

Health impact and the public health response to major job losses in small communities

An overview of the international and New Zealand literature

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Introduction

Background.

In September 2012, the State Owned Enterprise Solid Energy announced that it would "mothball" its Spring Creek mine near Greymouth, with 200 miners and another 130 contractors losing their jobs. According to the company, the mothballing was related to the current price for coal and the speed with which it could be extracted. The company also noted that there were a range of difficulties related to difficult geological structures, higher costs, and slower than expected development of the mine. While the prospect of the closure had been discussed for some time, a temporary hold on plans while they were reviewed had encouraged the local community to believe that the mine might stay open. However, on 24 September the company announced that plans to put the mine into "care and maintenance" only would go ahead. Miners and their families had previously been affected by the Pike River mine disaster in November 2010 where 29 miners and other contractors had lost their lives and the mine had been closed. In February 2013 it was publicly revealed that Solid Energy was in trouble with escalating levels of debt, amounting at the end of 2012 to \$330 million, attributed primarily to a slump in global coal prices.² It was unclear how this situation would affect other mining operations in the West Coast region.

In the knowledge that the loss of a large number of jobs was likely to have a major impact on the health and wellbeing of the small community of the West Coast, Community and Public Health West Coast requested a literature review to inform and support their response. The review starts with the general impact of unemployment on the health and wellbeing of individuals and looks at documented efforts to address the adverse effects. The later part of the review focuses on communities, starting with a brief overview of the international evidence on the health impact of workplace closures, and some examples of community response from Britain, Australia, and Canada followed by three detailed case studies of New Zealand communities that experienced mass layoffs and how they responded. Concluding comments suggest what might be learnt from the literature for the West Coast situation.

The meaning of work

Apart from the obvious purpose of meeting immediate financial needs, work is a "key determinant of self-worth, family esteem, identity and standing within the community, material progress and a means of social participation and fulfilment" (Black 2008, p. 4). It provides activity and structure to the day, links an individual to goals and

¹ See http://www.odt.co.nz/news/business/227334/mothball-mine-will-gut-greymouth

² See: http://www.3news.co.nz/Treasury-releases-Solid-Energy-files/tabid/1607/articleID/291402/Default.aspx

purposes outside their own needs, and provides interpersonal contact (Kasl and Jones 2000). Work may also provide a sense of purpose, the opportunity for control and the development and use of skills, though this is not always the case. People who are employed are statistically more likely to have above average levels of wellbeing than those who are not (Carlin et al 2011). The National Institute of Clinical Excellence (NICE) in the UK in their guidance for promoting mental wellbeing at work states:

Work has an important role in promoting mental wellbeing. It is an important determinant of self esteem and identity. It can provide a sense of fulfilment and opportunities for social interaction. For most people, work provides their main source of income. (NICE 2009, p.6)

In some circumstances, work may also be associated with poor health and workplace accidents. The workplace may be physically hazardous, for example, from unsafe machinery, noise, or dust, there may be high demands on workers without corresponding control and support, or poor personal relationships with managers or other workers (Carlin 2001 et al). In general, however, even those with poor health have better outcomes if they remain employed rather than unemployed (Kasl and Jones 2000).

Unemployment and individuals

Defining "unemployment" (being without a job) is itself not straightforward in relation to the impact on health and wellbeing. Job loss (a specific event) is somewhat different from unemployment (the ongoing state of being without a job), though job loss is likely to result in at least a some period of unemployment when new work is sought.

A large volume of literature exists on the health and wellbeing impacts of unemployment. Evidence shows that the duration of unemployment, prior experience of a period or multiple periods of unemployment, the stage in life of the unemployed person, work conditions in the last workplace, and the gender and social context of the person all have a bearing on the outcome for any particular individual (Carlin et al; Artazcoz et al 2004; McKee-Ryan et al 2005). There is also an increasing recognition that insecure employment and casual work can have most of the same adverse effects as unemployment.

A major debate in the unemployment literature relates to the divergence of opinion as to whether poor health outcomes are caused by unemployment, or are merely an association because those with poor health are more likely to become and remain unemployed. Large reviews by Kasl and Jones (2000), McKee-Ryan et al (2005) and Roelfs et al (2011) all provide good discussions of the evidence for both these viewpoints and note that the two interpretations are not incompatible even within the same study. This debate has less relevance for situations where there have been mass layoffs, and will not be further discussed here.

Mortality and morbidity

The international literature supports a causal pathway between unemployment and mortality. Kasl and Jones (2000), found an excess of 20%-30% excess all-cause

mortality³ in the studies they reviewed (p. 131). Roelfs et al (2011) found that unemployment exerted an effect on mortality even after adjusting for pre-existing lifestyle factors such as smoking, alcohol consumption, excess weight, and lack of exercise (p. 849). Other recent literature is consistent with the older studies (Maki & Martikainen 2012; Classen 2012; Garcy & Vagero 2012; Wanberg 2012; Sullivan & von Wachter 2007). However, the adverse association between unemployment and mortality is not the same across all groups. There are meaningful differences across different studies by age group, gender, follow up duration, duration of unemployment, geographic region and study design (Roelfs et al 2011).

While there is general agreement that unemployed people have poorer health status, the "precise nature of this impact is difficult to pinpoint" (Kasl and Jones 2000, p. 124). One approach to investigating morbidity has been to examine health outcomes across different countries with varying political and welfare systems. Egan et al (2007) for example, systematically reviewed the literature on health outcomes in relation to the privatisation of state utility companies in OECD countries over the past 50 years. They found that privatisations were frequently associated with company downsizing and redundancies and there was some evidence of health deterioration of employees who had to find new work or take less secure employment (p. 868). Bambra and Eikemo (2009) compared self-reported health status for the employed and unemployed across 23 European countries and found that unemployed people reported poorer health in all of them, no matter how generous the welfare system.

Measuring decline in physical health and disentangling it from health status prior to job loss or physical symptoms caused by psychological distress is difficult and most studies rely on subjective measures. Studies using self-reported methods have identified symptoms such as headaches, cardiovascular disease, acute respiratory conditions, and a decrease in immune function; other studies examining health service utilisation have shown increased rates of primary care consultations (Kasl and Jones 2000, p. 124-125). Another approach has been to investigate biomedical markers in unemployed people such as cortisol levels or c-reactive protein, which are linked to elevated stress and an increased risk of cardiovascular disease, hypertension and diabetes (see Wanberg 2011, p. 376). In contrast, some people's health may improve following unemployment if they have been exposed to situations or hazards in the workplace that are harmful to health.

Mental health

Unemployment is widely accepted to be associated with poorer mental health (Thomas et al 2005). People who are unemployed are more likely to be depressed and have increased rates of suicide, and other self harm, depression, irritability, and anxiety compared to those who are employed. They are also more likely to have high-risk health behaviours such as smoking, and using alcohol and drugs (Wanberg 2011; Mckee-Ryan et al 2005; Kasl & Jones 2000). Financial strain because of job loss is more likely to be implicated in this decline in countries which do not have social support for the unemployed (Wanberg 2012). Being without the non-financial

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³ Excess all cause mortality: deaths from any cause that are premature or occur before the life expectancy for a person of a particular demographic category. (Mosby's Medical Dictionary 2009)

benefits of employment such as social status, self-esteem, physical and mental activity, and feeling purposeful also contribute to poor mental health (Artazcoz et al 2004). Findings from New Zealand research are consistent with international studies. Blakely et al (2003) and Beautrais et al (1998) found unemployment to be strongly associated with suicide and suicide attempts. The Christchurch Health and Development Study found that unemployed young people had higher rates of suicidal thoughts, substance use and anxiety disorder (Fergusson et al 2001).

