EMPLOYMENT AND UNEMPLOYMENT

IN RURAL SOUTHLAND

by

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RESEARCH REPORT NO.196

November 1988

Agribusiness and Economics Research Unit
Lincoln College
Canterbury
New Zealand

ISSN 0069-3790

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CONTENTS

		Page
LIST OF TABLES		i
PREFACE		iii
ACKNOWLEDGEMENTS		v
SUMMARY		vii
CHAPTER 1	**INTRODUCTION**	1
CHAPTER 2	**BACKGROUND TO RURAL UNEMPLOYMENT**	3
2.1	Introduction	3
2.2	Unemployment in New Zealand	3
2.3	The Unemployment Rate	4
2.4	Studies of Rural Unemployment	7
2.5	New Zealand Regional Studies	11
2.6	Conclusion	15
CHAPTER 3	**METHODS**	17
3.1	Introduction	17
3.2	Sampling and Design	17
3.3	Sample Size	19
3.4	Questionnaire Design and Administration	22
3.5	Response Rate and Sample Characteristics	24
3.6	Conclusion	26
CHAPTER 4	**RESULTS AND DISCUSSION**	27
4.1	Introduction	27
4.2	Profile of Respondents	27
4.3	Work Situation	29
4.4	Unemployment	32
4.5	Underemployment	38
4.6	Interest in Education	38
4.7	Awareness of Supports and Services	43
4.8	Social and Economic Change Between 1986 and 1988	43

Page

CHAPTER 5 **CONCLUSION** 51

5.1 Introduction 51
5.2 Summary of Main Findings 51
5.3 General Implications of the Findings 52
5.4 Policy 53
5.5 Future Research 54

LIST OF REFERENCES 55

APPENDIX 1 The Questionnaire 57
2 Instructions for Interviewers 77
3 Interviewer Record Sheet 79

LIST OF TABLES

TABLE NO.		PAGE
1.	Number of Registered and Census Unemployed, 1971 to 1986 (March Figures)	3
2.	The Unemployment Rate Based on the Number of Registered Unemployed	5
3.	The Unemployment Rate Based on the Household Labour Force Survey	6
4.	Census Unemployment Rates for Local Government Regions and Urban or Rural Areas	10
5.	Census Unemployment Rates for the Southland Local Government Region	11
6.	Census Unemployment Data for Rural Southland	13
7.	Population and Dwellings Data by Rural Communities and Rural Areas for Southland and Wallace Counties	21
8.	Dwellings, Population and Meshblocks for Rural Communities and Rural Areas	23
9.	Summary of Sample Data; and Comparison to 1986 Census Data	25
10.	Profile of All Respondents	27
11.	Family Situation of All Respondents	28
12.	Work Situation of All Respondents	29
13.	Different Types of 'Not In Paid Work'	30
14.	Main Types of Employment	30
15.	Business Strategies For All Those Self-Employed	31
16.	Time Unemployed	33
17.	Approach to Work in Past 4 Weeks	33
18.	Characteristics of Those Unpaid Seeking Work	36
19.	Number of Respondents in Respective Jobless Categories	37
20.	Numbers Wanting Additional Hours of Work	38

LIST OF TABLES (cont.)

TABLE NO.		PAGE
21.	Main Area of Interest in Education	39
22.	Area of Interest in Education by Work Situation	40
23.	Area of Interest in Education by Type of Employment	41
24.	Main Hindrance to Undertaking Further Education	41
25.	Preferred Type of Instruction	42
26.	Extent of Knowledge of Five Services and Support	43
27.	Population Distribution for Census and Survey	45
28.	Work Status Comparison Between 1986 and 1988	47
29.	Employment Status Comparison Between 1986 and 1988	47
30.	Occupation Comparison Between 1986 and 1988	48
31.	Industry Comparison Between 1986 and 1988	48
32.	Welfare Benefits Comparison Between 1986 and 1988	49

PREFACE

Employment and unemployment are important aspects of New Zealand agriculture and rural society. This report sets out clearly the general pattern of employment and unemployment in rural Southland and contributes to our understanding of contemporary change in rural New Zealand.

In many ways the survey results presented here measure the economic pulse of rural Southland. The data include a description of the work situation for all working-age adults, and the results are compared with the 1986 census data to show the extent of change in the intervening two years.

The Southland region is typical of many which have had to adjust to a more-market government policy, and the results presented here give an indication of the nature of rural change in recent years.

Professor A C Zwart
Director

ACKNOWLEDGEMENTS

The author is grateful for the support received from his colleagues as the design of the research was formulated. Major contributors were Pat McCartin and Charlie Lamb. Mr Frank Nolan, Department of Statistics, Christchurch, provided valuable comments on methods and statistics, and Rod St. Hill from the Department of Agricultural Economics and Marketing, Lincoln College, provided general remarks on the report. Ms Julie Woolf, Department of Statistics, Wellington commented on the section discussing the Household Labour Force Survey calculations. The author is grateful for these contributions, but accepts full responsibility for any remaining errors.

