven risk analysis it was explained that although it seems obvious to carry out an analysis based on the framework in figure 6, no formal and comprehensive documentation of grower 'restructuring risk' concerns has been conducted by the industry to date. And in the absence of formal documentation, grower concerns about restructuring risks remain disorganised and easily passed over or refuted by other more organised interest groups. When a formal discussion document is compiled, it creates a form of paper trail upon which meetings can be based, debates triggered and stimulated, and issues refined.

Potentially this allows growers to have a greater contribution in, and control over, voicing important issues. In closing the introduction, growers were urged to ponder four points:

(a) Even the experts perform analysis with incomplete information;

(b) There is no single, best way to assess risk;

(c) Risk analysis is fundamentally subjective, not objective; and

(d) Because the New Zealand has 75 years history of operating in a regulated cooperative structure that has developed a politically strong, collective public face made up of individual business structures founded on the premise of 'safety in numbers' as mitigation against many risks associated with the industry. Now the assumptions (regulations that the 'old' industry was built on have changed, with no coherent analysis of whether the industry has the capacity to accommodate such change without incurring major financial and social disruption for both individual orchard enterprises and the regional communities in which they are located.

The next section discusses each focus group, beginning with an explanation of major and minor growing regions and relevant factors that characterise each and justify their separate consideration.

6.2 Specific Aspects of Focus Groups

The aim of this section is to describe each individual focus group, identify the key elements that are specific to that group and offer an explanation about how that expresses the grower construction of risk in that growing region. This is important as it informs discourse about locality specific, grower-relevant and grower-defined risk priorities. Which can, subsequently, enable regulators to have an awareness of, and sensitivity toward, the regions where they are experienced. Discussion then shifts to analysis of the overall focus group experience and the common themes that are shared across growing regions. This adds to industry restructuring discourse by identifying industry wide, grower-defined constructions of risk that can then be drawn on to shape industry wide risk mitigation strategies.

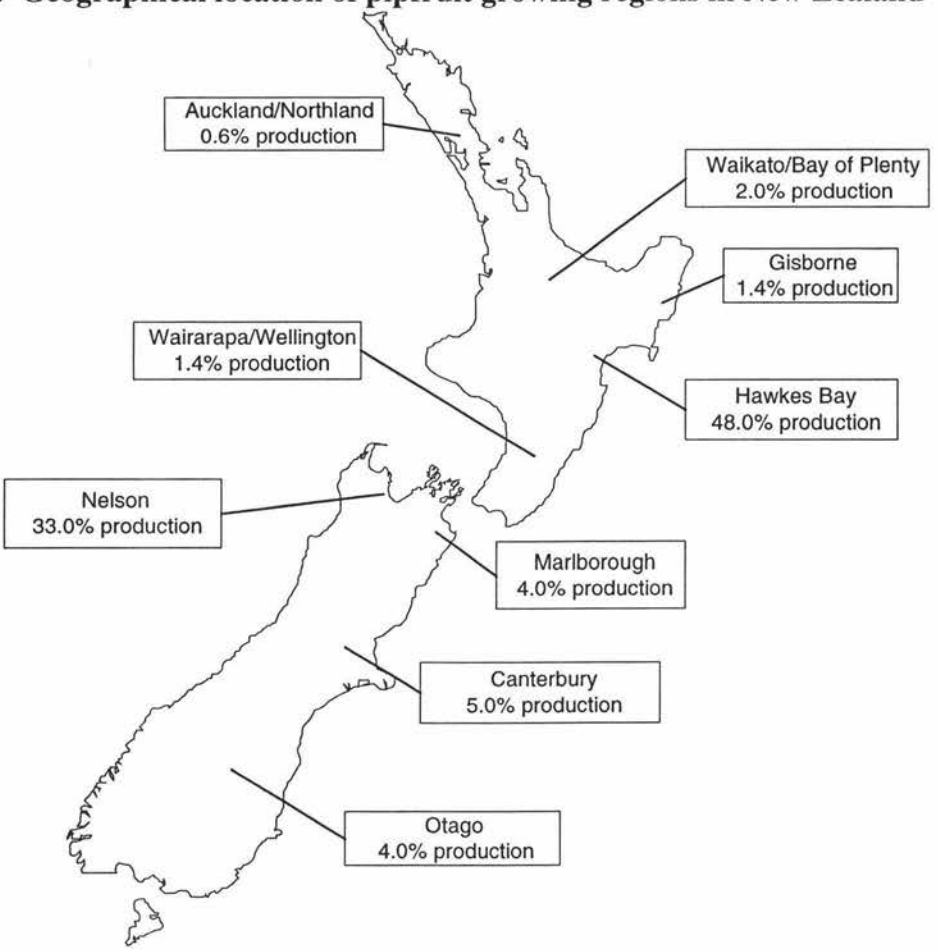
6.2.1 Minor and Major Growing Regions.

There are ten recognised pipfruit growing regions in New Zealand and based on ENZA statistics from 1997, 80% of export production occurs in Hawkes Bay and Nelson, referred to as major growing regions, with the balance produced from minor growing regions.. The table below shows the planted area of pipfruit per region (MAF 2000) and export pipfruit production by region for 1999 (ENZA 1999).

Table 8: Regional distribution of pipfruit plantings in New Zealand

Region	**Planted area - ha and (%) (MAF 2000)**	**Export production- tce x 000's (%) (ENZA 1999)**
Auckland/Northland	**856** (5.0%)	93 (0.6%)
Waikato/bay of Plenty	**1,066** (6.3%)	292 (20%)
Gisborne	**310** (1.8%)	206 (1.4%)
Hawkes Bay	**6,591** (38.8%)	6,894 (48%)
Wairarapa/Wellington	**673** (4.0%)	200 (1.4%)
Nelson	**3,833** (22.6%)	4,772 (33%)
Marlborough	**758** (4.5%)	566 (4%)
Canterbury	**1,969** (11.6%)	707 (5%)
Otago	**933** (5.5%)	620 (4%)
Total	**16,989**	**14,351**

Figure 7: Geographical location of pipfruit growing regions in New Zealand



Wairarapa and Canterbury are each minor growing regions, even though the Greytown area in the Wairarapa and the Loburn area in Canterbury each has a long history of orcharding. Greytown has a relatively more illustrious history, notable for the development of new varieties including the gala cultivar which forms the foundation for the subsequent, highly popular strains of Royal Gala and one half of the parentage for the popular new 'Pacific' series varieties, such as Pacific Rose and Pacific Queen. The scale of the industry in these minor areas was smaller until the mid to late1980's when, like most other growing regions, significant new planting and orchard redevelopment occurred (although they remain small scale production areas compared with the major regions). The macro-economic restructuring of that decade saw erosion of traditional pastoral farming profitability, was a significant driver behind new plantings in all growing regions, from Auckland to Otago.

Farmers in those straitened times, pursued various strategies to preserve the operational integrity of their farming enterprises. Two strategies relevant to this discussion were (a)

diversification into additional new enterprises; and (b) realising capital by subdividing 'lifestyle' sections from the farm for sale to a growing number of urban people seeking a rural living environment. In traditional fruit growing areas, new orchards were developed either as adjuncts to other farming operations, or by entrepreneurial purchasers of the 'lifestyle' blocks. In both the Wairarapa and Canterbury, this translated into new orchard development in the traditional localities - Greytown and Homeward (Wairarapa) and Loburn (Canterbury). New orchards were established at other locations in the Wairarapa valley, (from Martinborough in the south, to Opaki in the north) and in other parts of Canterbury (e.g. Hornby and Hawswell). Export variety production from Wairarapa reached 1 million cartons in the mid 1990's. Export production was expected to reach 2 million cartons in Canterbury, but a number of climatic and financial factors combined to limit production to a peak of just over 1 million cartons in 1995 and since then there has been significant decline in production.

6.2.2 Characteristics of Minor and Major Growing Regions

Four aspects characterise minor production areas that are relevant to the context of both the Wairarapa and Canterbury regions and justify the separate consideration and comparison of minor and major growing areas. These are:

a) Critical mass to support a comprehensive orchard support infrastructure. Under the new regulations, FAS, packing, coolstorage and transport are major issues, probably requiring growers to meet increased cost to freight crop to Hawkes Bay to access these services and in the process incur market access risk as the Wairarapa season is between one and three weeks later than Hawkes Bay. Minor regions have also lacked support from resident technical advisers and even when these services were established, the technical competency tended to be of a general horticulture nature, rather than specialist pipfruit competencies that are common in major regions;

b) Different capital values structure to orchard properties - orchardists interviewed in both Wairarapa and Canterbury expressly noted that the capital value of their orchards were significantly lower than similar properties in major growing regions. Land value reflected the 'lifestyle' rather than a segregated orchard market as exists in Hawkes Bay and Nelson. Consequently, dynamics of capital investment and risk exposure to volatility of land values are lower in these minor areas. As will be shown in later

discussion, this is an important factor behind the identification and weighting of specific risk events in the focus groups.

c) Some minor regions have advantages in proximity to local market opportunity, particularly for markets outside of major supermarket chains, such as green grocery stores, dairies, petrol stations etc.. Wairarapa is close to the Wellington market and is also only a short drive for Wellington residents to take a trip and purchase 'authentic' orchard fresh fruit. Canterbury growers are closest to the South Island supermarket distribution centres in Christchurch, which has seen a significant shift in market focus, away from export markets, toward the South Island local market.

d) Biophysical aspects dictated by climate are significant factors that define major and minor regions. Gisborne fruit matures one to two weeks earlier that other regions and can attract premium values as the first of a variety on the shop shelves. Canterbury has variable climatic conditions that can make it very difficult for fruit to grow to optimal export size and consequently increases commercial risk.