Overall wellbeing

There is strong evidence that unemployment leads to a decline in overall wellbeing. Apart from the effect on physical and mental health, unemployed people may suffer financial hardship, and the loss of social contacts, networks. They may also feel that they have lost the identity they had in the workplace are no longer making a meaningful contribution to society (McKee-Ryan et al 2005; Carlin et al 2011; Kasl & Jones 2000; Wanberg 2012). In a New Zealand study (Cullen 1999) unemployed people reported higher levels of deprivation, financial hardship and life struggles than those who were employed. They had higher levels of anxiety, and experienced social isolation and stigmatisation from negative societal perceptions about unemployment. Individuals who are committed to their job and for whom it fills a central role in their life are likely to be more affected by job loss than others (McKee-Ryan et al 2005). Similarly those with few interpersonal contacts or close relationships will also be more affected than those who have wider social networks outside the workplace (Carlin et al 2011).

Roelfs et al (2011) list a large a number of studies that support the association between unemployment and an increase in alcohol and binge drinking, smoking, weight gain, and drug use. This has been interpreted by some as indicating a mechanism for coping with "... unemployment stress by changing their behaviour in unhealthy ways."(p. 841). However, another view is that there is both a causation and selection effect in operation, that is, people who react to unemployment by increasing unhealthy behaviour were more likely to be "in the problematic range for these behaviours before losing their job." (Deb et al 2011, p.317; Kasl & Jones 2000, p. 127). It does however, appear that unemployed people are less likely to quit smoking than those who are employed (Kendzor et al 2012; Carlin et al 2011).

Moderators of poor health and wellbeing during unemployment

The experience of unemployment is not the same across all individuals and there are a number of well recognised factors that can moderate the impact.

Age

Age and career stage both have a differentiating effect on the relationship between unemployment and health. In the review by Roelfs et al (2011), unemployed people in early and mid-career were found to be significantly more at risk of death than those who were employed, with an increased risk of 73% and 77% respectively (p. 849). Older people in contrast had an increased risk of only 25%, although the authors take care to note that the mortality in the general population is much higher in the older

age group. A number of explanations for the lesser effect on older people have been suggested: that older people still in the workforce were likely to have better overall health than those who had already finished working; and that those who became unemployed were more likely to have already been contemplating retirement so that becoming unemployed was less disruptive to their planned future (Roelfs et al 2011). In relation to young people, Kasl & Jones (2000, p. 128) note that the difficulty of disentangling the effect of unemployment from the other transitions that are experienced during the 18-24 year old age group: from school or study to work and from home to independent living..

Gender

Unemployment has been shown to have a more damaging effect on men than women. In the studies reviewed by Roelfs et al (2011), the association between unemployment and mortality (from any cause) was higher for men than for women (an increased risk of 78% vs 37%) in spite of different rates of participation of women in the workforce across all countries, leading the authors to conclude that work status was more central to men's identity than women's. Artazcoz et al (2004) similarly suggested that being married, and particularly being married with children living at home had a buffering effect for women but the reverse effect for men because of the expectation that the male in the family should provide for his family (p. 86).

Individual personality and coping resources

Individual personality and personal coping resources can offset the negative impact of unemployment. People with higher self-esteem, higher perceived control and higher levels of optimism generally cope better with stressful life events such as unemployment. Losing one's job can, in these individuals, stimulate coping resources (McKee-Ryan et al p. 58). Being able to structure time positively and establish a routine of purposeful activity is also a positive way of coping (Wanberg 2012; McKee-Ryan et al 2005). In contrast, those who lack these characteristics are more likely to suffer more from being unemployed. Unemployed young people in a recent Australian study (Scanlan et al 2011) were found to spend more time in unstructured "passive" activities such as watching television or just "doing nothing" compared to their peers who worked. The authors noted that this type of unstructured use of time has been associated with poor health.

Social support and social context

Having satisfying relationships with others that can be maintained outside of the workplace has consistently been found to moderate the adverse effects of unemployment (Carlin et al 2011; McKee-Ryan et al 2005; Wanberg 2011). Social networks also create opportunities to find out about other jobs and become employed again (Wanberg 2011). The surrounding social context of the community can, however, either be protective or a risk factor. Carlin et al (2011) found that although those who lived in disadvantaged areas had lower levels of wellbeing than those who were employed, the social norms of these areas, where many were in the same situation, were a protective factor. In contrast, unemployment was more stigmatising for those who lived in less deprived areas where it was unusual (p. 15).

Unemployment protection

Financial support is likely to offset deprivation for those who are unemployed. Although Roelfs et al (2011) in their review of studies suggested that the effect is minor (p. 849), other studies including the review by McKee-Ryan et al (2005, p. 60) concluded that the adverse impact of unemployment is moderated in countries with higher unemployment protection. McLeod et al (2012), for example, reported that medium and low skilled Americans, were less likely to have health insurance while employed and more likely to lose it when unemployed compared to those who were high skilled whereas in Germany the relationship was between unemployment and mortality appeared to be mediated by the greater financial protection available. They concluded that "access to health insurance and health care may explain steeper socioeconomic gradients in mortality in the United States compared with Germany" (McLeod et al, p. 1548). Having another employed adult who contributes to the household is also a protective factor (Carlin et al 2011, p. 22). The relationship does not, however, appear to be entirely straight forward. Bambra and Eikemo (2009) compared welfare state regimes, unemployment and self-reported health across 23 European countries, finding that there were considerable differences in the inequalities in health between the employed and the unemployed even in those countries with the most generous welfare provisions. In countries where unemployment insurance worked on a contribution basis, women were disadvantaged because they had generally spent less time in the workforce overall. Women were also disadvantaged in regimes where the social structure focused on the male breadwinner model of the family.

Duration of unemployment

Longer duration or repeated episodes of unemployment appear to have more adverse impact than when work is found again within the space of a year. While high work commitment increases the impact of becoming unemployed, it also enhances the drive to find work and the degree of recovery once new work is found (Kasl & Jones 2000, p. 129; Carlin et al p. 15). Unsurprisingly, having sought-after work skills that were transferable elsewhere also moderated the effect of being unemployed and made it easier to find work again (McLeod et al 2012).

Interventions to promote health and wellbeing for unemployed people

While there is a substantial literature documenting the adverse effects of unemployment on individuals and communities, there has been far less attention to addressing these negative effects or to promoting re-employment (Wanberg 2011; Rose and Harris 2004; Harris et al 2009; Audhoe et al 2010). The contrast in the volume of literature has led a number of authors to comment that research needs to move away from merely documenting the problems, which are now well established, and focus directly on options for dealing with them (see for example, Harris and Harris 2009).

Vocational interventions and job search programmes

Programmes to assist re-employment have usually comprised a two-fold approach: firstly, employment-related interventions, such as linking individuals with available jobs, skill identification and development, improving interview skills, and additional training or retraining to suit the job market; and secondly, interventions that support unemployed people to manage stress and disappointment, boost their confidence, and retain their motivation in continuing to search for work. Novel approaches have been making the job search experience into a learning goal based on goal development theory (van Hooft & Noordzij 2009), or the use of a structured job search diary as a criterion for Australians receiving the unemployment benefit (Borland & Tseng 2007). Recent reviews by Audhoe et al (2010) and Wanberg (2011) cover the range of approaches in some detail. The literature generally concludes that there is some, though weak, evidence for the effectiveness of vocational programmes in increasing motivation and reducing mental distress. The greatest factor in programmes where participants were successful in finding new work was simply an improvement in the job market with more jobs becoming available. In particular, retraining programmes can show poor results if the assessment of where future jobs will be available is not correct (Wanberg 2011).