Also acknowledged is the generous assistance with interviewing provided by members of Southland Federated Farmers, Women's Division of Federated Farmers, Young Farmers' Club and the Country Women's Institute.

Finally, the author is grateful for the financial assistance provided by the Southland REAC, and for the assistance provided by the Deputy Chairman, Mr Reg Dalzell.

SUMMARY

The results from an interview survey of rural working-age people in Southland are presented in this report, along with an overview of relevant domestic and international literature. Data from 1,445 cases are used to describe their work situation in August 1988.

The main results show that:-

* The population of rural Southland has increased since 1986 but the workforce is now smaller.

* There are more people under 15 years old and over 30 years old, and less people between 15 and 30 years old.

* Rural communities have lost people since 1986 and rural areas have gained people since 1986.

* One in nine households on average has an unemployed person.

* While the unemployment rates are similar to official estimates the number of jobless is higher than official national levels and is at 13 percent of the total workforce.

* Many respondents are keen to undertake further education especially in agriculture and business.

CHAPTER 1

INTRODUCTION

Employment and unemployment are important aspects of any economy, especially in times of rapid social and economic change. Rural New Zealand in general and Southland province in particular have experienced these changes recently but there is little accurate measurement of the basic components of change. The objectives of this report are to document the current work situation of the Southland working age population, to measure the rate of unemployment, and to describe interest in further education. Data on these topics is useful for grounding any policy or proposals relevant to rural areas.

While the general focus is on work situation, attention is also given to unemployment and its various measures because this topic is of growing importance in 1988. Unemployment is steadily increasing and it becomes important to ensure that measures are undertaken in an appropriate manner. Chapter 2 examines unemployment by reviewing relevant literature and documenting existing measures in New Zealand.

Attention is also given to comparing the results of the survey with census data, collected in 1986. This comparison is the basis for an accurate description of the extent of social and economic change over the intervening two years.

CHAPTER 2

BACKGROUND TO RURAL UNEMPLOYMENT IN SOUTHLAND

2.1 Introduction

This chapter provides an overview of literature relevant to understanding work and unemployment in Southland (Southland County and part of Wallace County). The focus of the chapter is on unemployment and the ways it can be measured. The quantitative data are supplemented with reports of rural and regional studies which show what the rate of rural unemployment is in the U.S. and in Australia. These studies suggest that the rate of rural unemployment tends to be higher than the urban rate.

The aim of Chapter 2 is to document existing measures of rural unemployment in New Zealand against which the findings of the survey can be compared.

2.2 Unemployment in New Zealand

Unemployment is a phenomenon that has gained significance in recent decades in New Zealand. Throughout the 1950s, 1960s and early 1970s unemployment levels were low in absolute terms and much lower than in comparable countries (NZPC Monitoring Report, 1985). From 1971 to 1986 the Census of Population and Dwellings showed a steady increase in the number of unemployed, with large gains between 1976 and 1986. Over the same period the Labour Department Registered Unemployed also increased, and at a much faster rate between 1976 and 1981. The relevant data are shown in Table 1.

Table 1: Number of Registered and Census Unemployed, 1971 to 1986 (March Figures)

	Labour Department Registered Unemployed	Census - Unemployed and Seeking Work
1971	1,121	16,168
1976	5,021	25,585
1981	47,464	60,261
1986	54,180	109,191
(1987)	78,166	-
(1988)	101,770	-

Source: 1. Labour and Employment Gazette and Monthly Employment Operations, Department of Labour.
2. Census of Population and Dwellings, Work Status.

Recent data on unemployment show continued high levels. From March 1986 the number of Labour Department registered unemployed increased from 54,180 persons to 101,770 persons in March 1987.

2.3 The Unemployment Rate

There are three main ways of estimating the unemployment rate, each based on a distinct data source. There is the Labour Department register of unemployed, the Census, and the Household Labour Force Survey and each method has its shortcomings (Vollweiler, N.D., Sialaoa and Clements, 1987). The calculations which use the five-yearly census figure for the total full-time labour force are weakened by being dated, and the calculations based on the Labour Department list of registered unemployed are weakened by relying on voluntary registration for full-time work. Many unemployed do not register and some people are discouraged workers (Hicks, 1985) who hold no reasonable expectation of receiving a job offer and who do not attempt to register. In addition, studies of trends in the labour market show that there is considerable volatility in the propensity to register (Department of Labour, 1984). The Household Labour Force Survey provides a third measures of unemployment and it adopts measures which conform closely to the International Labour Organisation. Sialaoa and Clements argue that the latter source provides an economic measure of unemployment with its job seekers number, and a social measure with its jobless number. The fiscal cost of unemployment is provided by the registration measure.

The Labour Department data on registered unemployed are expressed as an unemployment rate by taking the total registered unemployed figure and dividing it by the total full-time labour force, including persons unemployed and seeking work, as derived from the Census. These data are shown in Table 2 in which the 1986 Census results were not used by the Department of Labour until January, 1988.

