

**THE IMPACTS OF RESOURCE SECTOR RESTRUCTURING ON OCCUPATIONAL AND
COMMUNITY IDENTITY**

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Abstract

SIA is generally focussed on assessing the potential or actual effects of projects, programmes and policies in the shorter term. There are, however, important longer term impacts that can eventuate and require attention in strategic applications of SIA. This paper examines the longer-term social impacts of resource sector restructuring in rural New Zealand. Previous research showed that natural-resource based communities experienced a wide range of social impacts as a result of both government and private sector restructuring during last two decades. Ongoing research has focussed on changes in the inter-relationships between work, business ownership and transfer, and community change. Of particular interest is the transformation of work by new technology and management practices, with implications for occupational identity and community life. Individual and family work histories obtained from in-depth personal interviews are being used to identify and describe the changing nature of work in natural resource based production and processing industries. Individual experiences are analysed in the context of community change through community case studies. Of particular interest are changes in the way skills are developed and transferred by individuals and groups through families and community structures to reinforce occupational and community identity. Preliminary results show that industry restructuring, economic diversification and increased individual and occupational mobility have weakened occupational and community identity. These results will interest agencies, industry groups, training organisations, and facilitators of community-based development, who attempt a strategic approach to social and economic change.

INTRODUCTION

Social impact assessment (SIA) is generally focussed on assessing the potential or actual effects of projects, programmes and policies in the shorter term. There are, however, important longer term social impacts that can eventuate and require attention in strategic applications of SIA, particularly around changes in government policy and processes of economic restructuring. This paper examines some of the longer-term social impacts of resource sector restructuring in rural New Zealand over the last 20 years - representing changes for a generation of workers.

The research programme¹ shows that natural-resource based communities in New Zealand experienced a wide range of social impacts as a result of both government and private sector restructuring during the last two decades (Taylor, et al., 2001). The ongoing research has focussed on changes in the inter-relationships between work in natural-resource sectors, business ownership and transfer, and community innovation. The key question addressed in this paper is whether there are longer-term social impacts that are only now becoming evident. Impacts evident nearly 20 years after the political watershed of 1984, with the introduction of dramatic new economic and social policies, and a greatly reduced role for the state in natural resource sectors and their associated communities.

In this paper we look first at the changing nature of work in resource dependent communities. Preliminary analysis of work-history interviews provides further insight into the changes taking place. Our conclusions consider the implications for SIA practice.

THE NATURE OF WORK IN RESOURCE DEPENDENT COMMUNITIES

Nineteen community case studies conducted during the first two phases of the research from 1996 to 2000 were reviewed to identify trends in the nature of work in resource dependent communities. Of particular interest is the transformation of work by new technology and management practices, with implications for occupational identity and community life. The results were related to wider literature on the nature of work in resource dependent communities.

It is evident that people employed in natural resource industries have adjusted their work practices to the changing demands of the global economy. Even though some workers in natural resource industries (e.g. fishers, miners and farmers) continue to exercise traditional skills, many others have found that their work has increasingly assumed the character of a mass production system (e.g. open cast mines, deep sea processing vessels, contract farming) as technological innovations, the application of scientific knowledge, and the reorganisation of the workplace has transformed the nature of their work.

Four interrelated processes can be identified in relation to the transformation of work in resource dependent industries:

- Business ownership and re-organisation - over the last 25 years the ownership of natural resource dependent industries in New Zealand has become dominated by a relatively few companies, with foreign control entrenched in some sectors (e.g. energy, forestry). Factors that encourage this concentration of ownership include the sale and restructuring of state-owned assets, deregulation of the economy, vertical integration and adoption of capital-intensive technologies (McClintock and Taylor, 2002);
- Technological innovation - has significant impacts on the work practices of business organisations and the skills of individual workers. Adoption of new equipment, techniques, and processes, often increases a firm's productivity and profitability. This innovation can require an increasing level of skills especially in relation to computerisation and electronic information; it can also lead to de-skilling, polarising the total community workforce as a small proportion of workers become more skilled and a much larger proportion become less skilled;
- Contingent labour strategies - as full-time jobs are replaced by contracting arrangements that maintained the same job activity without the same benefits or security. Contingent labour, made possible in New

¹ Resource Community Formation and Change, funded by the Foundation for Research, Science and Technology, Contract TBA X0001. For further information on the research project contact Taylor Baines & Associates (PO Box 8620, Christchurch or by email: n.taylor@tba.co.nz). Further papers are available on www.tba.co.nz

Zealand by labour market deregulation, generally results in lower wages, a loss of benefits and pensions, reduced job security and reduced solidarity between firms, workers and communities. Firms have greater flexibility in organising the skills and quantity of their labour force. Furthermore, the use of contract labour transfers the risks of overcapitalisation and unstable demand from the firm to the contractor;

- Changing work practices and conditions - the nature of work in a particular occupation, such as the routinisation of work or the rotation of shifts, changes as new technology, management styles, and organisational structures (typical of Fordism) are adopted by an industry.