A New Zealand example where this happened involved an education programme in South Auckland in the early 1990s where unemployed Maori and Pacific people were trained to work as community diabetes educators (Tregonning 2001). The training was provided free through the Ministry of Education at the Manukau Institute of Technology, along with a bridging course for those participants who had not completed basic schooling. The intervention hoped to address both local issues of unemployment and cultural barriers to diabetes care, but on completion of the course, there was a lack of positions for lay diabetes educators. Restrictive criteria from the Ministry of Education, a removal of funding allowing the course to be provided free, and the limited positions available limited what the programme ultimately achieved. The intervention did, however, have a number of positive effects: for some it was the first step in gaining new skills in entry (or re-entry) to the workforce, with 13 of the 31 students who began being able to find employment in other (mostly) health-related occupations; others were able to go on to further education.

Primary care services

Harris and Harris (2009) reviewed the literature on primary health-based interventions for unemployed people published between 1985 and the beginning of 2009. They found only seven reports of interventions, several of which were located in the Australian grey literature. The most common strategies were increasing GP's awareness of the health problems of the unemployed, and providing them with the resources to support patients and/or to refer them to relevant services, training GPs in specific skills (especially cognitive behaviour therapy) and providing health checks for unemployed people. The authors were not able to make any conclusions as to the effectiveness of any of these strategies because all interventions were small, and the quality was variable. For the future, they recommended investigating the value of health checks by GPs, adapting the existing evidence on the effectiveness of CBT and early assessment and management of cardiovascular disease to suit the needs of

unemployed people, and considering the effectiveness of coordinating with community groups to provide a referral service to employment and welfare services.

Cognitive behaviour therapy

Cognitive behaviour therapy (CBT) appears to be the most promising of the counselling therapies for unemployed people. CBT is based around techniques that deal with underlying fears and assumptions, teaching people to avoid negative thoughts and behaviours and generate strategies for coping (Williams cited in MacManus 1997). A British study (Proudfoot et al 1997) randomised 289 professional people who had been unemployed for over 12 months to either a CBT or social support intervention. At the start of the intervention more than half of each group met the definition for "psychiatric caseness" on the General Health Ouestionnaire (GHO) scale. Following the intervention, the CBT group had a much greater rate of success in obtaining full time re-employment (34% vs 13% in the social support group, p=0.0006) compared to the control group. The CBT group also differed significantly in improvements in self-esteem, job seeking, motivation for work and life satisfaction. For those who did not find employment, however, the favourable effects had largely disappeared by three months post-intervention. In a commentary on this study (McManus 1997), noted the importance of this study but stressed that the disappearance of the effect at the three month follow up for those who did not find a job suggested that "unchanged adverse social factors" were responsible for maintaining poor mental health. Another smaller study of CBT (Creed et al 1999) with 65 unemployed young people (mean age 19) in Brisbane who had been unemployed for one year or longer also showed positive results in the intervention group compared to the controls at the completion of the three-day intervention. However, the small numbers (38 intervention, 22 control) and the high proportion who dropped out at the 14-16 week follow up were major limitations.

Rose and Harris (2004) report on three case studies of CBT interventions in Australia through three different settings: government employment support agencies, general practice and mental health services. Their efforts to introduce a CBT programme in five employment support agencies proved unsuccessful, largely because the agencies were funded only to provide programmes which achieved vocational qualifications. The CBT programme had more success in the other two settings with health practitioners but ultimately proved unsustainable because recognition and financial support at a high level was lacking. The authors concluded that there was no organisation in Australia whose core business it was to promote psychological wellbeing for unemployed people. In a subsequent article, the same group of researchers (Harris et al 2009) reviewed five small-scale trials of CBT delivered through government labour market programmes in Australia during the 1990s. Although they found that each of these had positive results, it proved too difficult to scale up into a widespread intervention. They concluded that work at the policy level combined with consensus building with unions and employers was needed to expand understanding of the impact of unemployment and under-employment on public health and overall productivity.

In New Zealand, unemployment services have a focus on training and skill improvement and do not appear to mention mental health support. However, the Ministry of Social Development has a link to a directory of Family and Community

Services at http://www.familyservices.govt.nz/directory/ which lists a wide range of services by region, and includes counselling and mental health support services. Most of these are through non-governmental providers and community groups. Some require referral and not all are free of charge. There are, however, online sites that provide interactive CBT free of charge. Beating the Blues is endorsed by the Ministry of Health to people living in New Zealand through their GP. An online Australian CBT programme, MoodGym, is also available free of charge.

Health promotion programmes

A few interventions have focused solely on health promoting activities that boost coping strategies among those who are unemployed, but without providing any jobfinding assistance. Schuring et al (2009) for example, conducted a trial with around 900 unemployed people with chronic health problems in the Netherlands who were randomised equally to intervention and control groups. The intervention group received 12 weeks (9 hours per week) of education to enhance coping skills and physical fitness sessions. The control group was referred to a vocational rehabilitation programme. Outcome was measured using a range of validated psychological scales at baseline and six month follow-up. The study was unable to report any beneficial effects of the intervention in health and psychological outcome measures or on reemployment, nor were job search activities or attitudes to employment altered. The authors believed that they might have found more successful results if they used a different method of analysis, but in the end had to conclude that they could not recommend this health promotion intervention as an effective way to "...counteract at the individual level the negative effects of unemployment on health" (p. 898). Kerr et al (2012) also sought to use recreation activities as a means of improving coping skills and mental health among unemployed people with disabilities from traumatic brain injuries. They found that recreation activities that were physically active, culturally relevant and aided relaxation were useful in counteracting chronic stress from being unemployed⁵.

Communities and unemployment

Levels of unemployment in developed countries in the past decades have been affected by wider forces of globalisation, characterised by free market ideals and links between large multinational corporations (Scott 1995, p. 39). These have resulted in deregulation of the labour market, a reduction in the power of the unions, reduced job security, lower wages and the contracting out of work allowing the employer to achieve the same productivity without having to provide benefits or job security (Fitzgerald and McClintock 2002).

Privatisation policies in developed countries have also played a significant role in the rise in unemployment in the latter half of the 20th and early 21st century. Privatisation of public utilities in energy, transport, and communications were a feature of British politics in the 1980s (Egan et al 2006), with the same sort of policies being carried out

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⁴ Beating the Blues: <u>http://www.beatingtheblues.co.nz/</u>

⁵ This article was not available until later 2013 in full text so had to be reviewed from the abstract only which did not give details of the number of participants or how outcomes were measured.

in New Zealand in the mid 1980s and early 1990s under the banner of Rogernomics (Boston 1987). In parallel, advances in technological innovation meant that fewer, more skilled workers were required. In New Zealand this shift to a globalised market-led economy and the resulting government and private sector restructuring had wide ranging social impacts, particularly on natural resource dependent communities as the government withdrew from state ownership, for example, of mines or electricity generation (Fitzgerald and McClintock 2002). Unemployment increased dramatically from 1985, reaching a peak of 11.1 percent in 1992, with a disproportionate effect on some communities from the decline in opportunities for work (Scott 1995, p.2).

The health impact of workplace closures

Mass layoffs or closures of factories and workplaces that employ many people affect the wider community as well as the individuals who become unemployed. They are different in nature from individual redundancies: the prospect of finding another job is likely to be worse and the social networks more fractured; whole towns may experience emotional trauma (Classen & Dunn 2012, p. 348). Studies of factory or plant closures avoid the debate over causation or association as the pre-existing lifestyle and/or health status of those who become unemployed are not relevant to their being made redundant (Keefe et al 2002), however they also include relatively smaller numbers and therefore are limited in their power to show causation. It has also been noted that they may be subject to bias if more adaptable and skilled workers take the opportunity to leave and find work elsewhere as soon as they become aware that there is a chance of their workplace closing (Kasl & Jones 2000, p. 120).

Not surprisingly, studies of mass layoffs show that the same adverse health impacts apply as are shown in the large cross sectional studies of whole populations. Sullivan and Wachter (2007) from the National Bureau of Economic Research in the United States found that job displacement from plant closures resulted in a 15-20% increase in death rates over the following 20 years, amounting to about 1.5 years loss of life expectancy for a worker who became unemployed at age 40. In another study of male workers in Denmark following plant closures between 1980 and 2006, overall mortality increased as did mortality from circulatory disease, suicide, as well as suicide attempts, death or hospitalisation from traffic accidents, alcohol related disease and mental illness (Browning & Heinesen 2012).