Table 2 shows that in recent months the registered unemployment rate has increased steadily. The new Census labour force total supplied from January 1988 onwards does not appear to alter significantly the measurement of the unemployment rate.

An alternative measure of unemployment is available using Census data only. While this estimate is good for only the Census year it is useful as a base to make regional comparisons (see later discussion). In March 1986, the total labour force was 1,608,612 persons of whom 109,191 were unemployed. The labour force total includes both full-time (working 30 or more hours per week) and part-time categories, and it includes unemployed people. A simple way to express the rate of unemployment is to take the number of unemployed persons as a percentage of the total labour force, and for 1986 the figure is 6.8 percent.

Table 2: The Unemployment Rate Based on the Number of Registered Unemployed

	Number of Registered Unemployed	Full-time Census Labour Force Total	Unemployment Rate %
1987			
March	78,166	1,332,342	5.9
April	78,169	"	5.9
May	78,994	"	5.9
June	84,122	"	6.3
July	88,159	"	6.6
August	90,152	"	6.8
September	91,667	"	6.9
October	87,997	"	6.6
November	90,885	"	6.8
December	97,495	1,332,342	7.3
1988			
January	101,398	1,340,916	7.6
February	100,569	"	7.5
March	101,770	"	7.6
April	100,935	"	7.5
May	106,152	"	7.9
June	113,753	"	8.5
July	119,554	1,340,916	8.9

Source: Monthly Employment Operations, Table 6A, Department of Labour

Comparisons of the Census unemployment rate to the registered unemployed rate are problematic because the latter exclude persons seeking part-time work. The exclusion of part-time job seekers reduces the number of unemployed persons, but its effect on the unemployment rate is not clear since persons employed in part-time jobs are excluded from the denominator of the unemployment rate (Vollweiller, N.D.; 12). In the past, the number of Labour Department registered unemployed has been less than the Census unemployed (see Table 1) but as the July 1988 figure in Table 2 shows the two measures of the number of unemployed are now different (119,554 and 109,191 respectively) with the Labour Department figure now surpassing the 1986 census figure.

The quarterly Household Labour Force Survey (Department of Statistics, 1988) provides another measure of unemployment. Table 3 shows that for the June 1988 quarter there were 1,504,400 persons employed and 84,200 persons unemployed. On this basis the unemployment rate is 5.3 percent. Here, an unemployed person is defined as being without a paid job and available for work, but must have actively sought work in the past four weeks or have had a new job to start within four weeks. The household survey also shows that there are an additional 53,200 persons who are available for work and not actively seeking work or who are actively seeking work but not available. This brings the total jobless at June, 1988 to 137,400 persons, or 8.6 percent of the workforce.

Table 3: The Unemployment Rate Based on the Household Labour Force Survey

	Employed	Unemployed	Labourforce Total	Unemployment Rate(%)	Jobless (%)
Dec 1986	1,556,200	63,100	1,581,000	3.9	112,900(7.1)
Mar 1987	1,558,100	66,900	1,590,600	4.1	112,900(7.1)
Jun 1987	1,550,400	66,200	1,585,800	4.1	114,700(7.2)
Sept 1987	1,543,500	63,300	1,606,800	3.9	113,600(7.1)
Dec 1987	1,564,400	67,000	1,631,300	4.1	122,200(7.5)
Mar 1988	1,528,500	80,600	1,609,200	5.0	130,900(8.1)
Jun 1988	1,504,400	84,200	1,589,500	5.3	137,400(8.6)

Source: The New Zealand Labour Force, Department of Statistics, Wellington

Other data show that unemployment is higher among women (5.5 percent compared with men at 5.2 percent, although this difference appears to be declining), and Maoris (12.9 percent compared with Europeans at 4.3 percent). Also, over one quarter of all unemployed persons were aged between 15 and 19 years, and this group has an average unemployment rate of 13.0 percent.

Finally, the Household Labour Force Survey gives some average data on regional unemployment (Woolf, 1987). For the year ended 31 March 1987 there were comparatively low rates of unemployment (below 3.5 percent) in the main North Island metropolitan areas and also Christchurch, and high rates (above 4.7 percent) in the rest of the country. For the South Island, the unemployment rates were: Christchurch at 3.5 percent, Dunedin at 5.4 percent, and 'remainder South Island' at 4.7 percent. It is not possible to learn from

the survey what the unemployment rate was for specific provinces or counties because the sampling error would be significant for such small units.

2.4 Studies of Rural Unemployment

While the presently available data on regional unemployment is not detailed, it remains possible to learn something about this subject from two other sources. The first is overseas studies of rural unemployment and the second is regional studies in New Zealand.