Resource-dependent communities demonstrate a strong link between the nature of work and the nature of community. Occupational identity and occupational community are two closely related concepts that help to understand the nature of work in natural resource dependent industries. A particular occupation provides its workers with a self-image, a sense of values, and a reference group which influences the relationship between their work and the rest of their lives in their family and community. Examples of these occupational groups in New Zealand include loggers, farmers, fishers, miners, hydro-construction workers, workers on offshore drilling platforms, and certain types of workers at tourist resorts.

While these different occupational groups have a strong sense of identity, only some of them remain isolated enough from the rest of society to constitute clear occupational communities. Spatial and temporal factors isolate people employed in some occupational groups, either in terms of spending their leisure time with workmates or residential location. These groups develop their own distinct working culture, including systems of status and rank.

It is evident, however, that the transformation of work (and transportation) has had an impact on occupational groupings and communities. Local labour markets can no longer be defined so clearly because people commute outside their residential community. Furthermore, individual workers are experiencing more occupational mobility over their working lives, and may also hold jobs in different occupations either on a seasonal basis or, in some cases, on a weekly or even daily basis. Resource -dependent communities, in turn, have more diverse economies, with those based entirely on one industry finding it impossible to survive the vagaries of industry cycles of employment.

WORK-HISTORY INTERVIEWS

Individual and family work histories obtained from in-depth personal interviews are being used to identify and describe the changing nature of work and local culture in natural-resource based production and processing industries. Individual experiences are analysed in the context of community change through community case studies. Of particular interest are the changes caused by the four interrelated processes (outlined earlier) in the way skills are developed and transferred by individuals and groups through families and community structures to reinforce occupational and community identity.

Respondents for the in-depth structured interviews in each community include those interviewed during the earlier community studies, and others identified by key informants and snowballing. Altogether, approximately 120 interviews are planned across 18 communities (and six sectors). These interviews address the pattern of work within generations of the same family, the changing patterns of individual working lives, and the links between work, community identity and community life. This paper draws on the first 30 interviews completed in three communities - covering coal mining, dairy production and processing, and tourism.

All interviews are conducted on prior appointment, and guided by a standard question schedule (developed out of the community studies, and relevant literature), using only open-ended questions. The interviews so far have taken between 75 and 120 minutes. Interviews are focussing on those with a current or immediate past association with the particular industry - including owners, direct employees, contractors, and service providers.

PRELIMINARY RESULTS

Mining

Rununga is a coal mining town with a population of 1,300, located on the West Coast of the South Island. This region was established through waves of resource exploitation, including alluvial gold mining, logging and forestry, coal mining, fishing, farming, and more recently, tourism. Rununga, along with other small towns in the district that were established in the late 1800s as a residence for coal miners, has a slowly-reducing and aging population and housing stock, and many of its residents commute the 10 km to work in Greymouth, a town of about 7,000 people.²

Our in-depth interviews in Rununga concentrated on former and current miners. Almost all of those we interviewed had come from mining families. Typically their fathers and grandfathers were miners. The first generation of miners were often immigrants from Great Britain or Australia to work in the state coal mines, or, in some cases, gold mines (later turning to coal mining). They often went straight from school to an outside job at the mine, such as sorting coal and handling bins of coal. Over time they became truckers, an underground job that involves taking full bins of coal away from the coalface for several pairs of miners, who were, not uncommonly, close relatives or neighbours. This gave them the necessary two-year underground experience (described as '*learning to read the environment*', '*the informal code*' and '*the sensory language of the mine*') before they could become hewers of coal at age 21. As junior hewers, they would often work initially with their father or an older relative in an apprenticeship role. In many cases the interviewees also had brothers and cousins working in the mines, often teaming up in working pairs, and socialising together outside of work. They also married and started families with the sisters and daughters of their fellow miners. These close connections between family, work and community life seem to have been a feature - at least until the 1980s - of the mining communities we have studied.