Health service utilisation has been found to rise after plant closures in several studies (see Kasl & Jones 2000) though there may be a significant drop in the accident rate among groups who had been exposed to workplace hazards. Kuhn et al (2009) studied public health expenditures in Austria for health care following plant closures and found that there was an increase in costs for mental health problems but not for hospitalisations, doctors visits, or prescribed drugs.

There is evidence that those who are retained in a workplace that lays off a proportion of their colleagues also suffer from adverse effects from the stress and uncertainty that they are also likely to lose their jobs (Moore et al 2003; Dekker & Schaufeli 1995). Working in a chronic downsizing environment was worse for those employees that remained than a single exposure to layoffs and the stress was likely to result in increased health problems and work injuries (Moore et al 2003, p. 22).

In New Zealand, one study of meat processing plant workers in Hawkes Bay, Keefe et al (2002) followed a cohort of 1945 workers from a plant that closed (Whakatu) and compared them to 1767 workers from a plant that remained open (Tomoana) over a period of eight years. They found that the experience of redundancy from the closure was associated with more than twice the risk of mental distress leading to serious self harm, (relative risk 2.47, 95% CI 1.04-5.89).

A familiar pattern emerges from the literature amongst small towns across New Zealand: government restructuring results in job losses, followed by large numbers of people leaving the town to find work, including younger people and families. The flow on effect is a loss of services and skills for the town, particularly as those who leave are often community leaders. Businesses lose confidence and close down, the property market drops due to people leaving town and a lack of available jobs. New people, who are often unemployed, move in to take advantage of the cheaper housing. The newcomers may not be readily accepted by the existing residents, leading to a loss of a feeling of community, with longer-term residents resenting that they no longer know everyone in the town (McClintock and Fitzgerald 1998; Fitzgerald 1998; Taylor, Houghton and McClintock 1998; Keefe and Ormsby 2008; Dillon 2010; Smith 2010; Pomeroy and Newell 2011). This pattern is evident in towns that have borne the brunt of government restructuring, and towns which have been described as "resource-dependent communities" (Fitzgerald et al 2002) that is, those who rely on one main industry such as farming, forestry or mining and are subject to the uncertain and volatile cycles of commodity prices.

It is difficult to quantify the long-term effects of job loss on working lives, community cohesion and identity. Indeed there is a sense that the traditional interdependency between primary industry sectors such as farming and forestry and rural communities is changing (Pomeroy and Newell 2011). There may be weaker links now than in the past between those primary industries and their rural communities, indicating a need for "building and maintaining resilient rural communities" (Pomeroy and Newell 2011, 7). The impacts of restructuring may take years to fully emerge, perhaps even a generation (Fitzgerald et al 2002).

Community response to workplace closures

The single characteristic that enables communities to adapt to these circumstances appears to be their resilience. A resilient community can be defined as:

One that takes intentional action to enhance the personal and collective capacity of its citizens and institutions to respond to, and influence the course of social and economic change (Colussi 2000, p. 5)

Three international reports on promoting community resilience in the face of large numbers of job losses are highlighted below. All three have a focus on strengthening networks, and the importance of forging and maintaining links between the different sectors of the community as well as with public and not-for-profit organisations.

A manual on community resilience from British Columbia, Canada (Colussi 2000) uses the philosophy, principles and strategies of community economic development to develop an implementation model with four interlinked dimensions: people (attitudes and behaviours), resources (awareness and use), organisations (attitudes and behaviours), and community process (strategic thinking, participation and action). Twenty three characteristics of resilient communities are set out and a detailed methodology for gathering and analysing information about the community, setting priorities and planning for action. (see Appendix). There are, however, no case studies of community response provided as examples.

A report from Birmingham (Norman et al 2012) is somewhat different from those relating to resource-dependent communities, in that it deals with job losses in a deindustrialised economy. Nevertheless the conceptual approaches to coping with widespread job losses are not without interest for New Zealand. Birmingham experienced 200,000 redundancies in the three decades between 1978 and 2008, and this reports focuses on two of the most disadvantaged communities with very high levels of joblessness. The report begins by providing some useful background on the term 'resilience' and its application across the fields of science, psychology, and the environment:

... despite growing interest and numerous pages being devoted to it,[the term resilience] lacks coherency, clarity and consistency of use. There is a danger of this concept becoming an imprecise buzzword that loses potency. More significantly, there is a risk that the term resilience can be used to avoid addressing difficult, complex or structural problems: that an individual or community should be expected to put up with things; that somehow they are to blame for not being resilient enough. (Norman et al p. 12)

The model used in this document is the Wellbeing and Resilience Measure (WARM) which includes seven types of resources that a community has to draw on: the built environment, natural, financial, cultural, political, human and social resources (p. 34-35). The report acknowledges that the macro-economic context and wider structural conditions are usually beyond the influence of local communities. Instead the authors recommend focussing on action that is targeted at the level of social support networks and community leadership. Both communities highlighted had strong social bonds and voluntary organisations with committed people who worked hard for the good of their communities. The organisations were also fairly well connected with one another. One of the communities had managed to get funding through various grants to restore a disused building for a community hub which offered a wide range of services and housed many community groups and activities. However, while this sector was strong and filled a very important role, external ties were weak. In particular government organisations were not trusted. This was felt by the authors to be a major barrier to enabling the communities to adapt to changed circumstances: They commented that:

The commercial sector, the public sector, and the voluntary sector all have a role to play in promoting resilience ... weak or non-existent connections between these sectors are ultimately disabling for a community. (p. 50)

They found that where strong local bonds are overly dominant, a community can become isolated and cut off; its voice is not heard, and the community remains unnoticed by policy and decision makers until a crisis situation develops.

An Australian literature review of resilience in rural communities (McIntosh et al 2008) takes a similar approach, using a "four capitals" framework to underpin the concept of resilience: human capital (knowledge, skills, and health status of the population), social capital (trust in social groups and associations), produced capital (money, machinery, and infrastructure) and natural capital (the biophysical environment). The authors also address in part, institutional capital (private, public, and not-for-profit organisations and institutions). They note the importance of realising that economic indicators alone do not measure or explain why some communities are able to adapt to change more readily than others, but it is rather those that mobilise human and social capital (p. 36). They present a number of aspects of resilience that are insufficiently understood, including whether communities without strong produced or institutional capital can rebuild, and how willing highly trained people are to stay and adapt to emerging opportunities.

These reports offer no explicit answers but are useful for their approaches to drawing on the combined strengths of the community to adapt and move forward. As McIntosh et al (2008) note, although theoretical concepts of resilience are easily available, "empirical evidence of how it actually works is limited and not so well comprehended" (p. 37). The New Zealand literature, however, does provide a number of good examples of how communities have responded to large scale job loss following the closure of major employers in their town. The next section provides a short introduction to the New Zealand experience followed by three detailed case studies.

Case studies of New Zealand communities

These case studies are taken from in-depth studies that provide a glimpse into the long-term futures of each of these communities. In this section, individual communities have been presented in detail, in order to make the picture of how those communities responded to job loss more explicit. The three populations discussed are of different natures: coal-miners; freezing workers; and forestry workers. However, they each share the qualities of being resource-dependent communities and in common to at least two of the populations was the sense of 'camaraderie' that was central to their working lives. Both mining and freezing worker communities described the physical danger of their jobs, and having to rely on their team-mates – particularly so for miners, who were regularly faced with life and death situations. Mines and meat-works were also both intergenerational employers. The common effects of job losses across all three populations are described in more detail in a conclusion at the end of this section.