Nelson and Hawkes Bay are the two major growing regions accounting for 80% of the New Zealand export crop. Their rise to this status has been described in chapter 2. Each of these regions has a strongly developed pipfruit industry support infrastructure and industrial integration, making them dominant regional economic 'driver clusters' (BERL 1997 and 1998). One illustration of this integration is that the real estate market has a defined horticultural segment. Land values within this segment can ebb and flow depending on the performance of the sector at any given time. For example, the high profitability of pipfruit orchards in 1990, '91 and '92 led to property values inflating (Logan and Stone Ltd newsletters) to record levels of up to $70,000 per hectare for the then premium variety of Braeburn and collapsing to $15,000 to $20,000 per hectare for the same variety in 1997 as profitability declined.

This section has identified some of the characteristics of major and minor growing regions that is helpful to establish some broad context around the localities of each focus group and relative position in the overall New Zealand pipfruit industry, based on area and production. The next section moves to describing each focus group.

6.3 Focus Group Content

This section discusses each focused group and identifies the outcomes of each. This allows each groups description of how they view the industry, forces acting on the industry, and their own construction of risk profile, to stand alone and be given consideration separate form the total industry as a combined amalgam. The workshops will be worked through in chronological order, which purposefully deals with the minor regions first. The reason for ordering the focus groups in this manner is to avoid the facilitators inadvertently bringing perceptions or comments from the major regions and possibly influencing the responses offered by growers. This may seem a minor point, but the political hierarchy that exists within the industry means that minor regions are often dismissed by growers in major regions and growers in minor regions can react and become defensive where there is a hint of comparison being drawn between the different scale regions.

Following discussion of individual focus groups, the outcomes will be analysed for themes of regional commonality and themes of regional difference, concluding with an interpretation of what this means.

6.3.1 Wairarapa

Five growers attended the Wairarapa workshop, the first formal focus group exercise, held in mid January 2000, about four weeks before the commencement of harvest. Growers commented that they were particularly busy completing late thinning tasks. If the profitability of pipfruit growing was better, this is a task that they would normally hire seasonal labour to complete. Work pressure and family commitments were offered as reasons for other growers not attending. All were willing to participate and after some informal banter the group settled in to work through the stepped process.

Six organisational changes were identified that growers thought to be important for the strategic planning processes in their orchard enterprise. If there was a scale of importance attached to each, then deregulation would score maximum points, with the others some points behind. This is demonstrated by the comment:

"If they deregulate we might as well just pack up and go home" (grower 3)

"There is no way we can survive deregulation" (grower 1)

Deregulation referred to a core structural change - the removal of statutory single desk seller status for the industry, and the advent of multiple exporters operating competitively against each other. All growers were adamant that such a move would have dramatic negative on the industry in all growing regions. Regulated single desk and deregulation are seen as absolute, mutually exclusive states that are non contestable by growers in an industry wide sense.

The other five changes are more operational changes, around a central legislated single desk structure. They are perceived as more contestable in an overall industry sense, yet are seen as being imposed with no consultation and no apparent assessment of potential on individual orchard enterprises, in different regional contexts.

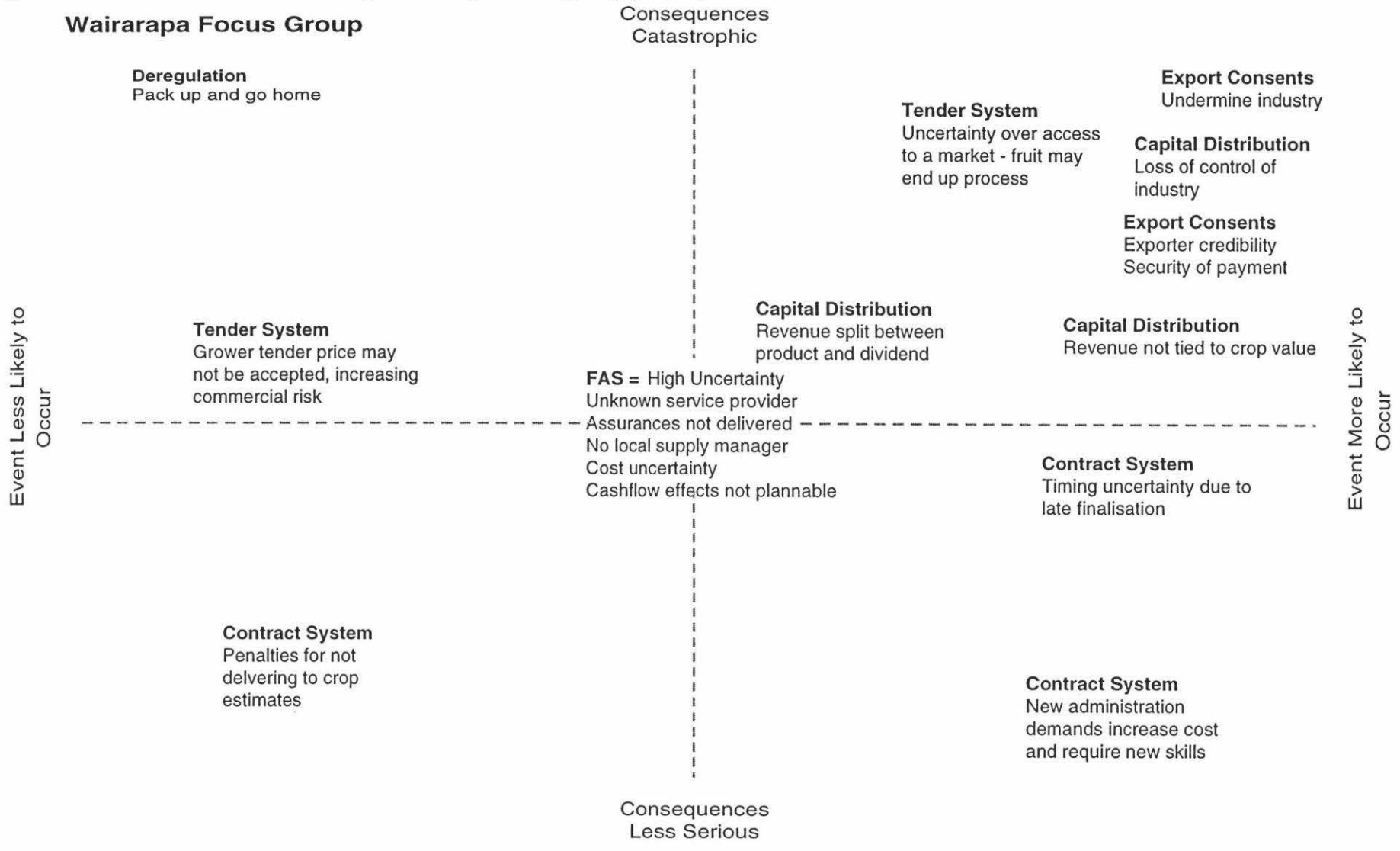
The results of working through steps one and two are shown in the table below. Using a table format, allows the connectedness of the two steps to be better represented, than using a plain text layout.

Table 9: Steps one and two of the Wairarapa focus group

Step One: Organisational changes vital for grower strategic planning	**Step Two: Risky events that may have an impact on industry performance**
Deregulation	#1 risk. Once its gone we won't be able to turn back the clock.
Tender system	Downward pressure on prices, price from grower may not be accepted by ENZA Possibly no 'market' for crop if cannot access the tender market.
Contracts	Favour ENZA and penalties to grower e.g. if crop estimates are inaccurate. Procedures still not finalised. New administrative demands add cost, require new skills
FAS	Absolute uncertainty Impact on cash flow unknown - grower pays cost, ENZA reimburses half at submission, balance later. Service provider unknown No local supply manager
Independent Exporters	Security of payment unknown Performance credibility (provides choice of exporter as a positive aspect)
Capital Distribution (shares)	Loss of grower control of industry Will shares be tradeable outside of growers? Buy in to orchards by foreign interests Orchard revenue no longer linked to crop/production.

Having identified important industry changes and the potential risks that they pose to the industry, participants were asked to graphically display what these risks mean for each individual on the risk matrix, expressing how each saw the likelihood of risk events occurring and the consequences for their orchard business, if the risk becomes an event. The participants used Post-it™ notes for this step, and this has been transcribed into the table below.

Figure 8: Risk matrix constructed by Wairarapa focus group participants



The groupings show that deregulation, uncertainty over access to a market outlet, loss of grower control of the industry, and the industry being undermined (through actions of multiple exporters) are the risk events that hold the potentially gravest consequences. Deregulation is seen as only moderately likely to occur, while loss of grower control and export consents are seen as having significantly higher likelihood of occurrence. In the lower quadrants of the matrix; demands on the business posed by the new contracts system are seen as having a wide range of occurrence likelihood and generally only moderate business consequences highly spread in terms of likelihood but only moderately spread in terms of consequence. The uncertainties surrounding FAS, being positioned in the mid point of the matrix, are seen as having both moderate likelihood of occurrence and consequence.