There have been three American studies in recent years. In the 1970s Korsching and Sapp (1978) undertook an interview survey of 1,980 dwelling units in Gadsden County, Florida. They divided the county into urban and rural locations and carefully sampled the population in order to estimate actual unemployment. The results of the study supported four propositions, namely:

1. The survey unemployment rate of 20.2 percent was twice as large as the official unemployment rate,
2. Fewer rural residents received unemployment compensation,
3. Rural residents were unemployed for a longer time than urban residents, and
4. Rural residents were not as familiar with employment agencies as urban residents.

In another study, Lasley and Korsching (1984) undertook a questionnaire survey of 1,861 households in an eight-county region in southern Iowa. Results showed that the unemployment rate ranged from 14.3 percent to 20.2 percent at the same time as the official rate ranged from 4.7 percent to 7.9 percent. Both these North American studies suggest that the rural unemployment rate is equal to the official rate plus approximately ten percentage points.

Another study in North Dakota (Ludtke et al. 1988) finds that rural underemployment is significantly higher than urban underemployment. While the official unemployment rate was 6.6 percent the survey found a total unemployment rate of 21.5%, of which 14.3% were discouraged workers or involuntary part-time workers.

The results of these three studies lend support to the view that rural unemployment is higher than that estimated by official procedures. In the United States case the reason for this under-reporting stems from the use of unemployment insurance claims in estimating unemployment. However, people in rural areas are not eligible for such compensation because they do not participate in insurance programs. This situation is similar to the New Zealand Labour Department recording of unemployed who choose to come into an office and register.

Some support for the view that unemployment rates typically are higher in rural areas compared to urban areas can be seen in Australian studies. Harris (1985) reviews the Australian literature and concludes that regional studies show higher rural unemployment rates, a deterioration in the unemployment situation, and substantial hidden unemployment particularly among females. Five separate studies show that rural unemployment rates range from 5.9 percent to 28.6 percent. Both these rates are higher than state or national figures although Harris does not give the details, only reporting the percentage change. Also, two studies estimated hidden unemployment and found that male unemployment rates would increase from 20 percent to 36 percent if hidden unemployment were added in. For women the increase was from 54 percent to 65 percent.

Census data in Australia do not corroborate the regional data. Mean urban unemployment rates exceed rural rates. Harris makes a number of suggestions about this anomaly and argues that the census data are at too aggregate a level to provide accurate insights into rural unemployment. The argument is that data from urban regions dominate all rural areas and mask any particular differences in rural areas. Further work is obviously needed, and it would seem important to analyse Census data using smaller units of analysis which can better detect specific regional variations in unemployment.

For New Zealand the Household Labour Force Survey only gives a crude measure of rural unemployment. Given the size of the sample that the survey uses, which means that provincial-level data are not available, it is quite possible that there are wide variations in the unemployment rate between provinces or counties. These variations would occur within the 'Remainder South Island' average of 4.7 percent referred to in Section 2.3.

There is one New Zealand study of rural unemployment (C.U.C., 1987). The main objective of the study was to assess the level of unemployment and underemployment in Malvern County in mid-Canterbury. A telephone survey of 400 households taken from the Darfield Telephone Directory produced results showing that 28 households (6.9 percent of the sample) had one household member who was unemployed and seeking full-time work. Most of this group were aged between 15 and 22 years and 71 percent came from non-farm households. The report includes an estimate of 135 households in the county having at least one unemployed occupant. Other responses also suggest that there was relatively high awareness of the Rural Support Group and that most respondents would be likely to use a job training scheme. However, there was strong support for the scheme to be run locally at Darfield rather than at Christchurch.

The study of Malvern County is brief and superficial. No attempt is made to estimate the unemployment rate for the county, and by using households as the unit of analysis the report does not provide any basis to make comparisons to any other measures of unemployment.

For regional New Zealand it is possible to analyse Census data in order to show variations in unemployment. The following comparisons are based on the measure of unemployment adopted earlier in which the number unemployed and seeking work is divided by the total workforce, including full-time workers, part-time workers, and unemployed persons. The objective here is to examine regional variation within New Zealand before examining Southland County itself. Table 4 shows the Census unemployment rate as at March 1986 for Local Government Regions and Urban or Rural Areas.

Table 4 shows that the unemployment rates vary between regions, with high rates (over 8.5) for East Cape, Coastal North Otago, Gisborne, Palmerston North, Dunedin, Tokoroa and Whakatane and low rates (under 5.6) for Wellington, Nelson Bays, Clutha-Central Otago and Southland. Southland shows a lower rate (5.4) than average (6.8). The urban areas data shows that Invercargill has a slightly lower overall unemployment rate (6.5) than the average for urban areas (6.9) For the secondary urban areas, Gore shows a lower than average unemployment rate (6.0). Finally, the rural area rate (5.6) is lower than the national average. The figures indicate that while the rate of unemployment in rural New Zealand is lower than the average, there are specific regions with high unemployment. The figures for Southland, Invercargill and Gore show lower than average rates of unemployment.