Huntly

For the small North Island town of Huntly, located between Hamilton and Auckland, coal-mining has traditionally been its key industry. By 1987, 922 Huntly locals were

employed in the coal mines. In 1987, as a result of the State Owned Enterprises Act 1986, the government restructured the State Coal Mines to become the Coal Corporation, resulting in a loss of 438 jobs (Dillon 2010).

The impact on workers

The collective and individual loss of income was significant, with mining jobs having been well-paid compared with many other jobs that were available. Many of the miners were able to move on to work in other industries, however, this was easier for those who already had another trade prior to entering the mines. One miner, for example, who had not completed an apprenticeship did not find work for two years after being made redundant. In contrast, another miner who was a qualified carpenter had another job to go to six weeks after being made redundant. One ex-miner commented that "People that have got good skills have no troubles finding jobs elsewhere and that is exactly what happened – they [CoalCorp] lost some really good personnel" (p.75). Some viewed the redundancy as a "good start" (p.75). One young family used the support services provided in helping them to purchase a house. Others found work overseas, for example working in the gold mines in Australia. Amongst some of the miners there was a sense of shame and stigma about having to sign up for the unemployment benefit – and so some did not.

Some of the negative effects experienced by the miners who lost their jobs stemmed from the culture surrounding the mining industry. There had been a culture of the "male provider": when miners lost their jobs, they felt worthless and unwanted, leading to anger, frustration and lowered self-esteem. Families were put under great pressure as they tried to cope with the intense frustration and grief. The pressure on families led to increases in domestic violence and suicide.

The impact on the wider community

Demographics

The township of Huntly was significantly affected by the restructuring of the coal mines and consequent job losses in 1987. There was an immediate impact on the population, with an estimated 100 families moving to Australia to find work. New people moved in to replace those who left, often to take advantage of cheap housing. The influx of new people to the area was not necessarily welcomed by the longer-term residents, with a sense that the newcomers brought their own troubles. Longer-term residents mourned the loss of community, and that they no longer knew everyone in town. There was a sense of being left with a "void within the community" (p.115), since some of those who left had been community leaders who contributed to running voluntary organisations. Some suggested that it was the more motivated families who left. Those who stayed felt a loss of confidence in the future of the district.

Corporatisation affected the whole community not just the lower socioeconomic groups. A lot of highly skilled people suddenly lost their jobs and many had to leave town to find employment. During the period immediately

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⁶ All references in the section on Huntly are taken from the thesis by Dillon (2010). Page numbers only are given for the sake of brevity.

following corporatisation the number of marital and family break-ups in the town increased. Problems with children and young people have also increased. Relationships between Maori and Pakeha began to show increased strain following the redundancies, as did family and inter-personal relationships. For those who received redundancy payments, arguments frequently arose within families over how this should be spent.

(Duncan, Bollard, Buchan et al. 1994. NZIER Corporatisation and Privatisation – Welfare Effects, p. 104 cited in Dillon, 2010, p. 114).)

Businesses

Businesses in Huntly were hit particularly hard. As the miners left, the retailers withdrew. Following the redundancies in 1987, 79 out of 196 businesses existing in 1987 had closed by 1991, or 40% of the business base. These businesses encompassed a range of services, including car sales, service stations, auto-electrical, joinery, home decorators, and accountants (p.101). Many of the traditional shops such as clothing and shoes have since been replaced by takeaways. The Real Estate market was hit hard, with house prices falling and more rental properties becoming available.

Camaraderie

The mining community of Huntly had to contend with shattered expectations. They had come to expect that a job with State Coal was for life. With a family history of mining, there was an expectation of employment which was passed down through the generations, leading to 'intergenerational employment'. A job in the mining industry came with a strong sense of camaraderie and friendship amongst the miners, which could be attributed to having to rely on one another in potentially life-and-death situations (p.72). The men not only depended on each other at work, but also lived together in a small community and had shared interests outside of work. The loss of this sense of community was felt deeply.

The response

Following the redundancies in Huntly, there were several support services established in the town. One of these was a central deployment centre set up immediately following the announcement of the job losses and which aimed to provide a "one-stop shop", answering questions and providing a base for different government agencies. This was followed by two other main initiatives.

The more successful of the services was an initiative of the council. A group designed to attract new businesses to the area, the Huntly Development Agency (HDA), aimed to "reduce the Huntly area's economic reliance on the coal industry by encouraging growth in existing businesses and attracting new business prospects to Huntly in order to generate further employment opportunities and better utilise existing business and community services." (p.98). The Agency was funded by government grants and community donations from local businesses and clubs. The group realised that in order for Huntly to attract business, it needed to present itself in a positive light. Therefore, six months after the redundancies, the Huntly Spring Festival helped raise community spirits, bringing together 8000 people onto the main street. The HDA also invited prominent businessmen from Auckland to Huntly, and

looked overseas to attract business. These initiatives resulted in eleven new businesses being established in the town by February 1998. The HDA did face particular challenges, including the lack of available industrial land for building on, hampering the ability to be "business ready". However, the manager of the HDA noted that "one of the best achievements of the Huntly Enterprise Agency during that period of transition was changing the infrastructure and the readiness and willingness of the council to accept new business." (p.99-100).

A second initiative, the government-initiated Job Search Services, was designed to help provide job skills training and counselling. This however had limited success. It had difficulty recruiting the ex-workers, and closed down in May 1987, a month after opening. Part of the Service's failure may have been due to the pride of the ex-miners in not wanting to ask for help. There was a sense that they did not want to be patronised or made to feel inferior. Another reason may have been that the miners were reluctant to go on the unemployment benefit, therefore they would not have been contacted by Job Search Services, as referral was through the unemployment register. In reflecting on its failure, the Job Search Manager commented:

That we've had just one reply to the letters sent to the remaining unemployed, probably the ones who would most benefit from the project, implies a certain reluctance to find work, a hesitancy to join just another government scheme, a preference to live off severance money, the belief that there are no jobs around anyway so why join a job search scheme? (p.103)

The person who replied was one of 100 ex-coal mine workers on the unemployment benefit who were contacted by Job Search Services. It was also possible that the initiative was too early, and may have been more useful in later months – after the redundancy money had run out.

Amongst the ex-mining community, other needs were identified, for which it would have been helpful to have some support. Ex-miners suggested a need for a Hotline with trained counsellors to help with the extreme stress, including recent suicide attempts, particularly among women, that had been reported. There had been such a service but it was offered for only one month.

The long-term outcome

By 2010, the long-term impacts were difficult to define. Solid Energy remained the biggest employer in the town; and there was the potential for tourism, with the rerouting of State Highway One opening up a potential scenic route alongside the Waikato River and linking Huntly to Ngaruawahia. The two towns had the potential to promote themselves respectively as the 'energy capital' and the 'culture capital' of New Zealand. While there had been a very difficult transition from working to unemployment, it would appear that the mining families have recovered. At the time of the interviews for the thesis, none of the miners were currently unemployed, in fact most of them had been in regular employment for a number of years (p. 109). It is arguable that the State Sector reforms both triggered social problems and exacerbated underlying problems, but it is unclear whether the significant social issues in Huntly, including poverty and crime, were the direct result of the redundancies in 1987. At the time of the most recent interviews there was a sense of optimism in the

community. Employed people were moving to Huntly for cheap housing and commuting to Hamilton and Auckland. However, opinions were evenly split between optimism about the town and believing that the town had "died" since 1987. There was a sense that Huntly had survived - a different community but not necessarily less of a community. "The reaction of Huntly to Rogernomics shows that even when faced with dire circumstances a town can pull itself up, dust itself off, and start again" (p.120).

Hawkes Bay

There were several closures of large meat processing plants in Hawkes Bay from the early 1980s through to the mid-1990s, resulting in mass job losses. These occurred at Patea, Whakatu and Tomoana (Grimes and Young 2009; Te Ropu Rangahau Hauora A Eru Pomare 2000; Keefe and Ormsby 2008; Mauri Mahi undated; Keefe et al. 2002).