Most of the miners reported that a common dream among their fellow workers was to work and be a shareholder in a small cooperative private mine, of which there were a number in the district. This dream meant (if one could save the money required to go private mining) freedom from the hierarchical structure within the large state mines (with its bosses and underwriters), rigid working conditions and roles, labour/union politics, and constrained production & earnings. One interviewee described private miners as '*very free, self-dependent, and multi-skilled*'. A number of our interviewees managed to go private mining, often in partnership with relatives.

However, over the 1970's, 80's and early 90's coal mining changed, due to:

- Falling demand for coal as industry shifted from coal to electricity and oil;
- Government economic restructuring leading to corporatisation of the state mines in the 1980s, and an attendant demand by managers for greater productivity, efficiency and competitiveness;
- The progressive introduction of a range of new technologies such as hydraulic transport of the coal, high pressure water coal cutting, mechanisation (including road headers, continuous miners, shuttle cars, and front-end loaders) - requiring staff with different types of skills, and new approaches to mine development and management;
- Labour market deregulation, including a major reduction in the power of the miners unions.

As a number of state mines closed or the remaining mines downsized, redundancies followed, such that in the period from 1986 to 1996 the local mining workforce (including the private mines) reduced to less than a third. At the same time, under intense competition from the corporatised State Coal company (Solid Energy), lack of stable investment capital, and changes to environmental regulations, the smaller private coal mines became increasingly unviable, and by the end of the 1990s virtually ceased to exist. In the 1990s several new large mine projects, designed to exploit newly identified coal reserves, were initiated as international joint ventures, employing a mixture of experienced and new miners. However they were not sustained, and the promise of ongoing employment and new local prosperity evaporated.

These combined changes in the local industry broke both the intergenerational link with mining and the coal industry that had been fundamental to the community. Our interviewees noted that '*most of the old-skilled miners left the town*' that was '*95% mine workers*', leaving '*much less opportunity for employment due to mechanisation*'. Few in the next generation entered mining, either because there were fewer jobs on offer, or they were discouraged

2 McClintock, W., Fitzgerald, G., & Taylor, N (1998). Rununga. Case studies in resource community formation & change, working paper 10. Taylor Baines & Associates, Christchurch.

by ongoing uncertainty over employment in the industry, and *'all of the young people have had to leave the area and the coast for work and education'*.

The miners that were retained in the corporatised mines have had to acquire new skills (such as heavy machinery operation), new work practises and schedules, and to adjust to new approaches to mining and management. Many of the current miners commute into the area for work. The current generation of miners are said to be different from the former: whereas in the past they *'started straight from school'*, were *'physically tough, hard, stoical'*, had a *'strong sense of comradeship'*, and *'able to stand for themselves and their interests against bosses'*, today's miners are *'coming into mining in their 30s'*, *'from different backgrounds and occupations, 'attracted by the money', and 'motivated by financial and production goals'*. They are also required to *'do courses'*, *'work long shifts'* and be flexible in the tasks they are required to perform. Also, while the working environment is safer, and the work itself no longer relies on physical strength and stamina, under the present shift work arrangements the hours are reported to be longer and less sociable.

In terms of community life, prior to the late 1980s local community life was relatively vibrant and active, and participation in sport and social activities (often focussed on the pub, or miners' and community organisations) was common among mineworkers. But today, with the demands of rotating shift work and few mineworkers living locally, community activities and sport are more difficult to organise and sustain. Also many miner's wives, unlike in the past, are in paid employment themselves.

The various changes in the local mining industry have brought significant social change. Our interviewees noted that in Rununga: *'families are less close', 'the sense of community has gone', 'all that's left are aged people, 'it's a poorer place now', 'the place has gone back socially', and 'there are lots of empty and derelict houses'*. The social composition of the town has also changed: *'there are lots of new people now - alternative-life-stylers and unemployed', 'lots of foreigners (not West Coast people)', and 'many properties are rented out'*. The nature of the social change experienced because of industry changes can be seen in the comments made by, respectively, an older and younger miner: *'we don't know our neighbours on either side', 'I have few school mates here now'*.

Harry's case (see box), which is not uncommon, illustrates the strong intergenerational family connection with an occupation and industry.