6.3.2 Canterbury

Five growers attended the second focus group, held at Rangiora in Canterbury, on 27 January 2000. The harvest season commences later in Canterbury than in Wairarapa, so although the groups were staged eight days apart, growers at a similar stage of preparation for harvest as in Wairarapa. Again, growers were busy with late thinning. And even though Canterbury growers expressed similar concerns over the poor financial position of their orchard businesses, they were utilising more casual labour than their Wairarapa counterparts. Two factors behind the use seasonal labour were (a) larger than 'average' scale of orchards - few orchards below 20 hectares - meaning that labour intensive tasks such as thinning were beyond the capacity of the orchardist/orcharding family to handle alone; and (b) retention of core seasonal labour for the harvest season, as demands for labour in Nelson and Marlborough with earlier commencement of harvest, and Otago with a wider mix of fruit crops (e.g. apples, plums, cherries, peaches, nectarines and apricots) can lure the labour resource from the Canterbury region at critical times. Again, work pressure and family commitments were offered as reasons for the non-attendance of other growers, all were willing to participate and keen to get started.

Participants identified five organisational changes as being important for the strategic planning processes in their orchard enterprise. Unlike Wairarapa, deregulation was not specifically identified as an organisation change, but was clearly linked as a

consequential risk attaching to industry changes. This was also clear in discussion through comments such as:

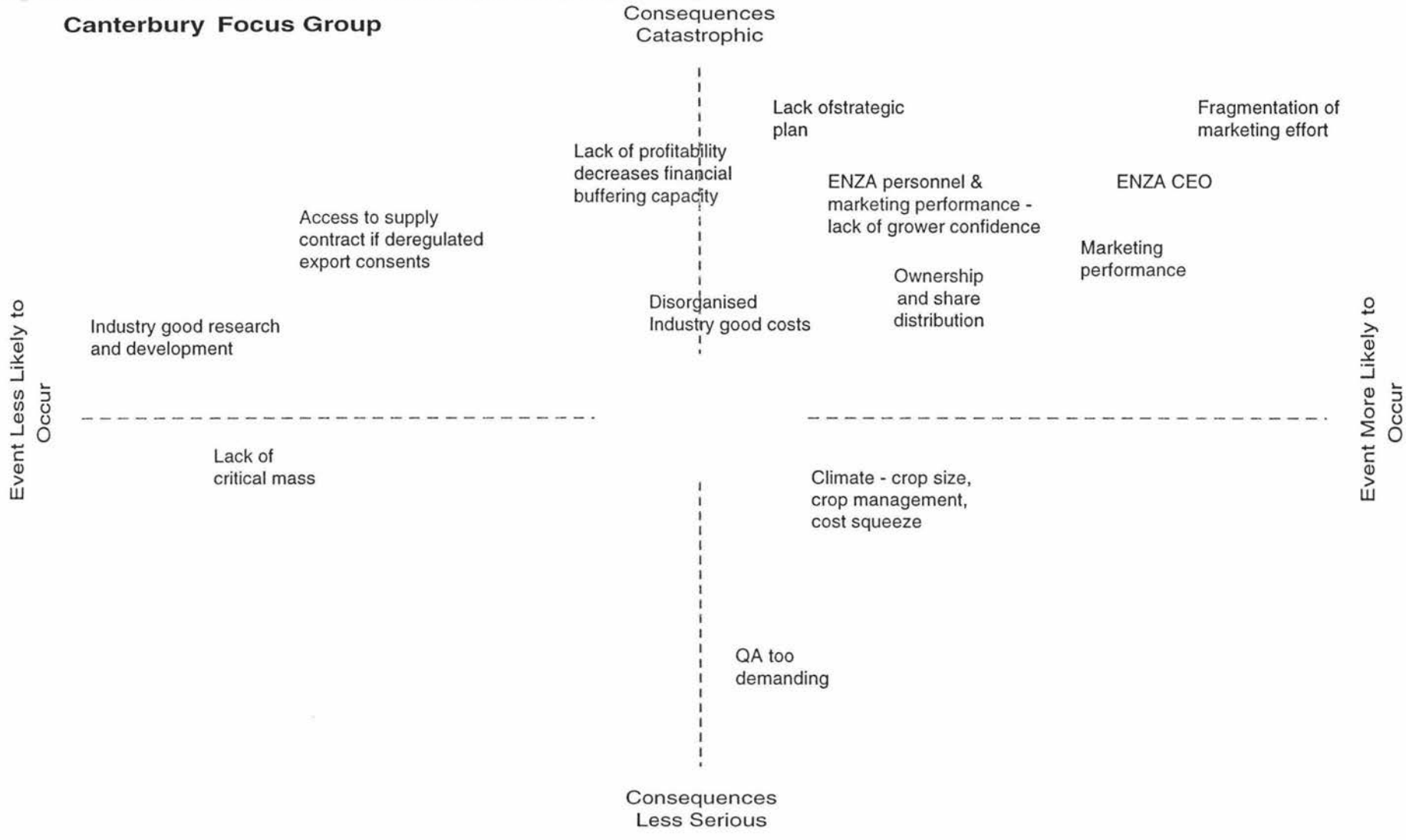
> "... if these changes don't work out, then the erosion in grower confidence will lead to rejection of ENZA because growers will be so stretched, that any hope of better income from deregulated exporting would be like the final flailing of a mortally wounded animal trying to escape it's captor." ... (Grower 5 Canterbury)
>
> "Yep, we might as well go down trying, we've got nothing else to lose". (Grower 1 Canterbury)

The results of working through steps one and two are shown in the table 10 below, followed by the risk matrix construction in step three displayed in figure 9.

Table 10: Steps one and two of the Canterbury focus group

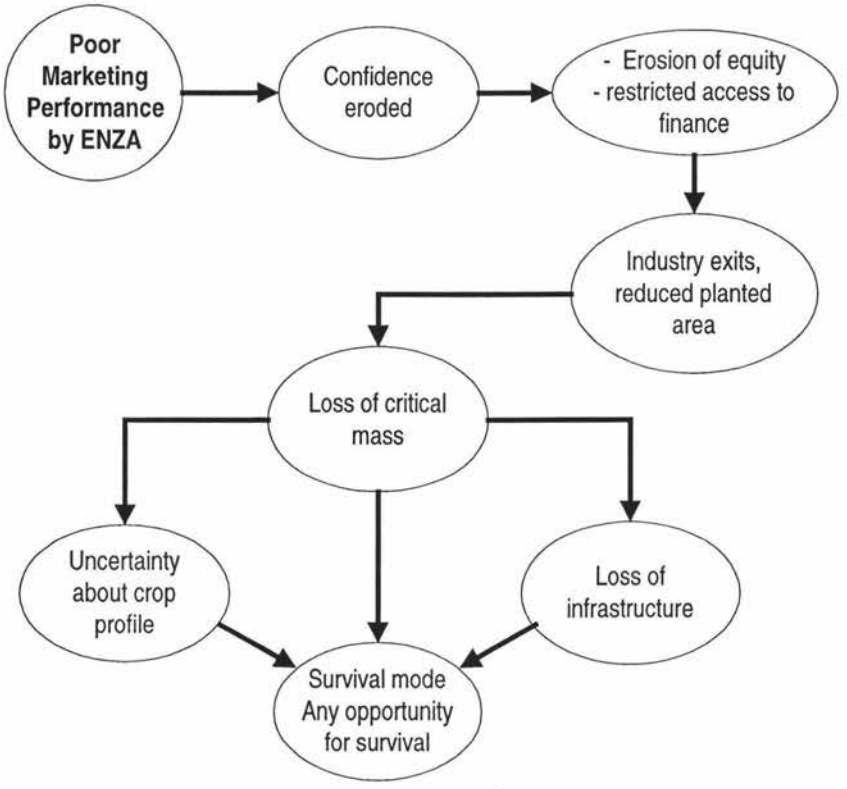
Step One: Organisational changes vital for grower strategic planning	**Step Two: Risky events that may have an impact on industry performance**
Marketing performance	Volatile performance ENZA gearing up for deregulation, rather than best performance for grower now. Us first attitude by ENZA - snuck up on growers
Logistics (FAS, tender system, contracts)	Low production volume in Canterbury → ENZA corners the logistics market so no competition benefits of Shifting cost from ENZA to grower, and receiving lower fruit payment
Profitability - continued lack of	Erosion of capital (equity) More difficult to gain banking arrangements. Lack of seasonal capital compromises orchard production performance (vicious cycle).
Tougher criteria to supply ENZA.	Increased cost with no clear pay back Reduce percentage of crop packed Increased market risk Requires new skills
Foreign fruit companies encroach into NZ industry	International supermarket companies destabilise NZ industry from within NZ. Focus on growing retail profit, reduce grower return
Loss of industry good research and development	NZ industry will lose place as world leader New variety development stalled Growers lose access to products of current research investment

Figure 9: Risk matrix constructed Canterbury focus group participants.



Marketing performance was the number one concern for Canterbury growers as they saw this as a critical driver of grower choices. The diagram below was drawn to represent the flow on effects of poor market performance by ENZA on the strategic decision making processes for growers. Growers acknowledged that this is a simplistic representation but stressed that supporting the best theoretical structure can end up being a very expensive luxury - at some point growers have little to lose by pursuing other market options.

Figure 10: Grower representation of the cascade of effects stemming from poor market performance.



Loss of industry-good[1] research and development was another important risk in terms of consequence. Growers considered that the critical mass of the industry, created by the current regulations forcing the industry to act collectively meant that a clear strategy could be developed, funded and pursued to the benefit of the industry as a whole. The new variety development programme was given as an example of this in action - no other

[1] Industry-good research is a term used in a similar manner to public-good research. The term refers to research from which the whole industry gains collective, rather than individual benefit.

country has developed as many new pipfruit varieties with international recognition and market appeal in the last 20 years.