Census data are available on a regional basis, and Table 5 shows the unemployment rates for Southland rural communities, areas and boroughs. The overall unemployment rate for Southland is 5.5 percent which is 0.1 percent higher than in Table 4 because the latter is based on provisional data. There is considerable variation within the Local Government Region. The regional communities vary from 1.6 percent to 11.1 percent and average 6.1 while the rural areas are low and typically in the range of 3.0 percent to 3.8 percent, with an average of 3.0. The overall average for communities and areas is 4.5 percent. Gore, Bluff and Invercargill City show higher than average unemployment. The Census data give the general appearance of high unemployment in the urban areas and low unemployment in the rural areas of Southland and Wallace Counties, while at the same time the overall rate of unemployment in Southland is lower than the national average.

Table 4: Census Unemployment Rates for Local Government Regions and Urban or Rural Areas

Local Government Regions	%	Urban & Rural Areas	%
Northland	7.7	Whangarei	7.2
Auckland	6.4	Auckland	6.4
Thames Valley	6.2	Hamilton	7.9
Bay of Plenty	7.7	Tauranga	7.4
Waikato	7.4	Rotorua	7.4
Tongariro	7.5	Gisborne	8.6
East Cape	8.7	Napier	8.0
Hawkes Bay	7.6	Hastings	7.6
Taranaki	7.1	New Plymouth	7.5
Wanganui	6.7	Wanganui	8.1
Manawatu	8.1	Palmerston North	9.4
Horowhenua	6.6	Wellington	5.6
Wellington	5.5	Nelson	5.7
Wairarapa	6.3	Christchurch	7.6
Nelson Bays	5.5	Timaru	7.4
Marlborough	7.0	Dunedin	9.3
West Coast	6.5	Invercargill	6.5
Canterbury	7.3	TOTAL MAIN	
Aorangi	6.3	URBAN AREAS	6.9
Clutha-Central Otago	4.3		
Coastal North Otago	8.6	Pukekohe	6.4
Southland	5.4	Tokoroa	10.0
TOTAL LOCAL		Taupo	6.0
GOVERNMENT REGIONS	6.8	Whakatane	8.6
		Hawera	7.6
		Fielding	7.3
		Levin	7.3
		Kapiti	5.8
		Masterton	7.5
		Blenheim	7.6
		Greymouth	6.6
		Ashburton	6.6
		Oamaru	7.1
		Gore	6.0
		TOTAL SECONDARY	
		URBAN AREAS	7.2
		RURAL AREAS	5.6
		NEW ZEALAND TOTAL	6.8

Source: Census of Population and Dwellings, 1986, Series B, Report 1, Provisional Regional Summary Statistics, Table 6.

The same Labour Department data on regional unemployment are available showing the unemployment rate for Invercargill. Since March 1987 the Invercargill rate has been lower than the national average over the summer but higher over the winter (May to November). In the month of August 1987 the Invercargill rate was 10.5 percent, 3.7 percent higher than the national average of 6.8 percent.

Table 5: Census Unemployment Rates for the Southland Local Government Region

	%		%
Balfour Community	11.1	Mataura Borough	5.6
Riversdale Community	1.6	Gore Borough	6.3
Lumsden Community	5.7	Winton Borough	8.1
Edendale Community	8.1	Bluff Borough	8.1
Wyndham Community	5.6	Invercargill City	6.7
Otatara Community	4.6		
Wallacetown Community	6.1	Wallace County	3.9
Part Invercargill Urban Area	5.8	TOTAL SOUTHLAND	5.5
Part Gore Urban Area	2.9		
Oreti-Waikaia Area	1.9		
Hokonui-Motaura Area	3.0		
Winton Area	3.0		
Awarua Area	3.1		
Waihopai Area	3.8		
Toetoes Area	3.0		
Wallacetown Area	3.4		
TOTAL RURAL SOUTHLAND COUNTY	3.7		

Source: Census of Population and Dwellings, 1986, series B Report 23, Southland Local Government Region; Table 6.

2.5 New Zealand Regional Studies

Four South Island regional studies were completed in 1987 and they focus on Twizel, Tapanui, Balfour, and Otautau, the latter two towns being in Southland. Ny (1987) studied population change in Twizel, Mount Cook and Omarama to find that there has been rapid population decline as Twizel changed from a construction town to a county town with an aging population. Community services were experiencing financial difficulties and the population was expected to decline an estimated ten percent to 12 percent in future. Ny notes that the unemployment level was high: in April 1987 five percent of the Twizel population was registered as unemployed but the study estimated that total unemployment was 12 percent of the population in May of 1987.

In terms of recommendations, Ny notes that the unemployed need to have the opportunity to gain extra skills through Access training programmes. She considers that training in tourism and hospitality would be of benefit because these skills would be marketable in the growing tourist industry in the area. Among other recommendations are the provision of financial assistance to private service organisations, and improved services from the Social Welfare and Labour Departments by way of more effective visiting arrangements. Generally, Ny sees the future economic development of Twizel as based on tourism and the development of recreational facilities.