Coal mining family case example: Harry

Harry is a retired coal miner. He came to NZ from Scotland as a child, and entered the state coal mines with his brothers in his teenage years. He initially worked on the 'rope road', winching and handling coal bins, then as a trucker, then a hewer. He married June, the daughter of a private miner. In time he became a check inspector (safety inspector) for the miner's union. After becoming increasingly worried about gas safety, he left the state mines in his 50's, and became a road worker for 2 years. An opportunity came up for him to buy into a private mining party, and he took it, working as coop-miner and jack of all trades for 6 years until his retirement. Unlike his former colleagues, his family have stayed living in the district. The family's occupational identification with mining is summarised below:

Father's father : Coal Miner in Scotland (from a mining family). Accident compensation paid for emigration of the family to the West Coast of the South Island of NZ.

Father : Worked with his father in the coal mines in Scotland. Then worked in Grey District state mines until retirement.

Mother : From Scotland - farming background.

Brother: Rope splicer at former state mine. Made redundant. Lives locally.

Brother: Miner until retirement. Lives locally.

Brother: Miner, died in his 30's.

Sister: Married a miner who became a mine manager. Moved to another mining town.

Sister: Married a miner. Died in her 20's

Sister: Married a miner.

Son: Apprentice at former state mine at young age. Occasional worked with his father. Became a private miner with brother in law when the state mine closed. Lives locally.

Son: Worked as a miner in a state mine. Made redundant. Now works for the railways. Lives locally.

Daughter: Worked in the miners' co-op shop. Married a miner who worked in state mine until an accident, and on recovery, became a private mine manager. Lives locally.

Dairy production & processing:

Clandeboye is a farming district in South Canterbury in the South Island. Formerly, it centred on the village of Clandeboye, one of a number of villages in the district that once provided services to localised rural communities.³ We interviewed both dairy farmers and dairy processing workers for this study.

Traditionally, moderate intensity family-based dairying and mixed cropping were the dominant farming types, and a variable economic unit was less than a third in area than is required today. There was also a clear social hierarchy in farming, with the dairy farmers on the lower rungs because their work was considered highly routinised, unrelenting, dirty, and '*industrial*'. Ironically, dairy farms are now the most profitable. Today, as one interviewee noted, '*there is no real community anymore - only a preschool and school*'. The community hall, which also remains, lies in the shadow of a large and expanding dairy processing plant, and has effectively become '*the factory's meeting room*'.

This plant gets its milk supply from farms up to 400 km to the north and 150 km to the south (collected by large tanker trucks with computerised testing and recording equipment), and it draws its 600-strong workforce from the nearest town of Temuka (population 4,000, about 8 km away), other South Canterbury towns, and the city of Timaru (population 26,000, about 30km away). Today the high-tech dairy processing plant, which is undergoing further expansion, is one of a number owned by Fonterra, the processing and marketing conglomerate formed in 2001 by the merging of the two largest NZ cooperative dairy companies.

The processing workers interviewed, who are urban dwellers, all came from families formerly involved in mixed (stock and/or cropping) or dairy farming in South Canterbury (generally as owner-operators), and had uncles and cousins still farming. For a variety of reasons their parents or grandparents had sold their farms and moved to town, breaking the family connection with the land, but not necessarily with agriculture. Some of the family farms had been sold to neighbours wishing to expand their acreage and retain viability. Their partners, if in paid employment, were generally office workers, and mostly came from former farming families.

The interviewees' siblings (the current generation) had taken up a variety of occupations, including dairy processing work, trades, and sales, and their partner's siblings were often involved in farming or some other work in the agricultural sector (like their forebears). Prior to their current jobs, the processing workers had previously done several other types of work, including farm labouring, primary processing (wool, meat, fish), and agricultural contracting (see Tom's story below). As the interviewees saw it, the expansion of the dairy processing plant at Clandeboye provided a unique opportunity for them to move into work which was clean, well paid, and more secure, without prior qualifications. Subsequently they have received training in modern process control, including the use of computers and automation.

Dairy processing worker case example: Tom

Tom's father was a wool classer and worked at a wool-processing factory, having been raised on his father's sheep farm in the district.

His maternal grandfather was also a farmer.