The first plant to close was Patea (South Taranaki) in 1982, with 800 job losses. Next was the Hawkes Bay Farmers Meat Co-Operative in Whakatu. Established in 1912, it had been the largest meat processing plant in the Southern Hemisphere. When it closed unexpectedly in October 1986, 2160 people lost their jobs (Keefe et al 2002). These closures were followed in 1994 by another large meat processing plant in Hawkes Bay, Tomoana, which was forced to close when its owner went into receivership. Overnight, 1214 workers lost their jobs (Te Ropu Rangahau Hauora A Eru Pomare 2000). Workers also learnt that there would be no redundancy payment and that there would be a stand-down period before they could access government unemployment benefits.

The impact

Health

The closure of the Whakatu plant in 1986 has been shown to have had serious health effects. In the eight years following the closure of the meat-works at Whakatu, researchers found that there was double the risk of serious self-harm for those made redundant compared with workers at the nearby Tomoana plant that did not close (Keefe et al, 2002). The researchers also found that despite this increased risk of self-harm, there was no increased risk of hospital admission for mental health diagnoses for workers in the redundant cohort: that is, those who suffered from depression or drug and alcohol problems, for example, were not being admitted to hospital at a higher rate (Keefe et al 2002). This finding was verified by former Whakatu workers, some of whom testified that they knew of colleagues who had problems with depression following closure, but who did not seek or get help from the health system (Mauri Mahi undated, p.18).

Researchers have also looked more in-depth at how workers coped with losing their jobs following the closure of Whakatu, including the immediate and longer-term health effects. Following closure, there were reports of deteriorating health and deaths. Some ex-workers suffered from mental illness, with older Maori men being

particularly vulnerable to depression. Older men were described as having "lost that glint in their eye" (Keefe and Ormsby 2008, p. 59). There was a sense that some had simply given up following redundancy, not knowing how to handle the closure, and were unable to recover from their depression: "I've seen fellas, two years later, walking around on walking sticks" (p. 59). Other effects were more physical, including weight gain and loss of fitness, along with increased smoking and drinking.

The Whakatu plant had provided health services for its workers, including its own G.P, nurses, dentists and specialists. With the closure of the plant and loss of these services, along with the loss of income, many workers did not know how to cope when they were ill. Some found health services unaffordable, with a partial solution being to share medication amongst extended family members. The effect of limited health services could be severe, with one case of a man who went without an anaesthetic while having a tooth removed in order to save money.

Income

Financial difficulty was one of the main repercussions following the closure. Couples who had both been employed at the meat-works and who formerly had large incomes between them did not know how to save. For many, their homes became a liability. Their stress at lacking a regular income was made worse by a reluctance to sign up for the unemployment benefit. They also had to wait months for their redundancy pay-out: when it finally came, it provided some financial relief, including the ability to purchase a house. Others, however, lacked the financial knowledge to know what to do with the redundancy money, requiring financial advice to make good decisions. According to one ex-worker, some of the ex-workers did "really, really dumb things" with their money. (Keefe and Ormsby 2008, p.48)

Community / Camaraderie

One of the great losses accompanying the closure of the Whakatu plant and the consequent redundancies, was that of camaraderie, or "whanaungatanga" (kinship). Camaraderie encompassed extended personal and social networks, and included the workers' pride in the reputation of working at Whakatu. They had a commitment to achieving objectives and their pride in Whakatu was in part due to it being seen as the "biggest and the best" freezing works in the country (Keefe and Ormsby 2008, p.31). Camaraderie, or kinship, developed partly due to the many generations of whanau at the works, and also due to having to rely on each other closely as a team. The workforce became like an extended family outside of working hours. Whakatu was known as the "University of Life", with a unique curriculum, which included the chance to learn Te Reo Maori and Tikanga.

Employment

The closure of Whakatu came as a great shock to many. Several members of one family were sometimes made redundant. For many workers, the works was the only way of life they knew. This was felt in particular by older men in their fifties and beyond, for whom work at Whakatu had become a ritual. Some of them simply did not know how to cope after the closure. For example, community workers who visited men in their homes found them sitting at home, not wanting help. Some died

soon after; others were "in deep mourning for a couple of years or so" (Keefe and Ormsby, 2008, p.44). A few saw the closure in a positive light, and with a sense of relief, including a mother with a new baby who welcomed not having to return to work and another worker who saw it as an opportunity to pursue a new career.

Some ex-workers found re-employment in other freezing works, but did not always experience the same conditions and camaraderie. The new jobs sometimes required the workers to travel or re-locate. This put an extra strain on families and sometimes caused fatigue and road accidents. Others found that finishing at the works and experiencing other employment opened up new opportunities, a 'new world'. For many, there was a sense of reluctance in signing up for the unemployment benefit, out of pride, with people preferring to work for their money.

Training and Education

The closure enabled many ex-workers to participate in further training and education. For some, this was the entrance to a new life. However, with the abundance of exworkers training for the same qualifications, there could be an excess of people with the same qualifications applying for a limited number of jobs. Upskilling was therefore no guarantee of a job. There were other difficulties in moving outside the freezing works to work. Some women struggled to understand "people on the 'outside'" (Keefe and Ormsby 2008, p.55) as they were used to their own discourse revolving around the works and their families. They found it difficult to engage in the language of the outside world, having been immersed in the freezing works and having worked, lived and socialised together. They felt that the world had passed them by and in order to adapt to the outside world, it was necessary to learn new terminologies.

Relationships

The closure of the works had a big impact on relationships. There was a difference between how male and female workers reacted to the loss of their jobs. It seemed that women adapted more easily: they tended to "get on and do things" (Keefe and Ormsby 2008, p.49) – that is, they were able to retrain, get a new job, and become involved in community activities. Men, however, tended to live more in the past and favour re-living the old days. Families were severely stressed, with job loss, reduced social contact, lack of income and lack of confidence in finding other employment combining to produce tension in domestic relationships. Sometimes the lack of income was a trigger for divorce. Others made the choice to live apart in order to be eligible for the Domestic Purposes Benefit. There was sometimes a role reversal between the husband and wife, with the husband no longer being the breadwinner in the household. Families often broke up, due to members having to relocate to find work.

Support needed / given

The closure had a wide-ranging impact on families and the community. Ten years after the closures, there was a sense that Hawkes Bay had not fully recovered from the closures of Whakatu and Tomoana. It was described by some as a ghost town with little money. The schools had been affected, and the school bus stopped. One person

said that the closure had brought in a "new era of lower socio-economic people" (Keefe and Ormsby, 2008, p. 61). There were also more "strangers" in the area, and a lack of trust in others.

The closure of Whakatu drew out community support, for example from the church, which donated money. In some cases it forced workers to gather together and share resources, such as one group of workers who created a cooperative at a local marae, buying food in bulk (p.45).

A strong conclusion of Keefe and Ormsby's study was that support systems can be "pivotal to facilitating training and employment opportunities for workers, providing financial advice, and maintaining social support networks" (Keefe andOrmsby, 2008, p. iii). A key finding of the study was the "lack of control the workers experienced when the Works closed, and the lack of support that was available to them when they found themselves jobless and in financial strife" (p.64). In 1994, when the Tomoana works closed, there were more formal support structures put in place for workers. From this study, the authors made several recommendations concerning supporting workers following closure. These include:

- Providing a funded support service, for example, a one-stop-shop, where workers receive help and advice
- Providing in-home visits for ex-workers who are known to be socially disconnected
- Developing policies within industries that allow workers to feel some control over, or participation in, decisions regarding their work environment
- Acknowledging that not all work will be beneficial to people's health and wellbeing: some work is better than others.