Houghton et al.(1987a) have studied another region with declining population. The Tapanui region was studied in 1982 and again in 1987 with a view to examining the impacts of corporatisation of the New Zealand Forest Service beginning on 1 April 1987. The Forest Service workforce was halved and an estimated 12 percent of the population of Tapanui left the district by July 1983, and all of these workers had jobs to go to. The business community reported relatively little effect from corporatisation because the major influence was the rural downtown. Business turnover came mostly from farming (54 percent) and then forestry, including sawmilling (24 percent).

Houghton et al. note that Tapanui faces continued population decline and slower business growth. It is the traditional, primary industries which are thought to be able to sustain the business community in future, and the authors' are skeptical that small rural centres can provide the capital and expertise to create new enterprises and jobs.

Kearsley and Hearn (1987) have assessed the problems of unemployment, underemployment and regional development in Northern Southland. They focus on demographic changes, employment, perceptions of quality of life, expectations for the future, and give policy recommendations for regional economic development. A questionnaire was delivered to and collected from a sample of households in the six townships of Riversdale, Mandeville, Balfour, Lumsden, Mossburn and Waikaia, and to 120 randomly-selected of the approximately 300 farming households in Northern Southland. From the approximately 1,000 households in the study area there were 333 usable returns, thus providing general information about the population and attitudes about quality of life and the future. An additional questionnaire was given to all household members and replies from 478 persons gave information about employment and education. The response rate (only given for the household survey) provided a good basis for inference from the sample to the population.

The authors describe the employment structure of Northern Southland as bipolar, with most jobs in either the primary sector or the services sector. The rural economy

generates most employment and the rural towns are dependent on the primary sector. Full-time workers made up 71 percent of the workforce sample, typically in the service sector. A second job was held by 14 percent of the sample, and these jobs typically were in the primary sector as farmers, shearers and farmhands. Most (61 percent) in this group had full-time jobs. Nearly one-fifth of respondents had undertaken seasonal work in the past few years, typically within the primary sector, and most (62 percent) were males and most (62 percent) were married.

The household survey asked if there were any unemployed persons in the household and six percent replied in the affirmative, a similar proportion to that found in Malvern County. Like the survey in Malvern County, most of the households with unemployed were non- farm households; 71 percent in Malvern and 'practically all' in Northern Southland. For the individual survey there were approximately 48 or ten percent who said that they had been unemployed at some time in the past. The open definition would include a larger number than for those unemployed at present, so that the number reported appears to be low. It is possible to take census unemployment figures specifically for the study area in Northern Southland, and Table 6 shows the relevant data. The Census unemployment rate was 4.3 percent in 1986, and it was this year that the respondents referred to when they said they were unemployed.

Table 6: Census Unemployment Data for Rural Southland

	Unemployed	Total Labour Force	
Balfour Community	9	81	
Riversdale	3	183	
Lumsden	15	264	
Oreti - Waikaia Area	21	1,098	
Hokonui - Mataura Area	48	1,602	
	92	2,214	4.3%

For those respondents who had been unemployed there was even representation by males and females and half had undertaken seasonal work. Also, half had found another job, typically within the primary sector, and these jobs were not strongly preferred.

On the topic of underemployment, nearly one-fifth responded in the affirmative. Most were housewives, farm hands, farmers, drivers, carpenters of freezing workers. However, 54 percent of this group were in full-time employment and 36 percent had undertaken seasonal work, more than in the sample as a whole.

There are a number of other reports relevant to the Southland Region. Caskey and Lewis (1986) reported on business opportunities in Southland and assisted in the development of a regional tourism marketing plan. The report focused exclusively on tourism promotion with a wide perspective. Houghton et al. (1987b) surveyed businesses throughout Southland in Winter, 1986. Results showed that Southland was vulnerable to external forces that influence employment and population, and that there is a high dependence on export markets. No new sources of production and employment were identified, and financial factors such as high interest rates, exchange rates and inflation had the greatest impact on the region.

The report on Southland businesses also showed that manufacturing is the major source of employment, with freezing works and the Tiwai Point Smelter being the major contributors. Forty-two percent of firms interviewed employed both spouses, and attitudes toward the business climate were pessimistic with the farming downtown given as the main reason for limited business opportunities.

Some research in Southland focuses on particular Southland locations. Houghton et al. (1986) examined Otautau to find that there had been population loss and that the business community is dependent on the farming sector and to a lessor extent, forestry. Otautau business managers were unable to identify new business opportunities so that the future looked uncertain until the farming sector improves. Recently, the Social Welfare Department reported that 78 percent of the adult population of Tuatapere are on some form of benefit (Southland Times, 1988). There were 28 percent unemployed, 25 percent on the Domestic Purposes Benefit, and 25 percent on National Superannuation. The rural towns are becoming places where the elderly stay on, and young families move to live because of cheap housing.