Tom did the minimum 3 years of high school, leaving without a qualification. His first job was as wool-handler-labourer in the same factory as his father. He stayed there about 8 months before getting a job as a butcher's labourer in a local town shop. After 2 years he went travelling overseas with his partner. On his return he got a job at the dairy factory's packing plant in town, where he worked for 7 years, before being transferred to the expanded and upgraded plant at Clandeboye as a shift packing supervisor. His job involves working in a control room supervising operation of computer-controlled milk powder drying machines and occasionally working with robots. He works in 12-hour shifts, on a 2 days on - 2 nights on - 3.5 days off roster. He described his working situation as '*high tech & automated - working with lots of computers and peering at a screen*'. It is also well paid compared to what he made as a labourer.

Four of Tom's five brothers also work at the Clandeboye dairy factory.

The dairy farmers we interviewed all came from farming backgrounds - generally multi-generational dairy farming on both sides of the family, and they had taken over a family farm at some time. Most had a long-standing connection with the community. One of the interviewees had recently moved to the district and was one of the first of the new farmers in the district converting properties from mixed cropping to dairying. The interviewees' partners had more varied family backgrounds, but generally there was some connection with agriculture. The

3 McCrostie Little, H., Taylor, N & McClintock, W. (1998). Clandeboye. Case studies in resource community formation & change, working paper 13. Taylor Baines & Associates, Christchurch.

partners themselves tend to be involved in the management of the farm business, having particular responsibility for the bookwork and computing. They indicated that the Internet has become an important tool for communicating with customers, suppliers, market information sources, and for business management. The interviewees' siblings were generally also involved in farming, though in one case, they had all become white-collar professionals, while the partners' siblings were almost all involved in agriculture. We also found that the pattern of involvement in farming was being repeated for the next generation with the interviewees' children either doing farm work, or studying agriculture.

Our interviewees had all first learned about farming from the previous generation, often working as labourers on the family or other farms before perhaps becoming sharemilkers and eventually owning their own properties. Some had taken breaks doing other jobs before returning to farming and running their own properties. The key change that interviewees reported in dairying was an overall intensification of the farming system, including systematic use of irrigation, new grass species and fertiliser regimes, new types of supplementary feed, genetic improvement of stock, and bigger herd sizes (leading to more intensive pasture management). This was accompanied by developments in dairy shed design and milking equipment that enabled dairy shed workers to manage more cows at one time. Simultaneously, environmental performance standards became tougher and more rigorously enforced. The common view is that dairying had become '*far more technical*', and has to be approached like any other major business that involves investment of considerable capital. This means more use of consultants, farm advisors, and accountants as '*part of the management team*'.

Dairy farming family case example: Bob

Bob's grandfather was a shearer from Australia, established a dairy farm in the district.

He married Frances, the daughter of a local dairy farmer.

Bob's father succeeded to his father's farm, supplying milk to the local dairy factory (the predecessor to the current processing plant).

After leaving school Bob went to work for his maternal grandfather, learning about dairying from him, eventually succeeding to the property when his grandfather retired.

One of his brothers took over his father's farm and still runs it today, while the other moved to Australia where he works on a cropping farm.

Bob married the daughter of a crop and sheep farmer, and together they ran his property without outside help, working long hours. Bob '*hardly saw the kids during the week*', with everything focused on the demands of the farm. Over time he turned the property into a profitable modern intensive dairy operation by doing pasture improvement, irrigation development, employing staff, acquiring neighbouring properties and expanding the dairy herd from 65 cows to 450 cows. Nowadays he employs a sharemilkers, but still runs his own separate feed unit elsewhere in the district.

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His two sons are working on farms elsewhere to gain more experience in cropping and dairying. To Bob & Frances, Clandeboye now exists in name only (or as the location of the factory), and the residents see themselves as belonging to a much larger diverse district, rather than a local Clandeboye community.

The routinised demands of dairy farming were described as having a '*huge impact on one's social life - with everything having to fit around milking*'. In the milking season, 15-hour (plus) working days are common, seven days a week. This means that farmers and their partners have little time to socialise, and are typically not able to participate much in community activities especially during their busy periods. However most reported some involvement in community organisations.

In terms of social change, one of the long-term residents noted that up to the 1980s there were sufficient people to run local dances, sports clubs, and to support local shops. However '*it all began to disappear in the mid 1980s due to economic pressure*' with many of the long-standing farming families selling up and leaving - and with the increased ease of travel, people shopped and socialised in town, '*the old close-knit community had gone*'. However, all the interviewees reported that the area is now being re-invigorated by the new dairy boom: dairy farming and processing are expanding, bringing in fresh blood and '*new energy*' to the area and '*an economic revival in town*'. There are new neighbours ('*on my road alone, there have been 5 new houses built, with dairy farm staff living in them*') and the school roll is increasing.