Climatic conditions were listed as a risk event which, initially, does not appear to fit the terms of reference - risks arising from industry change. Following discussion, participants retained this heading, arguing that the combined organisational changes accentuated the climatic risks as the industry was less able to accommodate the variations that occurred in the Canterbury crop and thus accentuated risks of being able to access the export market. And, even though there is specialisation to service the South Island local market, loss of export opportunity increases vulnerability to supply and price volatility in the local market.

6.3.3 Hawkes Bay

Eight growers attended the third focus group, held at Hastings in Hawkes Bay, on 2 February 2000 which was facilitated by the author. Hawkes Bay is the first major production area to commence harvest each season. Hawkes Bay is also the largest growing region, producing about 48% of the national export crop. Harvesting of some pear varieties was already underway and apple harvesting was anticipated to commence in about ten days. Growers considered that they were in a lag period, attending to important but less time consuming or timing critical activities. All thinning activities had been completed. There was an air of apprehensive anticipation for the harvest season. Not so much in respect to the activities of harvest but more directed toward what financial returns the season could deliver. After several years of poor financial performance, a good profit year was needed. There was unspoken anticipation that 2000 would deliver to this hope.

Participants identified seven organisational changes as being important in determining both short term and long term industry development. Unlike the Wairarapa and Canterbury groups that identified specific activity changes (such as FAS and contracts), the Hawkes Bay group identified changes in the way growers participate in determination of industry direction as the area of greatest threat to their businesses. This demonstrates the importance of industry political dynamics to Hawkes Bay growers, amplified by the following grower comments:

"Lack of rational decision making coupled with the rate of change and the ability of growers to adapt to changes." (Grower 2 Hawkes Bay)

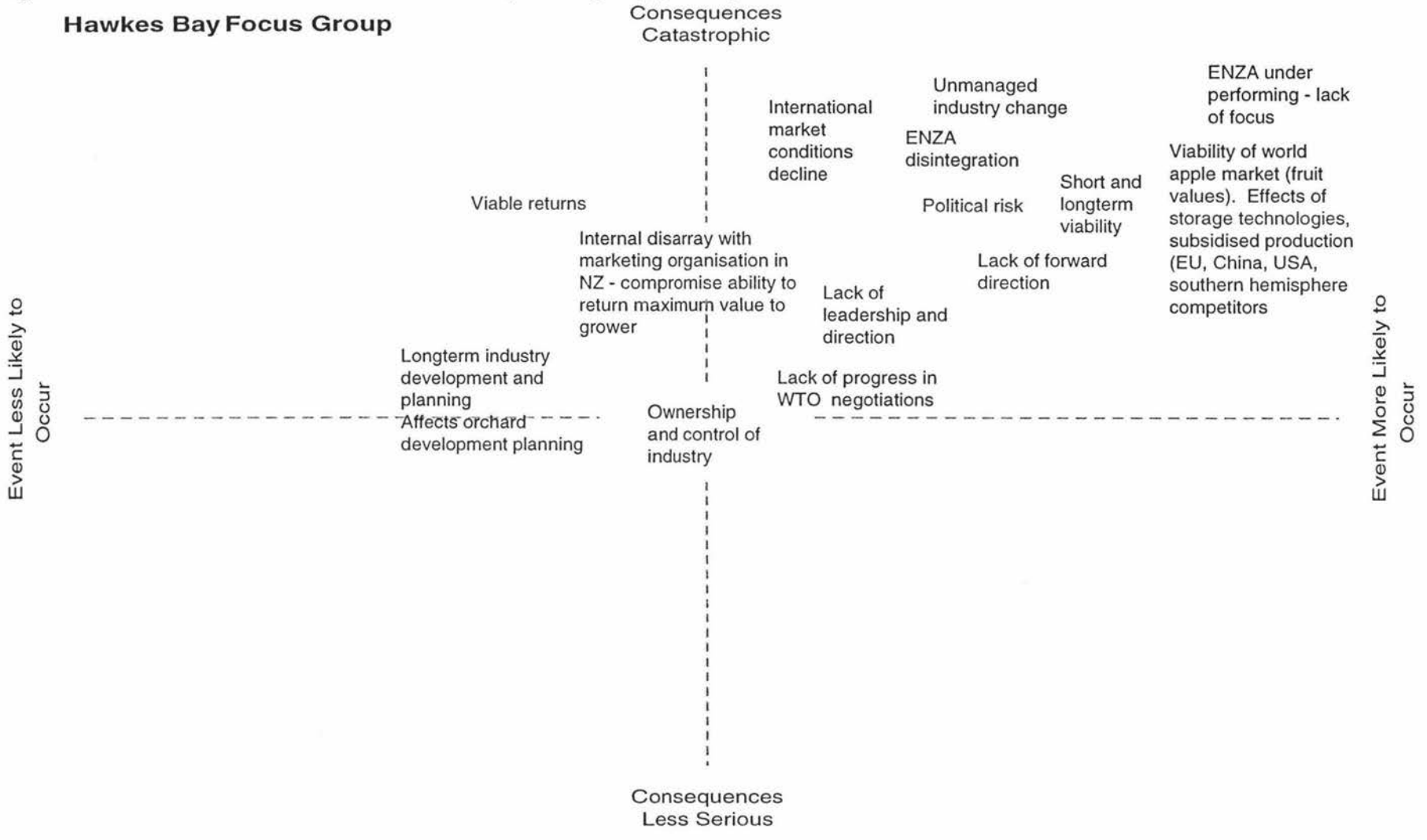
"We spend so much time trying to convince MAF and MP's about how important the board is and they don't seem to want to listen. That is so exhausting emotionally, and physically - because I have still got an orchard to run as well." (Grower 7 Hawkes Bay)

The results of working through steps one and two are shown in the table 10 below, followed by the risk matrix construction in step three displayed in figure 9.

Table 11: Steps one and two of the Hawkes Bay focus group

Step One: Organisational changes vital for grower strategic planning	**Step Two: Risky events that may have an impact on industry performance**
Unmanaged industry change	Decline in industry confidence Industry decline Economic and social loss Capacity of growers to implement imposed changes
ENZA under performing	No clear future strategy Short term planning Lack of change impact assessment at grower level
Low grower returns	Lack of profitability constrains ability to act Destabilising Increased pressure to deregulate
Political intervention/imposition	Continual and exhausting need to lobby Divided focus distracts from primary purpose
Uneven international market (or playing field)	Unpredictable vulnerability
Grower powerlessness - loss of grower control	Growers are marginalised Growers excluded from planning and managing industry change Lack of good information for growers to judge/assess best decisions/directions
Industry leadership	Lack of confidence in grower representative bodies Lack of framework, confusing structure(s)

Figure 11: Risk matrix constructed Hawkes Bay focus group participants.



As already mentioned, in Hawkes Bay growers considered restrictions on participation in determining industry change as the dominant risk event. This is expressed most clearly through the specific identification of unmanaged industry change, lack of leadership and direction as risk events of moderate to high likelihood and moderate to high consequence. This marked difference in risk perception, or construction, between Hawkes Bay and the preceding two minor regions, indicates greater importance of political participation in processes that determine the strategic development of the industry for. This may be a reflection on added vulnerability that is imposed through the sectoral specialisation that exists in the region, for example a segregated real estate market that is not present in minor regions. This is an understandable situation, as the relative capital investment required per unit of production has historically been higher in Hawkes Bay than in Wairarapa, whereas costs of production and fruit values have been similar. Therefore capital costs of participation or relative industry investment are higher in Hawkes Bay, and consequently potential for capital erosion due to poorly planned or managed industry change, is higher.

6.3.4 Nelson

Five growers attended the final focus group, held at Richmond in the Nelson region on 11 February 2000. This group was facilitated by another member of the research team, with the content taped for subsequent analysis by the author. The focus group process was conducted in a similar manner to the earlier focus groups, following the five step process described in the introduction to this chapter.

As the second biggest growing region and the oldest major growing region in the country, Nelson displays some important differences from Hawkes Bay, and minor growing regions. Three that are of interest to this research are:

(a) Their are multiple political structures representing the region, through four geographically specific grower associations (as against one in Hawkes Bay and one each in all other minor growing regions). This is important as it provides expanded opportunities for individual growers to participate in political aspects of the industry and requires additional negotiation between the grower associations before a regional position can be reached. Whereas in Hawkes Bay, with only one association, the

regional position can be arrived out with minimal negotiation and is vulnerable to manipulation by the current industry representatives. However, it is important to state that neither regional structure is always inherently better or worse than the other, just that the structure will influence the time taken to arrive at a regional position, and grower perceptions over the ability of the individual to participate in the process;

(b) Nelson has resisted 'rationalisation' of packing facilities, resulting in a higher number of packhouses continuing to be run as part of the orchard enterprises. Whereas in Hawkes Bay, packhouse rationalisation has seen many 'orchard' packhouses close and packing operations centred around remaining or new operations that have expanded volume and technology and typically operate as autonomous enterprises, separate from an orchard enterprise. Some in the industry would suggest that the motivation behind ENZA driving rationalisation, is to separate the primary level grower/producer, from the secondary level industrial service provider. Effecting a separation would then allow ENZA to manipulate (reduce) the cost structures imposed through the packing activities. Of course another possibility from such a development is that power becomes more concentrated into the packing sector, increasing cost to the grower, rather than delivering cost efficiencies. The significance is that has resisted this change and may result in Nelson orchardists have a quite different perception of the industry, from their Hawkes Bay counterparts; and

(c) Nelson has not suffered the ravages of hail storms that have been experienced in Hawkes Bay in recent years. Commentators vary, but all agree that at least 50% of Hawkes Bay pipfruit orchards had suffered 40% or greater loss of crop due to hail storms between 1994 and 1997. Some estimate that it may be as high as 65% of orchards. From personal experience, it is expensive and difficult to recover export grade fruit from crops that have suffered 40% or greater hail damage, and even with hail insurance cover (typically less than 30% of growers carry such cover) significant financial impact has had to be carried by affected growers, adding to the financial stresses imposed by several years of low fruit values. Consequently, Nelson orchardists consider that they are in a relatively stronger financial position than Hawkes Bay growers.