Finally, there has been a vigorous development of women's issues and promotion of positive and diverse images for rural women. The Rural Education Activities Programme (REAP) has promoted seminars for rural women and a survey which aimed to develope an awareness of the important roles women occupy (Allen, 1985)

Many of the above studies note the decline in population in Southland. Southland County experienced absolute population decline between 1981 and 1986 (Cant, 1986) while for New Zealand as a whole the population

increased by 4.2 percent over the same period. The rate of decrease for Southland was 2.6 percent. Cant conjectures that many rural service centres face the double pressure of decline in population and decline in aggregate farm production.

Some of the studies cited above emphasise the potential of tourism development to aid the rural economy. However, it is not possible to provide for rural development by simply promoting tourism. While this report is not the appropriate place to develop the issue, I note the main points carefully argued by Hodge and Whitby (1981). Generally, they note that typically there is little prospect of increasing employment in rural areas because economic growth of the nation entails decline of the region. They emphasise the futility of chasing the limited number of mobile industries and they argue that it is better to develop indigenous industries. Policies need to be implemented by taking account of their general social consequences not the private point of view, and policies should be labour market oriented rather than pursue intervention and price support. Since the general pattern of development in advanced societies is from secondary industry to services it is likely that the latter will be the greatest source of jobs. However, the authors qualify this point by saying that the resource base must remain the dominant feature of a regional economy.

2.6 Conclusion

Unemployment is a recent phenomenon in post-war New Zealand climbing to relatively high levels since 1981. There are at least three main ways to measure the unemployment rate and current estimates range from 5.3 percent to 8.9 percent. Regional variations occur and the literature on rural unemployment suggests that for overseas countries the rural rate is significantly higher than the urban rate. However, Census data for 1986 show that Southland has lower than national average unemployment, but with higher than the county average in the urban areas (boroughs and cities) and rural communities and lower than the county average in the rural areas. Specific regional studies in the South Island and in Southland in particular show the general character of recent changes in these localities. Typically, there is population decline and forced adjustment to a more-market government policy that does not allow the economies of rural areas to function as they once did.

This background to unemployment in Southland provides a base from which it is possible to compare new methods of unemployment estimation as discussed in Chapter 3.

CHAPTER 3

METHODS

3.1 Introduction

The main purpose of this research is to describe accurately the work situation of rural Southland people for August, 1988. The questionnaire was designed to allow all working-age people included in the sample to describe their employment status and to give some account of their employment preferences, including their interest in gaining additional skills and information. The aim of Chapter 3 is to describe precisely the methods and design of research.

The study area includes all of Southland County and the South-eastern and populous part of Wallace County. The study area is a fairly homogenous hinterland of Invercargill comprising both the Southland and Waimea Plains, and including the Hokonui and the Longwood Range. The focus is on rural Southland, so that the communities of Invercargill, Otatara, Bluff, Mataura and Gore are excluded from the study.

The questionnaire designed for this research incorporates Household Labour Force Survey and Census definitions of work and employment status. The results of the survey can then be used to compare the August 1988 situation with equivalent estimates obtained from the June Household Labour Force Survey. In addition, the results can be compared with the 1986 census so that a precise indication of the extent of change over two years is possible. The results of the research can then be used to describe the general impact of government policy.

3.2 Sampling and Design

Measurement of rural unemployment in the past has required special attention to methods. For example, Korsching and Sapp (1978) used cluster sampling of 5,300 dwellings containing 20,884 persons. This method required that a map with all dwelling units on it was prepared using three separate data sources to show a total of 100 clusters. Each cluster contained approximately 50 dwellings from which a 40 percent sample was taken. All dwellings within the selected clusters were visited by interviewers using structured questionnaires and the interviewers achieved a 90 percent response rate. A total of 30 persons undertook the interviews, after appropriate interviewer training, and each interviewer visited about 66 dwellings.

There are two general approaches to sampling a population (Gardner, 1978; Kalton, 1983). The first approach is to use a population frame, that is, a list of all the elements of the population, and then take a random

sample from the frame. For rural Southland there are a number of frames, such as telephone directories, electoral roles, and ratepayer lists, but each has particular problems which make this approach unsatisfactory with respect to one of the specific objectives of measuring the unemployment rate. The telephone directories would give names, addresses and telephone numbers but the lists would have a proportion of changes where they were not up-to-date, and there would be some people, especially those unemployed, who would not have a telephone. The electoral role gives good coverage of all adults and is updated as people move, but the list includes people over 18 years old. Typically, employment options and definitions usually apply to people over 15 years old, so that this source would be incomplete. Finally, the County Council list of property owners, which is based on Valuation Department records, offers a comprehensive listing. However, this list would not provide direct contact with tenants, or properties owned by one party but rented to another party. Any mail survey, for example, based on this list would suffer from a small but significant loss by questionnaires being misdirected. Interviews would be better because the interviewer could follow up any contact and ultimately speak to the tenants.

The second approach is to use area sampling. Area sampling entails selecting people according to place rather than list and by this means a sample of current residents is obtained. Provided that interviewers are persistent and do not substitute dwellings or respondents, then a truly random sample of actual residents should be obtained.