One long term resident felt there were now two types of dairy farmers in the district: the first are *'the older owner-operators who were brought up with dairying - they have smaller herds, are more self-reliant, more conservative in business, and more secure'*, and the second are *'the newer farmers (half sharemilkers, half farm managers) who are in it for the money, often North Islanders, aggressive in business, money oriented'*. These new farmers were also seen as *'not participating in the community, generally not well liked, but better performers when it comes to the environment'*. Clearly, as the dairy industry expands, Clandeboye is facing a further period of social change, and community re-formation.

Tourism

Methven is a town of about 1,000 permanent residents in Central Canterbury in the South Island of New Zealand. Until the 1970s it was essentially a service centre for a farming area. However, in the early 1970s, after recognising the potential for a ski industry based on the nearby Mt Hutt, the residents of the town and the country set up a local community organisation, to invest in the initial development of a ski field. A public company was then floated to finance the development. Hotels, accommodation and eating-houses, and small tourism enterprises were established (often by locals) to meet the needs of the incoming skiers. However, development of the ski-field and facilities halted in the mid 1980s when local money dried up due to a major rural recession brought on by economic restructuring. The ski field then moved out of local ownership into the hands of a Japanese company that made considerable investments on the mountain. In the mid 1990s the owners began disinvesting, eventually selling the ski field business to a subsidiary of Air New Zealand, which also operated two major ski fields in the Queenstown area. With a new round of investment in the ski field, local tourism was reinvigorated, and Mt Hutt became an international ski destination. Today Methven can be considered a winter tourism town (with a seasonal population of up to 3,000) that also provides important services to the farming community, with its fortunes closely tied with those of the ski field and its owners. This relationship, and the change in local identity from farming district to winter tourism (including those that were involved in bringing about this change) can be seen on the large sign in the town centre: *'METHVEN. MT HUTT VILLAGE. SISTER CITY OF SHIOZAWA'*⁴.

Our interviewees in Methven included fulltime ski industry workers, adventure tourism operators, and owner-operators of hospitality businesses of various sizes. Those who were working in the ski industry had no prior family connection with the ski or tourism industry, having come from families involved in farming, forestry, and various professions. This was also true for their partners. Pathways into the industry were varied. For example, one had studied accounting and financial management then worked for several leisure and ski organisations before becoming a career ski industry manager. Others had entered the industry by following their skiing passion and worked seasonally in the industry in various roles, eventually becoming full time workers in supervisory and management roles. The interviewees described a typical worker in the industry as *'having a passion for the mountain environment, enjoys skiing, highly self-motivated, and increasingly people/service oriented'*. Workers who were once happy to travel around taking low-paid ski jobs are increasingly looking for permanent, career opportunities in the industry. However they have difficulties progressing in the industry because *'there are relatively few full-time positions - so workers tend to be seasonal, moving slowly from ski patrol, snow groomer, lift operator and snow makers (into supervisory roles)'*. At the same time working conditions are reported to have improved, and with the advent of snow making machines some of the uncertainties of the business are reduced. As seen in other resource industry work, the demands of the busy skiing season mean long working hours, and therefore little time for community participation. During the quiet season participation and socialising is greater. Those that don't have permanent jobs (and therefore leave at the end of the season) tend to socialise together, and not get involved in the wider community.

Most adventure tourism interviewees came from farming families in mid Canterbury, and were still involved in some capacity in agriculture. For example, one who had a background in horse training (learning from his father) had started a horse racing "adventure" operation an adjunct to an existing family race horse breeding and training business. Another had been a local cropping farmer who faced a severe downturn in farm income resulting from the economic restructuring in the mid 1980's. To supplement the farm income he took off-farm work as a sales representative, eventually developing a hot air ballooning business that has since become a fulltime operation employing several people. Two of his three children are still involved in agriculture. Another interviewee, an outdoor pursuits guide, had a family background in fishing, small business, and sports achievement. He left school

4 McCrostie Little, H., & Taylor, N (2000). Methven. Case studies in resource community formation & change., working paper 28. Taylor Baines & Associates, Christchurch.

early and worked in fishing and various labouring jobs before getting involved in outdoor recreation work with youth and in disabled persons sport - which lead to his current position.