Participants noted that Nelson growers were particularly busy preparing for the harvest season, expected to commence in the next two weeks. Ensuring packing facilities

and equipment were operational was one of the factors identified as contributing to business. Participants expressed a stoicism toward the pending harvest with comments like:

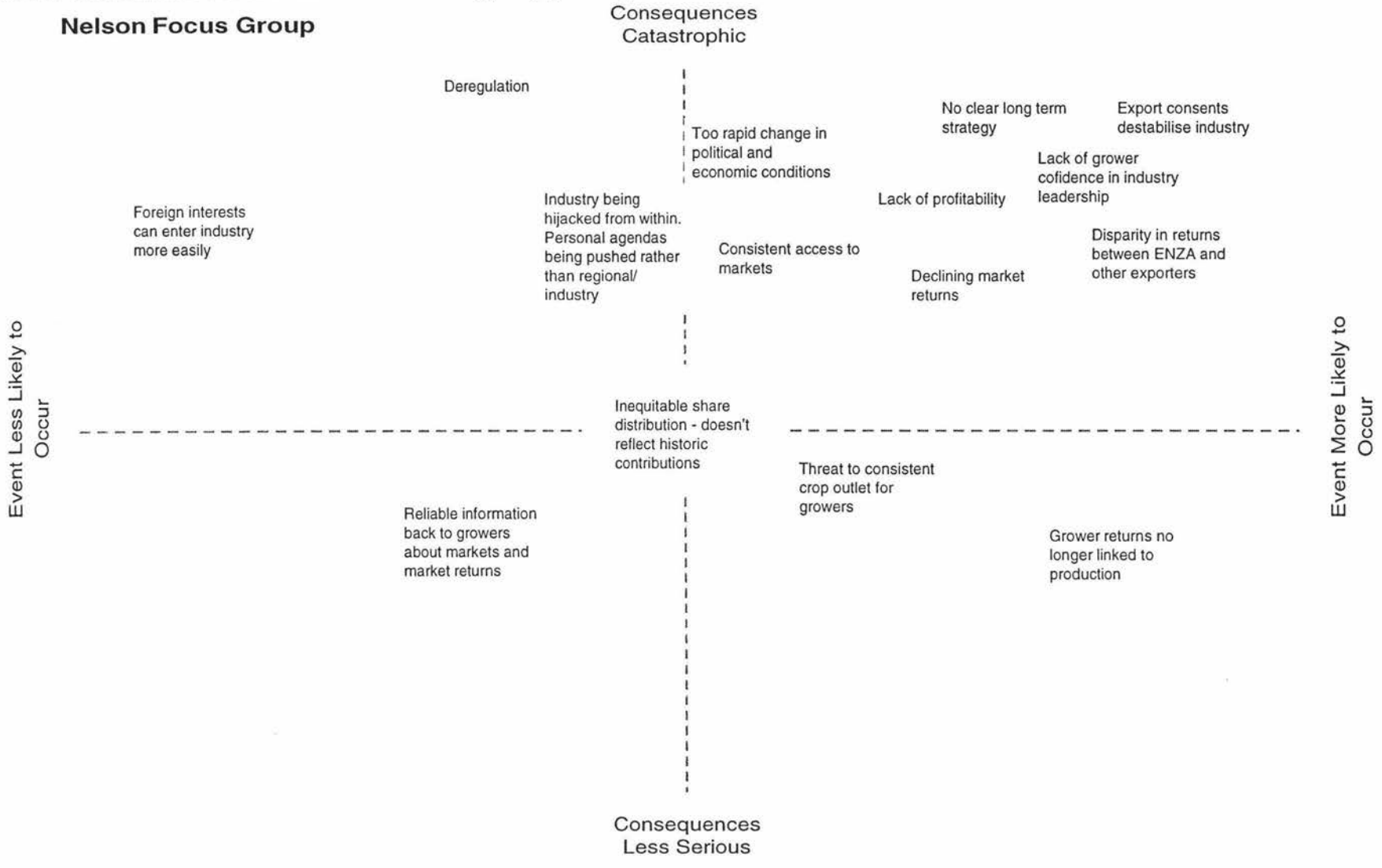
> "We've done our best with the crop on the tree and we'll do a good job with packing, then it is beyond our control." (Grower 3 - Nelson)

Participants identified six organisational changes as being important in determining both short term and long term industry development and, as in Hawkes Bay, political aspects feature highly. However, there is also recognition of operational changes (FAS, contracts, etc) which is possibly consistent with the comments above, describing differences between the two regions, particularly the different regional responses to packing rationalisation. The results of working through steps one and two are shown in the table 10 below, followed by the risk matrix construction in step three displayed in figure 9.

Table 12: Steps one and two of the Nelson focus group

Step One: Organisational changes vital for grower strategic planning	**Step Two: Risky events that may have an impact on industry performance**
Declining market returns	Loss of grower control of industry Lack of confidence in industry leadership - grower powerlessness
Inept political organisation of the industry	No clear long term strategy Industry hijacked from within Threatening loss of single desk (deregulation)
Increasing supermarket power and decreasing category decline	Downward pressure on prices, reduced profitability, limits ability to act at orchard level (stifle innovation). Increased internal industry tension -ENZA export vs ENZA cool Export consents destabilise NZ market negotiating power
Excessive rate of change	Too rapid change in political and economic conditions
Capital distribution	Inequitable process threatens asset/equity values Vulnerability of industry to predatory investment
Contracts, tenders, FAS	Consistent crop outlet for growers Reliable information to growers on markets and market returns

Figure 12: Risk matrix constructed Nelson focus group participants.



In Nelson, industry deregulation and risk events that were seen as having a strong contributory association with deregulation (export consents, industry being hijacked, foreign investment) were seen as the events of greatest consequence. This is consistent with the low to moderate ranking given to deregulation in terms of the likelihood of the event occurring. Scepticism over the effectiveness of industry political processes and structures was strongly represented (personal rather than industry agendas being pushed, and no long term strategy). Overall, the Nelson group tended to display the greatest level of balance between operational and political aspects of the industry which was consistent with earlier observations that the Nelson industry was in a relatively better financial situation; and the political structure of the area spurred greater within-region negotiation of factors that of importantance to the industry in the Nelson region.

Having described each focus group and the outcomes of the focus group process, the next step is to draw a strand of common risk construction across the groups as an indication of inter regional commonality. This is discussed in the next section.

6.4 Risk Constructions that are Common Across Focus Groups

To effectively manage change in the industry, (i.e. in a manner that provides greatest continuity through the industry), it is important to separate the issues of concern that are common across the industry, from those that are held by individual regions. This allows change management effort to be focused where it can be most effective, resulting in national strategies for national issues and, if considered appropriate, local strategies for local/regional issues. This section seeks to draw together four constructions that were shared across all four focus groups and that were seen by participants as having high consequence and high likelihood of occurrence. Participants in each focus group have used different words to describe the events/issues that are now being brought under common headings. In drawing together events/issues that share a degree of commonality, there is a risk that the meaning for each individual group will be reduced in order that it be made to fit beneath a particular heading. And in the process of creating that fit, the multi dimensional constructions are distilled down to a single dimensional meaning that lacks the former, multi dimensional richness. In an effort to avoid, or at least minimise this distillation, each event/issue is discussed as a theme which allows imprecision in definition

and discussion, around a central core of commonality. These four themes are discussed in more detail below. The themes are:

(a) Grower ownership and control of the industry;

(b) Lack of long term strategic planning;

(c) Marketing performance; and

(d) Fragmentation of NZ marketing effort

6.4.1 Theme one: Grower Ownership and Control of the Industry.

Consistently, participants in each region identified this theme, some couching it in terms of a dilemma "... sometimes I wonder if I'm damned if I do and damned if I don't, but only a fool would think that deregulation is a good thing for the New Zealand industry" (Grower 3 Nelson). The equally unpalatable choices being:

(a) Fighting to support retention of a grower controlled and owned single seller structure, which is their structure of preference. However in the context of perceived powerlessness, lack of confidence in industry leadership and management, and recent experiences of poorly managed industry change, growers wonder whether this is a stand on principal which is going unnoticed or ignored by those with responsibility over the final determination of future industry regulation. And in the process of making this stand, rejecting opportunities for relationships with 'independents' that could provide greater security to their business should the industry be significantly re-regulated (deregulated); and

(b) pursuing opportunities with 'independents' in anticipation of a re-regulated (deregulated) industry and thereby contributing to an inevitability for deregulation of the industry.

As described in the introduction to this chapter, the participants of these focus groups essentially support single desk marketing and oppose deregulation away from a single seller export marketing structure.

Grower powerlessness was commonly mentioned as an overarching and confounding issue for participants. The words to describe this showed marked similarity between regions, for example:

... no one seems interested in the problems of production anymore ... (Grower 3 Wairarapa)

... it seems like the tail wagging the dog, I thought this was our industry ... (Grower 1 Hawkes Bay)

... what we said at grower meetings used to influence operational policies ... (Grower 1 Nelson)

... I'm not working in a unified industry, someone else is playing the tune and I don't know who it is anymore ... (Grower 2 Canterbury)

Growers consistently expressed a perception that the industry consultative processes were changing rapidly. This was accentuating the perception of powerlessness as growers expressed constrained enablement to bring an understanding of what change translates to at the individual orchard level to the attention of the change drivers (ENZA and government). In particularly expressing and describing how changes would result in altered risk dynamics that would deliver increasing levels of market risk vulnerability to the individual orchard enterprise, and away from the industry as a collective, that had previously acted with a high level of sensitivity to the collective industry good.