Community Response

In 1994, when the Tomoana freezing works closed, the community responded quickly to support its workers. Immediately after the closure, community leaders suggested the idea of a resource centre, and two days later, a support group was established to lobby for resources. This support group met with key people, including government representatives, and was able to open the Tomoana Resource Centre (TRC) five days after the closure – which was to operate under a voluntary capacity for the first six weeks. The group was then able to secure a contract with the Community Employment Group (CEG), with funding of \$80,000. The main purpose of TRC was to provide "support, advice, assistance, guidance, training and re-employment options under 'one roof" (Te Ropu Rangahau Hauora A Eru Pomare 2000, p.60). Ultimately, the centre's aim was to help workers adjust to job loss by valuing their humanity and supporting them to maintain control over their lives.

There were several key factors in establishing the centre. It was important for it to be timely: it was established as soon as possible after closure, providing a meeting place for workers and a source of support. Its location was important: being in a central place, it was easy to find and close to where workers lived and to a car park. It also

required sufficient resources, including support from a range of agencies. Its key components included a focus on both people and processes, with services offered including social support, advice and counselling, assistance in re-employment, retraining, and career development.

The main needs of workers identified were income security, social support and training and re-employment. Workers were often faced with losing more than one income in a family. With no redundancy and a stand-down period for the unemployment benefit, they were put in a very difficult financial position. At TRC they were offered a 'one-stop shop' to help with financial needs, where government agencies and community groups were coordinated under one roof. The centre provided budget advice and operated a foodbank. Workers also faced the loss of their working whanau. This need was addressed by TRC in offering counselling, and where necessary, home visits. The centre conducted a telephone survey to advise workers of its activities, and to provide support and advice. Workers also needed to be directed towards finding further employment. At TRC they were offered a diverse range of training sessions, where they were able to develop skills, build morale, get social support and have a time structure for the day. TRC had the advantage of putting people straight into training and avoiding any unnecessary red tape. It also had networks within the meat industry, and some people were able to be re-employed in the industry.

TRC operated under the acknowledgment that redundancy entailed a dual reality: there was not only a loss of one's job and income, but also a loss of identity and family. It recognised that job loss is a personal crisis, which leads to helplessness and a loss of control over lives. Therefore the kaupapa of the centre was to help former workers maintain a sense of power and control over their lives, to "provide a range of services within an integrated framework that valued people" (Te Ropu Rangahau Hauora A Eru Pomare 2000, p.65). Behind the centre was the concept of whanau, encouraging people to share tasks and develop networks. This human element was seen to be "fundamental" (p.65). A further aspect of that human element was "people's aroha for each other" (p.66), in recognising and valuing the mana and dignity of the workers. This "aroha" was perhaps indicative of the recognition of the Tomoana workforce as a "whanau" (p. 23), and may have been unique to that workforce.

Tuatapere

Historically, logging (of indigenous forests) had been a key industry in the rural Western Southland town of Tuatapere. At the peak of the industry, there were 120 sawmills operating in Tuatapere. By 2010, one sawmill was operating. The downturn in the logging industry occurred after 1950 due to a number of reasons, including the depletion of the natural forests; the recession of the late 1960s which reduced the demand for timber; and changes in technology which were beyond the means of smaller operators. A further significant factor adding to the downturn in the forestry industry was government restructuring of the Forest Service in 1987 (McClintock and Fitzgerald 1998) which resulted in plantation forests and stateowned mills being sold to multinational companies such as Rayonier. In Tuatapere,

this resulted in significant job losses within the forestry industry. In 1986, the Forest Service had employed 69 people (out of a population of 861) within the industry. By 1st April 1987 this was reduced to 10, with three more employed by the Department of Conservation (McClintock and Fitzgerald 1998).

The forestry restructuring and consequent job losses had a significant impact on the town of Tuatapere. Immediately following the restructuring, many forestry workers stayed in the district, thinking work would return and going on the unemployment register for an extended time. Others, including many families, left Tuatapere. As new people moved in. the population size and structure changed drastically, firstly with a decline in population and then an increasing proportion of residents aged 40 and over (Smith 2010). There were many changes to the town's infrastructure, with business and service closures including the Post Office, two stock and station agents, the National Bank and the Totalisator Agency Board. The maternity hospital and general medical service were threatened. The retail sector diversified and by 1995 included two craft shops, while the accommodation sector expanded to include two new camping grounds, a backpackers hostel and two motels. (McClintock and Fitzgerald 1998).

The restructuring of the forest service and job losses affected residents and the town's sense of community. Many residents felt despair over the changes, with one commenting that it "took a whole strata of society out", that is, the young families who left to get work (Smith 2010, p. 32). Those who were left behind felt they were "depleted of valuable resources" (Smith 2010, p.32). Some had the sense of being unfairly treated and being at the mercy of government decisions.

Community response

The township of Tuatapere had to think innovatively, and garner its community spirit, in order to survive. The "community has responded to changes in service provision and ... [has] managed the move from being a vibrant rural service community to a tourist town" (Smith 2010, p. 28). In 1987, the Tuatapere Resource Centre was established. It operated as an advisory centre, and provided a base for adult education along with a community worker. It initially focused on helping residents adapt to the changes imposed by the restructuring of the forest service, and since then has provided a base for community and economic development issues. In 1998, it had a visitors information centre and was attached to a museum and craft shop. It was funded initially by the State Services Commission, followed by short-term funding from a range of local and government sources (McClintock and Fitzgerald 1998).

Since the downturn of the logging industry in Tuatapere, the local economy has diversified to include other industries. These include a foray into horticulture. In 1993, the town had a 'cool climate crops' strategy, with two horticulturalists growing gentian violets (employing 15 people between them) and another eight farmers trialling them; there was also interest in growing hydrangeas commercially. The greatest development in the town since the 1980s has been tourism. In 1994, a project restoring the Port Craig Viaduct, the largest wooden viaduct in the world, was completed, which increased tourism to that area. Another project involved the renovation of Borland Lodge (near Lake Monowai), which has increased the number

of overnight stays to that facility. A further project, funded by a \$250,000 grant from the Southland Community Trust, involved hiring personal locator beacons to trampers in Fiordland. One of the biggest undertakings, with a budget of \$2.7 million, was the development of the Hump Ridge Track, a walking track for trampers which starts and finishes close to Tuatapere. Other projects have included the 'Wild Challenge' Iron Man competition and the 'Big Garage Sale' (McClintock and Fitzgerald 1998). Tuatapere has been able to develop these initiatives in part because of the strong community spirit and willingness to meet the "challenge head on" (Smith 2010, p.32). Tuatapere residents were aided in their resolve to retain their town's identity by social structures such as educational and sporting facilities which facilitated people meeting and coming together. There was a culture of voluntary work within the town which contributed to the sense of community.

Tuatapere citizens responded to job losses by forming groups and holding meetings to discuss their options. In 1994, the local community board and District Council organised a public meeting to "consider the type of community the residents would like to see ... in the Tuatapere area in the future" (Smith 2010, p.30). Specific initiatives arising from this included:

- the circulation of a promotional video on Tuatapere
- purchasing of Search and Rescue beacons, which were made available for trampers and hunters
- creating an overall theme of 'On Nature's Edge' for the region
- undertaking to develop a walking track called 'The Hump Track' (including the historic Port Craig viaducts) (Smith 2010)

Tuatapere residents then developed a Promotions Group, the main focus of which was tourism, with prominent ideas including the development of the Hump Ridge Track, the Southern Scenic Route, saving the historic Port Craig viaducts, and more recently, the idea of a cycle trail between Tuatapere and Te Anau. The residents also worked together to save their town's health services which were threatened with closure, and "formed a trust for the establishment of a medical centre and the continuation of the maternity hospital" (Smith 2010, 32).