Local tourism operators were described as typically '*rural types, friendly and outgoing, having a relaxed approach but business driven*', and with '*a good awareness of the marketplace, and maybe even entrepreneurial*'. One interviewee described tourism development as '*self-initiated and self-learning*', involving '*doing your own research, and making direct approach to marketers*'. This had been facilitated by the development of the Internet '*which enables direct bookings (as noted by one person - approximately 50% of our business comes off the net)*'. Cellular phones also improved communications, especially for those having to work away from an office.

The hospitality interviewees were similar to the ski industry workers in that they were not from the district, and they and their forebears had no or limited background in the tourism or hospitality industry. Generally they came from entrepreneurial middle-class professional families, though one came from farming. All had entered the hospitality industry seeking a change of life-style and location, being especially drawn to the Methven environment and opportunities for skiing. Experience in people-management and a degree of entrepreneurship were common features of these interviewees, as noted in our studies of other tourism towns. For example, one interviewee had been a business management specialist and executive in a large corporation (see Colin's story below), while others had been teachers and health professionals with property or small business interests. Their partners had similar backgrounds, and for the most part, their siblings and children had become professionals and managers.

As noted, all the Methven interviewees were first generation entrants to tourism, and many had come to the district from elsewhere. Most therefore showed an entrepreneurial quality, and were working in or running enterprises that made use of information technology and the Internet to market and manage their products and services internationally. Along with others in the local tourism industry, they were the face of Methven's shift from a sleepy family farming and rural servicing destination to an international tourism destination. Commonly, they were confronting the challenge of working and surviving in a place where business is highly seasonal and their jobs and business income depend on having snow on the mountain. Local development efforts therefore centre on stimulating off-season (summer) visitor activities.

Our Methven interviewees noted that there have been '*massive changes*' in the town associated with the downturn in farming, increased physical mobility (which has meant '*the demise of local sports clubs and other groups*'), and the revival caused by the development of ski-based tourism ('*the town was dying, and skiing saved it*'). Change is on-going, some pointing to the new investments in housing, hotels, business facilities, and a redeveloped town centre, others point to the arrival of new people for life-style and environment reasons. As one observer noted '*while there has been some recovery from the mid 80's slump, the economy is different in character from the past*'.

Tourism sector case example: Colin & Janice

Colin and Janice are running a relatively new medium sized hotel/motel business in Methven.

Colin's forebears were immigrants and his parents were both professionals.

Janice's father had been the managing director of a large company and her mother was a health professional. Colin trained in mechanical engineering (like his father), and Janice in journalism.

In both cases, their siblings had taken up management and professional careers.

Colin's first jobs after graduating were as an engineer in manufacturing companies, slowly acquiring management responsibilities. At the same time Janice started her own catering business. Colin's management experience stimulated him to study business management, which lead to employment as a manager-executive in a large NZ company, which he helped restructure and downsize, leaving him without a job. He then moved into international business consulting in the same industry. Eventually Colin & Janice decided they wanted to '*reduce the intensity of (their) working lives, and searched around for a suitable business opportunity away from the city*'. They finally settled on Methven and their present business.

Their family lives on the job-site, with Colin mainly focused on the business side of the enterprise and doing occasional consulting work, and Janice taking care of hospitality services. During the ski season, they employ over 20 staff and their lives are very focused on work. When there is more free time, both are involved in local groups promoting Methven's economic development.

DISCUSSION

The results of the nineteen case studies of the changes taking place in resource-dependent communities, and the preliminary results of the working-life interviews, show that the process of industry restructuring (outlined earlier in this paper) has caused individuals to become more physically and occupationally mobile, weakening the occupational identity of families and their communities. Traditional family associations with particular industries and occupations, especially among men, are disappearing. Some specialist skills, once highly valued, respected, and passed from father to son, are no longer required. Often there are few places to transfer these skills to anyway.

These impacts are particularly marked in mining communities where, despite the fact that some have been able to enter mining under the new conditions, young people that stay are taking up other resource sector or service occupations, commuting to work in other centres, or becoming unemployed. Those that leave (the majority) are getting tertiary educations and moving into different kinds of work. In Rununga (and elsewhere), the community as people knew it has disappeared. The situation is somewhat different in farming where the recent boom in product prices has seen farms converted to dairying, often by people from outside the community, from mixed crop and sheep farming. For some, the sellers, the family connection with farming is coming to end; for the buyers it often means adjusting to life in a community that is not organised to cope with the schedules of dairying. In such areas there are already shortages of suitable labour for dairy farms. Partly driving this change has been continuing centralisation, ownership restructuring, expansion, and technological change in dairy processing. This has seen former rural and other workers becoming dairy process workers.