6.4.2 Theme two: Lack of Long Term Strategic Planning

Consistently, participants expressed varying degrees of dissatisfaction over the management style and leadership of ENZA. To a degree this can be interpreted as an amalgam of the preceding three themes. This is because it is natural that where a group perceives its existence and identity is threatened, they seek to identify the source(s) of the threat(s) and hold people or organisations accountable for permitting or even constructing the threat to occur. So this theme could be discounted as not being a bona fide theme that contributes significantly to understanding industry perceptions - grower voices. To do this would demonstrate a shallow analysis that is unworthy of the intention of this research project. For the following three factors serve to negate at least some of the influences of dissatisfaction and therefore due consideration as a separate entity from the previous three:
(a) Participants clearly identified a need for, and willingness to change;

(b) Participants demonstrated a good understanding of international market conditions for pipfruit, particularly in aspects of global production/supply and supermarket influence; and

(c) Participants were cognisant of erosion of their political influence over the preceding ten or so years.

The areas where participants identified and described particular example that demonstrated poor leadership and management were:

(a) Little if any assessment of impacts of change and the ability of the industry to adopt change in an orderly manner within the time frames permitted. Specific examples identified were ESP's[2] (ENZA submission profiles) where finalisation of the specific standards per profile group did not occur until right on harvest and with little or any explanation of the changes these would impose on orchard operations, skill sets needed or potential financial implications;

(b) Introduction of FAS (free alongside ship) whereby growers directly meet the costs[3] of packaging, storage and freight to alongside the ship. Details of the operations and infrastructure changes that needed to be implemented were not finalised until after some districts had commenced their harvest season; and

(c) Introduction of a new computerised and internationally networked inventory management system referred to as SAP. Despite promises of greatly enhanced reporting capacity and accuracy of product tracking and grower payments, the system failed abysmally in the first year of operation resulting in errors and delays to grower payments, inaccurate capture of product data and erosion of grower confidence in ENZA management to a point where growers "...doubt ENZA could organise a piss-up in a brewery." (Grower 7 Hawkes Bay).

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[2] ESP's are specific fruit characteristics such as colour, firmness and starch content that can be measured and are considered indicators of fruit storage ability and quality. En ESP profile of 'A' is expected to have the longest storage quality and inherent eating quality. Consequently such fruit attracts a premium over other profile fruit but also has attached to it a longer period where the grower carries the commercial risk for fruit quality and suitability for market.

[3] Previously these costs were paid by ENZA on growers' behalf and grower returns reflected the net return after deduction of such costs.

An in-depth review of each of these industry developments would likely paint different perspectives on the change processes and the imperatives driving each change event, from that identified by the grower participants in these focus groups. However, it needs to be noted that such a review would add perspective on a complex set of industry developments, not discredit or nullify anyone perspective. The relative political power of the different 'voices' that present each perspective would ultimately determine the perspective or multiple sets of perspective that would carry greatest influence. That growers comment on their lack of incorporation into the change events, above, adds credence to grower perceptions that the political influence within the industry has shifted from growers to other entities such as those listed in theme three and providing the glue for the preceding three themes to form the amalgam of this theme as stated in the opening discussion of theme four.

6.4.3 Theme three: Marketing Performance

A lack of profitability was identified by all focus groups as a major issue of concern and expressed most strongly in Hawkes Bay. Hawkes Bay participant comments typically qualified the factors contributing to compromised profitability by including the financial impacts of hailstorms that have affected around 50% of orchards over the same period of recent (post 1993) fruit value volatility/decline. Anecdotal evidence collected from general grower interviews, suggests that significant numbers of orchard enterprises have been sold as the effects of low fruit values combined with capital costs of orchard redevelopment have been compounded by inevitably low volumes of fruit production, due to the lag period of five to seven years before the increased volume and (anticipated) value from the redeveloped area can be realised. The following comments are illustrative of this theme:

> The lack of profitability decreases our financial buffering capacity (Grower 3 Canterbury).
>
> We have to get viable fruit values (Grower 1 Wairarapa).
>
> We have to have viable returns in a long term framework (Grower 4 Nelson).
>
> Low returns can only be accepted for so long (Grower 4 Hawkes Bay).

6.4.4 Theme Four: Fragmentation of the New Zealand Marketing Effort.

All focus group participants accept the need and desirability of industry change to ensure the New Zealand pipfruit is most advantageously placed in the international fruit marketplace. There was clear recognition that the global market was going to be tougher, not easier in the future, lending a perception to the researcher that participants are reasonably well informed of macro conditions operating in markets outside of New Zealand's borders. came through under various descriptions. The following statements illustrate these variations:

> Inept political organisation of the industry, leading to the industry being hijacked e.g. by independents[4] (Grower 4 Nelson)
>
> Lack of cohesive longterm strategic planning driving change (Grower 5 Cant)
>
> The new operating policies (FAS, tenders, contracts) haven't been analysed back down the chain to implications for producers (Grower 2 Wairarapa)
>
> Lack of rational decision making coupled with the rate of change and the ability of growers to adapt to changes (Grower 1 Hawkes Bay)

Participants expressed a willingness to accept change that was well conceived, well planned and consistent with a shared longterm strategy, illustrated in the Nelson comment:

> "... this is not an industry that can operate on short term decision making. It takes a long time to grow an apple tree to mature production, our planning and vision needs to reflect this." (Grower 1 Nelson)

However, most clearly expressed was dissatisfaction with current change processes and when this dissatisfaction is coupled with the expressed descriptions of powerlessness, this indicates that there has been a shift in relative influence over industry planning and direction, A shift from strong grower influence over operational arrangements at many points along the product chain (through various industry representative bodies[5]); to

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[4] The independents is a term, or title, used to represent growers who want to export outside of ENZA, on their own account.

[5] Examples of these were (a) grade standard committees that established the overall grade standards each year, and reviewed the application of those standards on a weekly basis; (b) regional research committees that

increased executive power at within of ENZA, and increased central government political influence (or intervention) through agencies such as Ministry of Commerce, Treasury and Ministry of Agriculture and Forestry through changed regulatory mechanisms - regulatory mechanisms that had previously facilitated grower voices in the industry, but now engineered to fragment the industry.

The preceding sections in this chapter have discussed the characteristics and constructions for each individual focus group, and aspects of commonality in construction that can be drawn across the groups. The following section discusses two additional themes that have been identified in more than one focus group and not yet discussed. They are:

(a) Loss of critical mass; and

(b) The changing role of the orchardist

6.5 Additional Themes that Built a Deeper Industry Pictures

6.5.1 Loss of Critical Mass

This was expressed in three regions but the context was different in Nelson from the context presented in Wairarapa and Canterbury.

In Nelson, the critical mass was focused both internally within New Zealand and externally into the global arena, each incorporating a degree of reflection of the current situation and in anticipation of regulatory changes that were perceived as posing a significant pressure to further fragment the New Zealand industry. For example, through liberalised export consents resulting in uncertainty for ENZA over crop volume it will receive resulting in a weaker negotiating position for development of marketing plans with major customers; and multiple exporters/sellers of New Zealand fruit leading to weak selling and industry wide erosion of fruit values.

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identified industry research priorities; (c) local fruit grower associations; and (d) the national fruit grower body NZ Fruitgrowers Federation..

In Canterbury and Wairarapa, the focus was within the region and within New Zealand. Pending industry change was seen as being considered in relation to and focused on the major growing regions with negligible consideration of the contribution minor regions made to the overall performance of, and opportunities for the greater New Zealand pipfruit industry. For example, capital infrastructure assets, such as coolstore facilities, that participants perceived had been established out of an integrated industry development strategy, could be disposed of without apparent reference to the growers in the areas where such infrastructure had been established. Participants described frustration at an apparent lack of opportunity to influence the future treatment of such assets, further contributing to, or illustrating the expression of grower powerlessness in these minor regions.

6.5.2 The Changing Role of the Orchardist

This was specifically expressed in Nelson in the comment "...change away from just being a grower". This identifies that the change being embraced by the industry, is translating into significant changes as to what the task of being a pipfruit grower entails. This also highlights the influence of central government regulation in determining the development of the pipfruit industry. Since the advent of the Fruit Control Act 1924, the industry progressively developed skills specific to the various sections of the industry and encouraged activities and responsibilities to be managed from positions within the industry that resulted in perceived operating efficiency. Consequently, the grower role became progressively specialised to one of growing fruit and administering a fruit growing enterprise, or in some instances growing and packing fruit. The other activities in the product chain such as coolstorage, packaging, freight to ship, shipping and marketing became responsibilities of the Apple and Pear Marketing Board, acting on the behalf of all individual growers, in the collective interest of the industry, and enabling entry into negotiations for supply of services, access to markets, and product prices, with a single industry collective strength that was theoretically stronger than through multiple individual bargaining.