Following the "disastrous" effects of the government restructuring and economic downturn, a community emerged which was "determined to retain their [sic] identity and livelihood" (Smith 2010, p. 32). This determination flowed through into forming groups and pursuing other ventures for their township. There was a sense that "coming together at a time of crisis contributes to the sense of community of working together for the greater good" (Smith 2010, p. 34). "The community's desire to continue to live in the environment that they have a strong affiliation with, enabled them to collectively pursue all possibilities. The survival of the community was seen as the people's ability to give of their time on a voluntary basis" (Smith 2010, p.36).

Summary of the New Zealand case studies

There are commonalities of experience amongst the three communities discussed above. Common to both Huntly and Hawkes Bay communities was the loss of camaraderie, enjoyed by both while working in mines or freezing works, respectively, which illustrates a sense of social connectedness that extended beyond the workplace.

In both cases the camaraderie was also a result of intergenerational employment, with mining families in Huntly expecting to be employed in the same industry as their forbears and freezing workers in Hawkes Bay sometimes the fifth generation to be employed at the works. In order to address this loss of camaraderie, interventions therefore needed to focus on social support – and this is where the responses within each community appeared to differ. In Huntly, a government support service, Job Search Services, was unsuccessful, failing to recruit workers and closing after a number of months. Its failure was perhaps in part due to the singular focus of the service, as it focused solely on re-training at the expense of social connectedness. contrast, the support service offered in Hawkes Bay, the Tomoana Resource Centre, offered both job training and social support. Camaraderie at work was not the only aspect of community that was lost: a wider loss of community was experienced in each of the three townships. In Huntly, Whakatu and Tuatapere, longer-term residents reported their grief at losing large sectors of their society, and with the departure of ex-workers and the arrival of newcomers, and no longer knowing everybody who lived in the town. This loss was experienced as a 'void'.

Amongst the many negative effects experienced as a result of mass job losses, were relationship issues, arising from the great pressure job losses placed on families. These pressures were felt across all communities experiencing job loss, and were particularly exacerbated within the community of Whakatu where there were sometimes multiple redundancies within one family. The pressures sometimes became so great that they resulted in health and social issues such as suicide or domestic violence, or ultimately the break-up of relationships.

The loss of income experienced by workers who lost jobs was clearly a negative effect. In both Huntly and Whakatu communities there was a consistent reluctance to sign up for the unemployment benefit, out of a sense of shame and stigma. This reluctance often put families under further financial hardship.

Loss of employment was not experienced uniformly. While there were many negative impacts, some viewed the redundancy as an opportunity to make a new start, perhaps seizing the chance to embark on a new career. In both the mining community of Huntly and freezing works community of Whakatu, workers who lost their jobs within a specialised industry often found that it was necessary to upskill in order to re-enter the job market. Some freezing workers were able to regain employment within the meat industry, but sometimes found that the conditions were different from those they had been used to. Some of the miners from Huntly had skills from trades prior to entering the mines, which were helpful to fall back on, and enabled them to pick up new work quickly. In Tuatapere, the community took the restructuring of the forestry industry as an opportunity to re-invent themselves as a tourist town.

A common type of intervention across the communities appeared to be a 'one-stop-shop', bringing services and agencies together under one roof and offering support to workers. The Tomoana Resource Centre appeared to be a successful intervention of this kind, offering a central location where workers could not only be re-trained but also enjoy some of the social support they had formerly known at the works. In Tuatapere, the community centre established soon after the restructuring of the forest service appeared to be a physical focal point to help mobilise the community. Huntly

also provided a deployment centre, which opened soon after the redundancies and brought together government agencies under one roof.

The details contained in the analysis of these case studies above may help inform and guide appropriate interventions for small rural communities experiencing job losses, and offer a sense of direction for those communities.

Concluding comments

The international literature provides a valuable background and wider context to the general issues relating to the health and wellbeing impacts of unemployment. Awareness of the range and extent of negative effects may help C&PH West Coast understand the way individuals and the community in the region is likely to be affected. However, it is the New Zealand case studies that are likely to be the most helpful in providing examples of how an organisation such as C&PH West Coast can respond. A number of relevant themes for the West Coast can be identified from the literature:

The health and wellbeing of individuals and the wider community will suffer from large scale job loss

Unemployment clearly has a negative impact on health, particularly mental health, and wellbeing. Financial support through the unemployment benefit, though it may prevent extreme poverty, cannot compensate for the wide range of non-monetary benefits of being employed. Individuals who are able to draw on personal and social resources or have alternative job skills may find other employment more quickly or experience fewer adverse effects, but these individuals may also be those who move elsewhere in search of work. Communities are also likely to undergo at least an initial downturn and a period of economic and social change.

Coordination of services across sectors is critical

The three New Zealand case studies support the desirability of the "one-stop-shop" model. This appears to provide a positive focus for a whole-of-community response. It needs to offer both employment-related services and social support and to be available promptly. Services offered in isolation – for example, health promotion alone, or job search alone - do not appear to be as successful. C&PH West Coast is likely to play a leading role through its coordination with agencies, community groups, and other relevant parties in providing such a service.

Each community is unique

The case studies show that the strategies that each community came up with were tailored specifically to their own resources and strengths. The Tuatapere residents, for example, were able to promote a lesser known part of the country with a special feature (the wooden viaduct) and develop a new walking track which has proved very popular. Similarly, the Tomoana resource centre prioritised the importance of

providing a whanau-centred service for their community to support the redundant workers and help them maintain their identity and social networks.

Community-driven response is a success factor

While government agencies have a major role to play, those communities that have emerged from the impact of widespread job losses got together themselves and planned how to move on. They made use of public funding sources, but the initiatives were their own and tailored to their own resources. The Huntly Development Agency, for example, which involved the council, local businesses, and community groups was more successful than the government job search service.

Resilience

Although none of the New Zealand case studies directly mentioned resilience, the actions they took do in fact exactly reflect the models of resilience described in the international literature. Each community drew on their particular "capitals" in their response to maintaining the viability of the community. The Tuatapere case study would seem to provide a particularly good example of combining human, natural and organisational capital in the efforts of the residents, the District Council, and the Community Board, and drawing in government funding where available to initiate projects that created a new identity for their town based on its surrounding environment.

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APPENDIX 1

The 23 characteristics of resilience listed in the Community Resilience Manual (Colussi 2000). Note that the manual uses the philosophy, principles and strategies that are associated with Community Economic Development (CED) approach and outlines what this involves. The following list gives only the broader headings from the list. Full details are given in the original document (pages 13-17).

- 1. Leadership is diversified and representative of age, gender, and cultural composition of the community.
- 2. Elected community leadership is visionary, shares power and builds consensus.
- 3. Community members are involved in significant community decisions
- 4. The community feels a sense of pride
- 5. People feel optimistic about the future of the community
- 6. There is a spirit of mutual assistance and co-operation in the community
- 7. People feel a sense of attachment to their community
- 8. The community is self-reliant and looks to itself and its own resources to address major issues
- 9. There is a strong belief in and support for education at all levels
- 10. There is a variety of Community Economic Development (CED) organisations in the community such that the key CED functions are well served
- 11. Organisations in the community have developed partnerships and collaborative working relationships
- 12. Employment in the community is diversified beyond a single large employer
- 13. Major employers in the community are locally owned
- 14. The community has a strategy for increasing independent local ownership
- 15. There is openness to alternative ways of earning a living and economic activity
- 16. The community looks outside itself to seek and secure resources)skills, expertise, finance) that will address areas of identified weakness
- 17. The community is aware of its competitive position in the broader economy
- 18. The community has a Community Economic Development plan that guides its development
- 19. Citizens are involved in the creation and implementation of the community visions and goals
- 20. There is on-going action towards achieving the goals in the CED plan
- 21. There is regular evaluation of progress towards the community's strategic goals
- 22. Organisations use the CED plan to guide their actions
- 23. The community adopts a development approach that encompasses all segments of the population