In some resource-dependent communities, the downturn in agriculture and primary industry restructuring has stimulated diversification, especially the development of tourism based on natural features and endowments. The entrants to tourism tend to be entrepreneurial, self-motivated, and often in search of a change in life-style or career. In Methven, for example, some farming people have transformed themselves, through self-education and experience, into service-oriented business people. In so doing, they have created significant numbers of part-time and seasonal jobs for locals once engaged in the agricultural sector, and for outsiders. The shift from farming town to tourism town meant newcomers, social change, and a new identity. Other communities have attempted to repackage their identity through heritage tourism (e.g., as historic forestry or mining towns); still others have taken advantage of growth in, or were drawn into, particular sectors, such as dairy farming and processing. While economic diversification has not occurred in some communities, they have often experienced a major change in their social composition (for example, from locally-employed coal miners and their families to commuters and welfare dependents).

What we have seen from both the community studies and the work history interviews to date is that the increased individual and occupational mobility resulting from industry restructuring has changed, and often weakened, local social functioning, community cohesion, and community identity. While communities are never static, the nature and extent of the changes described increases the tension between stability and change. A common phenomenon in these communities is the simultaneous attempt to retain the community's identity and historic association with particular industries (with attendant values about work and life), while attempting to be flexible, to diversify, and to shake off the past and become something new. The work interviews in particular reveal that adjustment to the considerable changes in work and industry that took place in the 1980s and 90s in resource-dependent communities is still occurring and, for many, the future remains very uncertain.

CONCLUSIONS

The New Zealand "resource communities" research programme has shown that there were many, immediate social impacts as a result of state sector and industry restructuring through the 1980s and 1990s. These changes came on top of longer-term trends of rural depopulation, technological innovation and difficulties sustaining viable rural services.

Perhaps the most dramatic changes were plant closures and widespread redundancies in sectors such as dairy processing, mining and forestry. SIA work at the time focussed naturally on the immediate, often severe, problems faced by individuals and communities. The emphasis was on a management of change approach.

Longitudinal research by this programme since 1996 has allowed a more in depth analysis of social impacts. The research shows very clearly that social impacts resulting from complex processes such as industry restructuring or major changes in government economic policy may not exhibit fully for several years, even a full generation. This is the case with impacts on working lives, local social functioning, community cohesion, and community identity. These longer-term social impacts are an important concern for SIA practitioners.

We have argued previously (Taylor et al., 2002) that SIA needs to develop further the longitudinal analysis of social impacts and that this analysis requires longitudinal research. It is then important to translate the research into practical frameworks for application in the conceptualisation of social impacts, and also into case studies that can be used in the development of realistic scenarios of social impacts over time. Examples of this sort of application from the current research are the use of the resource-cycle concept applied to community change, the working life-cycle used to understand individual and family responses to economic change, an appreciation of the link between occupational and community identity, and the importance of occupational mobility to understanding local labour markets.

In addition to SIA practitioners, these results will interest central government agencies, local government and enterprise development organisations, industry groups, training organisations, and facilitators of community-based development. All these people may be involved in aspects of a strategic approach to social and economic change at the local or regional level.

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REFERENCES

McClintock, Wayne L. and C. Nicholas Taylor (2002). Business ownership in natural resource dependent industries in New Zealand. Paper prepared for the 9th International Symposium on Society and Resource Management, Indiana University, Bloomington, Indiana, USA, 2-5 June.

McCrostie Little, Heather and Nick Taylor (2001). Resource community formation and change: a case study of Methven. Working paper RC28, Taylor Baines and Associates.

Taylor, Nick; Goodrich, Colin; Fitzgerald Gerard and Wayne McClintock (in press). Undertaking longitudinal research. In Henk Becker and Frank Vanclay (Eds), *Handbook of Social Impact Assessment, Conceptual and Methodological Advances*, Cheltenham: Edward Elgar.

Taylor, N.; Fitzgerald, G. and McClintock, W. (2001). Resource community formation and change in New Zealand: a framework for social assessment. In Lawrence, G., Higgins, V. and Lockie, S. (eds.) *Environment, Society and Natural Resource Management*. Edward Elgar Publishing Ltd, Cheltenham, UK and Northampton, MA, USA.