With the advent of FAS growers needed to firstly build an understanding of what critical services they needed to secure from FAS service providers, and develop the skills to negotiate appropriate contractual arrangements. This may appear a reasonably simple

commercial exercise, but in reality has been quite problematic and complicated by historical relationships between growers and other service providers. For example, many packhouse operators became FAS providers. The pre-existent relationship between grower and packhouse operator had been one typified by a working in partnership description - the orchardist concentrating effort on producing good fruit to present to the packhouse. The packhouse handling the fruit from the grower to present a good quality line of fruit to ENZA and maximise the export fruit yield from the grower line received. Contractual arrangements existed but were traditionally on the basis of an informal 'gentlemen's agreement' basis. Relationships with the grower and packhouse were normally enduring, with little if any competition between packhouses to attract grower clients. Current change in the industry has broken down these traditional relationships and developed a strongly competitive environment between packhouses and formal contractual arrangements between grower and packer. A new and charged dynamic for growers to adjust to, particularly when they perceive themselves as marginalised from their traditional role in informing, testing and contesting change.

6.6 Summary

The field work reported here has only felt the waters on the subject of grower constructions of risk. There are approximately 1400 growers that make up the pipfruit industry and this project has only canvassed the views of 21. That suggests that there is scope to test the results gained from the four focus groups in a wider grower audience. That audience could also be segregated according to ideological leaning. This project has only captured the views of growers who essentially support the continuation of single desk selling. It would be foolhardy to ignore that there is a significant number who subscribe to an opposing position. They too are growers worthy of hearing as their positions and opinions will have been developed in response, whether consciously or not, to their own risk constructions.

The author, acknowledging bias toward supporting the principle of single desk, has tried to limit the degree to which that bias influenced the research process and interaction with research participants. However, the capability to limit bias influence has only been partially tested due to the selection of the focus group participants.

Chapter 7

Discussion and Conclusions

7.0 Reflections on the Research Process – Conceptual Challenges

Rather than summarise the contents of each chapter, the aim of this final section is to reflect on the research process at a number of levels – theoretical, methodological and from an industry policy point of view. In many senses, it is difficult to get a 'fix' on any farming industry in terms of explaining its daily operations, 'typifying' producer structures and gaining clear insight into financial operations. This is particularly the case with pipfruit orcharding where approximately 1,400 suppliers face unique conditions at the micro-level (the level of their own operations) whilst participating in larger industry developments and functions. In many ways, there is no 'standard' orcharding operation and international market conditions have been so volatile in terms of price and demand sensitivities over the last five years, that grower perceptions of key industry risks are in many ways increasingly comprehensive, yet in others, poorly informed.

Reflecting on the value of theory in explaining and conceptualising important aspects of New Zealand's pipfruit industry, this thesis has argued the merits of combining political economy of food perspectives stemming from food regimes analysis and concepts of food networks. While the food regimes framework has received some criticism from the post-structuralist camp, it is difficult to conceive how a clear understanding of agri-food networks in New Zealand, particularly post-1984, could be proposed without focusing on the momentous political and economic events associated with the structural adjustment experiment which fundamentally changed the productive, investment, economic and socio-political landscapes. Food regimes analysis, with its focus on investment axes and comparative trends in global food restructuring, represents a powerful theoretical tool in situating historical and current industry challenges and structural conditions.

The most important challenges for the New Zealand industry in the near future are twofold. First, to resolve the current ongoing regulatory review impasse that is crippling industry development by occupying a considerable amount of time, energy, financial input

and intellectual focus on the part of industry directors, marketers, growers and post-harvest operators. Most parties would agree that the new regulations introduced in 1999 are not ideal. However, there are ways to maximise industry value working within those regulations which still support the principle of controlled channel marketing. At issue is whether, and how, different industry stakeholders wish to continue with controlled channel marketing given ENZA's perceived history of some degree of financial mismanagement and limited accessibility in information sharing.

The second important challenge includes the ability of growers and stakeholders to accept that in the near to medium future, they will likely have to work harder for lower returns. The structural conditions of the international marketplace dictate this reality. Retail consolidation, oversupply, new large suppliers like China coming on-stream and the shrinking Southern Hemisphere counter-seasonal window all point to less-than-optimal returns for the next three to five year period. Where New Zealand may have an advantage over other Southern Hemisphere competitors in terms of retaining some fruit premia in the marketplace is in its perceived image as a supplier of 'clean, green' food products. Further, prices will be better protected through a controlled marketing programming which reinforces the urgency of resolving the current regulatory dilemma.

The intensely contested politics surrounding New Zealand's pipfruit industry point to the value of food networks analysis in 'peopling' agri-food restructuring literature. Ultimately, people make decisions within the context of industry structures. People also interpret the meanings of 'maximising industry value' and 'risk' and shape/re-create key organisational structures within industries to pursue certain goals and values. Food networks also facilitates a discussion of discourses of power within agri-food systems. In the case of New Zealand, the agrarian political economy has been dominated by neoliberal ideology and development practices. Central government, to some extent media and state organisations have been firmly imbued with market ideology, which to a degree may be in the course of being challenged (or re-packaged) by the election in 1999 of a centre-left government coalition. It is difficult to speculate on the implications of discursive change at the central government level at this point. It is also difficult to guess which way the central government will swing in the current pipfruit industry regulatory review process. The degree of industry infighting and indecision over the past 14 months regarding the 'new'

1999 Regulations may have permanently muddied the waters for continued support of controlled channel marketing.

The issue of 'grower risk', discussed in Chapter 6, demands a combined understanding of structural determinants of industry risks, and the types of personal and commercial management activities which are perceived to mitigate or inflame these risks. Again, this complex issue points to the value of combining a structural, networked and locality-based understandings of the processes that shape regional, national and international industry conditions. This does not imply a pre-determined heirarchy of theoretical framework approaches to specific problems. Throughout this thesis, the reality of contested and fluctuating restructuring processes has demonstrated the need for flexible and careful theorising of 'globalisation' and how it may be manifested or constituted through local meaning, structures and resource conditions.

7.1 Reflections On Blending Analysis Approaches.

Using structure analysis has been an effective tool to built up both an historical perspective on the New Zealand industry development, the local distribution of industry presence in New Zealand, and the contemporary international and domestic influences shaping the restructuring pressures that are currently being managed by the industry. But relying on this approach alone, would not allow building the grower perceptions on processes and power that are important factors that influence industry capacity to manage restructuring. Network analysis has provided a means of building this grower perspective that, when combined with structural aspects, enables understanding of how events, processes and policies are mediated by pipfruit growers

The benefit of mixing the two approaches has been to provide a degree of contestation of each approach. Networks on their own are a product of previous historical events that have brought the industry to a specific point. But then structure alone is not necessarily a good basis to project forward. From previous personal experience working on the fringe of policy development in the midst of the restructuring era, it appeared that a significant number of assumptions were made about how farmers would act, based on structural analysis. This research as challenged the assumption that farmers would act in a

'rational' manner in terms of investment. This research has asked orchardists - farmers – how they perceive risks affecting their business enterprise. And as a result has provided initial findings that can be used to shape additional research.

7.2 Agrifood Restructuring – More Questions.

The New Zealand case of agrifood restructuring theory is unique in many ways. This uniqueness is shaped by the fact that among western 'industrialised' nations, New Zealand has pursued among the most radical and profound series of socio-political and economic reforms compared with other developed nations. The expression of globalisation within New Zealand society and political economy is therefore conditioned by structural and other locality factors. In some ways, it can be argued that the New Zealand case is an anomaly among nations, and research on agro-commodity chains reveals only 'particularist' information.

This view however is theoretically short-sighted and obscures the myriad of ways New Zealand poses complex and 'cutting edge' questions relevant to agrifood theorising. For example, this research has shown that broad-based decisions about economic reform shape rural and non-rural based industries. This suggests that traditional boundaries between 'rural' and 'urban' restructuring and socio-economic analysis might be re-examined with a view to finding commonalties between these (often) academically separated contexts. Further research into the ways national scale political-economic change links rural and 'non-rural' spaces may provide new insight into the ways academics and policy makers make connections between people, activities and development objectives. It may be increasingly difficult to formulate 'rural sector' policy in a spatial vacuum, seemingly isolated from other sectors of society.

The whole question of 'scale' also raises interesting possibilities for more investigation. Assuming that scale is not a fixed spatial container (in other words 'global' and 'local' are not ontological givens), the question remains – what does 'globalisation' actually mean and how is it constituted and expressed? This research seems to point to the fact that globalisation can only be understood in terms of local experience. In other words, the 'global' is constituted in the 'local' and both of these levels of aggregation are socially

described and often characterised by conflicting interests. Looking a spatial scale as a social and political process, or component of agrifood restructuring, highlights an interesting and potentially fruitful area for further theorising.

Finally, little has been said about the role of 'nature' in shaping (or determining) the social and political systems surrounding agricultural production. In a similar way that 'rural' and 'urban' have represented a traditional theoretical dichotomy, it is also the case that 'nature' and 'society' have been viewed as separate entities. More work needs to be done on re-thinking the ways nature and society interact and mutually constitute one another. Questions about nature and what is 'natural' are particularly important as New Zealand makes decisions about new food technologies, the possible roles of biotechnology in food production and ways to capitalise on its 'clean, green' image in international markets.

7.3 The Development Connection

The New Zealand pipfruit industry is being subjected to change pressure that is being exerted from a range of sources. For this thesis, political pressure has been the primary area of concern, as this is an area where people control the process and agenda. Whether the direction of change can be labelled development or retrenchment is open to speculation. However, an underlying assumption is that political pressures being applied to the industry are, ostensibly, to encourage continuing development.

The adoption of a combination of in depth interviews and focus groups has permitted some degree of isolation of people controlled factors in the industry and those factors determined by environment and biological process. The reality is that the grower is mediating all these factors within the business enterprise. So if, indeed, industry development is the ultimate objective of the political drive to change the regulatory structures that have shaped industry development to date, the policy makers have a duty of care to understand the grower perspectives, particularly in the grower construction of risk.

The research has provided growers with a structured process to describe their context, identify risk issues, and analyse and prioritise those risks. Displaying the risks

within a dynamic probability : consequential matrix has permitted the grower definitions of risk to be viewed in a context of perceived urgency. This information can provide an important check to shape industry development strategies. Options can be weighed against likely effect (increase/decrease) on the identified high likelihood, high consequence risk issues, with the ultimate choices ensuring that there is no undue increase to the risk vulnerability of the pipfruit industry. Thus ensuring that change is following a development trajectory of growth in advantageous aspect of the industry, rather than simple change.

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APPENDIX ONE

Focus Group Handout

Risk Analysis: From Co-operative to Company in New Zealand's Pipfruit Industry

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1 An Introduction to Risk

1.1 These Notes Cover...

- a brief discussion of 'risk'
- an outline of a 'risky' framework
- key 'risk' questions about current industry restructuring

1.2 Rationale

Within the last twelve months, the pipfruit industry has been pushed to the brink of deregulation, it has witnessed the passing of the *Apple and Pear Restructuring Act* in November 1999, and it is currently making an historic change from a grower cooperative to operating under the 1983 *Companies Act*. These significant changes have introduced new set of risks to growers, the industry and rural communities.

1.3 Study Aim

Growers from different regions have various perspectives on the financial, personal and industry risks presented by current industry changes. This study aims to clarify regional similarities and differences in defining key restructuring risks as the industry moves from a co-operative to a company.

2 Starting Points: A 'Risky' Questions for Making Decisions

There are two general reasons for undertaking a formal 'risk study':

1. *Repeated (Smaller) Risky Decisions* - where sensible strategies are necessary to help individuals make good choices. Although these are 'small' decisions, when they are spread among large numbers of people they can have a cumulatively large impact. Example: choosing the best time to spray crops; where to pack fruit.

2. *One-Off (Big) Decisions* - where there is a considerable gap between the best and worst outcomes of making a decision - often at a collective or industry level. Clearly, these outcomes also have significant individual impacts.
Example: industry de-regulation; major share-holder investment.

This study centres more on the 'One-Off (Big) Decision' type of problem, with specific reference to the industry's (pending) shift from a grower cooperative to a company structure.

2.1 Working Through Complex 'Unknowns'

Clearly, growers and industry personnel cannot foresee all the changes or consequences of the *Apple and Pear Restructuring Act (1999)*. However, that does NOT mean that a formal risk analysis cannot be undertaken.

Most real choices in horticulture/agriculture are very complex and characterised by:

1. incomplete information about the problem(s) at hand;
2. multiple and conflicting objectives;
3. many people being involved in the choice(s), and having different ideas about how to deal with the outcomes and consequences of those choices;
4. several complex decisions are usually linked to form 'one' big decision;
5. changing (politically and/or economically) decision making environments;
6. mainly irreversible and/or costly commitments once a decision is made.

2.2 What Might Growers Do in Facing 'Complex Unknowns'?

The psychological response by different people to complex decisions varies and may be more, or less 'rational' in an economic sense. Many factors go into decision making that extend beyond simple economic cost/benefit analysis.

In dealing with complex restructuring situations, growers might use any combination of the following tactics:

1. simplifying complexity to find a course of action that is 'good enough' rather than 'the best';
2. avoid uncertainty or take steps to reduce it;
3. concentrate on incremental measures rather than actions promoting fundamental and rapid change;
4. reduce conflict of interest, or perceptual differences among concerned groups of people through discussion (sometimes simply 'forming a committee' can defer decisions and give everyone breathing room).

2.3 What *Are* the 'Complex Unknowns'?

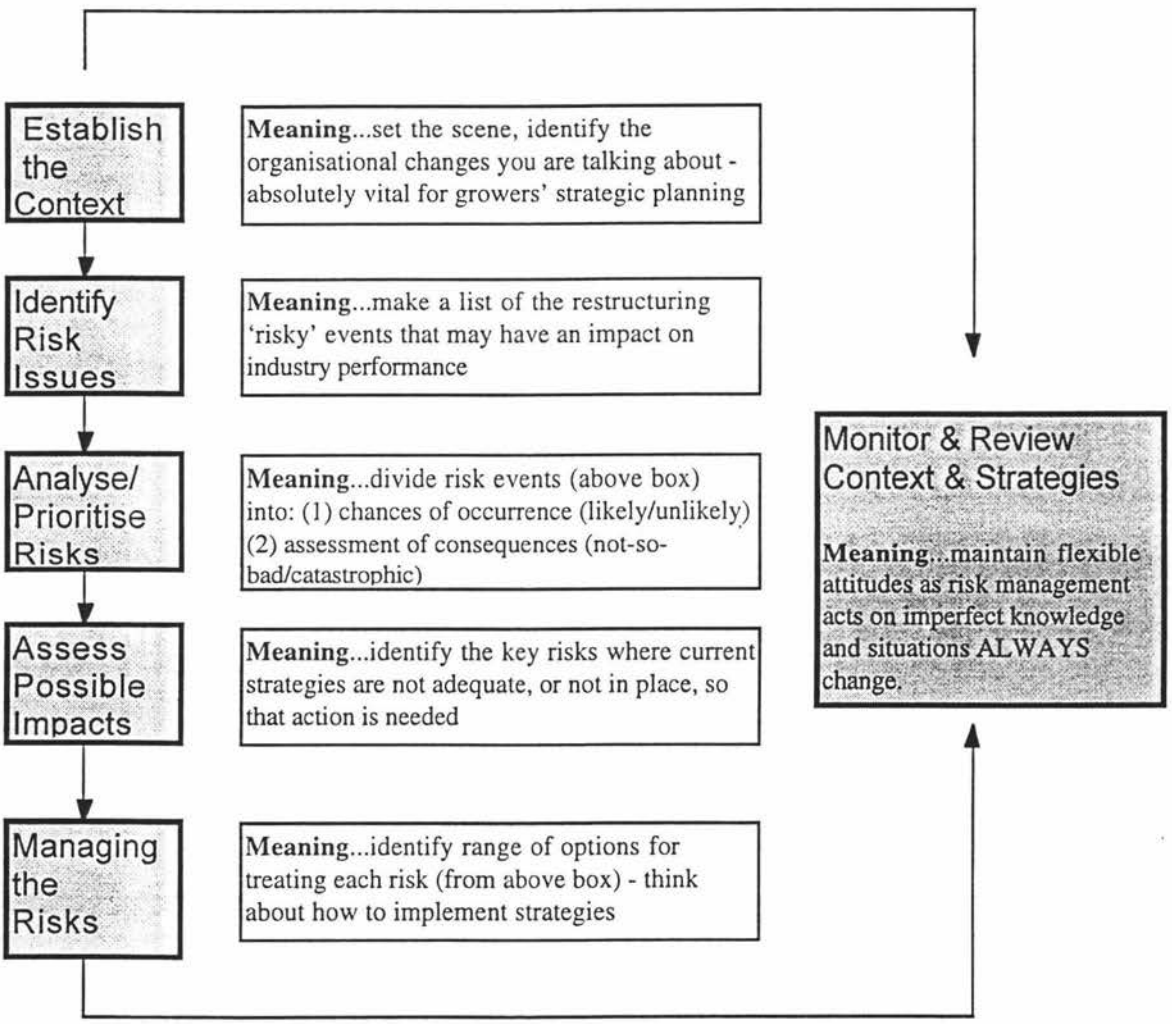
One of the main purposes of this study is to let growers decide what the 'complex unknowns' might be. Deciding what to identify as key risks in decision making analysis depends on:

1. identifying 'known' risks and speculating on possible future outcomes;
2. simplifying the situation to a point where a discussion and analysis of risk is possible;
3. keeping things practical and realistic so that our risk analysis might help clarify thinking and choices about handling restructuring risks.

3 Starting Points: A Risk Framework

Often, a picture is worth a thousand words. Below is outlined a risk framework, in the form of a diagram. The goal is to help organise thoughts and work through a constructive discussion of issues. The diagram is not 'cast in stone', and is not the only way to approach risk problems. Diagrams can always be improved, or some steps skipped - this might be more obvious at the end of the discussion and in analysing the key issues.

Diagram 1 Thinking About Restructuring Risk(s)



4 Grower-Driven Risk Analysis

In some senses, conducting a risk analysis based on Diagram 1 seems very obvious. However, no formal and comprehensive documentation of grower 'restructuring risk' concerns has been conducted by the industry to date.

In the absence of formal documentation, grower concerns about restructuring risks remain disorganised and easily passed over, or refuted by other more organised interest groups.

When a formal discussion document is compiled, it creates a sort of 'paper trail' upon which meetings can be based, debates progressed and issues refined. Potentially, it allows growers to have a greater contribution in, and control over, voicing important issues. Remember:

* even the 'experts' perform analysis with incomplete information
* there is no single 'best way' to assess risk
* risk analysis is fundamentally subjective, not 'objective'

4.1 Work Group Tasks

Part A: To get started on the risk analysis:

1. Decide what 'risk' means (a short, simple statement)

2. Work through each stage of Diagram 1 to come up with a perspective on key risk issues, strategies to address them and ways to monitor outcomes.

Part B: Think about what should be done with a grower-driven discussion document about risk:

1. What is the target audience for a report about growers' risk concerns? This may some bearing on how issues and strategies are defined.

2. Make sure to identify 'next steps' in this research process and involve key elements of the industry so that they become part of, and responsible for, grower's discussion process.