In general, the sample from a population frame is useful where the frame provides an accurate base to the study. The present study demands great care in locating a representative sample that includes all people regardless of employment status. The best of the three available frames is the list of property owners, but even this list may not be comprehensive. For this study, the second approach of area sampling appears to be better because it overcomes any inadequacies that may exist with population frames.

For any given sampling method one can use mail surveys or interviews. The former is relatively straightforward to organise and conduct but suffers from possible non-respondent bias because response rates typically are in the order of 50 percent. It is quite likely that unemployed people would not reply to a mail questionnaire because they may feel alienated and not inclined to offer information about themselves. Interviewing, though relatively more difficult to organise and conduct, offers the prospect of over a 90 percent response rate. Interviewing appears to be most appropriate to the objectives of the present research.

The above considerations of sampling and design suggest that interviewing based on either a property-owner frame or area sampling is most appropriate. Another very

important consideration is the cost of travelling. To overcome this problem one can undertake cluster sampling whereby the survey area is subdivided into sub-areas and a sample of these units is used in the study. Less travel is then required. It is also possible to take a random sample within each unit as in multi-stage sampling.

Cluster sampling requires some basis of determining sub-areas. To generate a map with all dwelling units (as Korsching and Sapp did) is time-consuming, and two easier possibilities exist. The first is to use Department of Statistics mesh-blocks, which are the smallest unit used in the five-yearly census. Typically, meshblocks contain approximately 20 dwellings and 60 persons of working age on average. Census data are available for each meshblock so that survey results can be compared to known standards to check on the quality of the sampling procedure. For example, the number of dwelling units should change only slightly between 1986 (last Census) and 1988. The second possibility is to take sub-units from the property owner list by taking groups of adjacent properties. This process could result in wide variation between clusters and there is no check on data quality. For these reasons an area sample cluster design is used with interviewers to administer the questionnaires.

3.3 Sample Size

To estimate the size of a sample one must consider precision, probability and proportions. The degree of precision refers to the quality of the sample as an estimate of a population characteristic. For the present objective of measuring the unemployment rate at least, a tolerance of two percent would provide for a sensible evaluation of an estimated rate of, say, 14 percent. If the best available measure is ten percent then a finding of 14 percent plus or minus two percent would imply a range from 12 percent to 16 percent, and this is significantly different from the best available measure.

Also to be considered is the probability of having a result fall within the two percent tolerance, and in this case the 95 percent level is appropriate. Finally, consideration must be given to the proportion of the population who are unemployed and the proportion who are employed. These levels are set at ten percent (P) and 90 percent (Q) respectively.

The three considerations listed above are related as follows:

$$1.96 \sqrt{\frac{PQ}{n^1}} = 2$$

where n^1 is the sample size. In this case the sample size

should be 864 persons.

Having estimated the sample size, this estimate is subject to consideration of finite population correction, response rate and degree of analysis. The population of people over 15 years old is 22,938 (Table 7) and the sample size (n) is reduced when the finite population correction factor is used, as follows:

$$n = N \cdot n^1 / (N + n^1)$$

$$= 22,938 \times 864 / 23,802$$

$$= 833 \text{ persons}$$

If the response rate is 95 percent the modified sample size must be increased accordingly, so that:

$$n = 833 / 0.95$$

$$= 876 \text{ persons}$$

Finally, since we may want to know the unemployment rate for each sex, and also do other analyses of the data, the sample size is doubled bringing n up to 1,752.

The two sets of considerations discussed above indicate that a sample of 1,752 persons be used. However, since each person lives in a household at a particular dwelling the appropriate unit of analysis for the survey is the dwelling itself. In this way a smaller number of dwellings can be sampled, to ease the burden of field work, but the desired number of persons can be surveyed. From Table 7, we can learn that for the study area there are 22,938 working people for 10,074 total occupied dwellings. Hence there are 2.277 working people per dwelling and 769 dwellings should be surveyed.

The Statistics Department list of meshblocks in the study area forms the basis for a systematic random sample. This list includes meshblocks that have few or no dwellings, and these low density meshblocks would be costly to include in the study because of the extra travel required within and between meshblocks. It is also likely that these meshblocks are located on the fringes of the study area. In view of these considerations all meshblocks with five or less dwellings were excluded from the list. The excluded meshblocks contained 275 dwellings and 953 persons distributed over 113 meshblocks, and forms a very small proportion (2.7 percent) of the total number of dwellings.

The final task is to determine the appropriate number of remaining meshblocks to sample. After excluding the low density meshblocks there are 9,799 dwellings in 540 meshblocks, for which the total population is 31,090 persons. Because the population density is higher in rural

Table 7: Population and Dwellings Data by Rural Communities and Rural Areas for Southland and Wallace Counties

	Usually Resident Population	Total Population	Population Aged 15 Years and Over	Total Permanent Private Dwellings	Total Occupied Dwellings
SOUTHLAND COUNTY					
Balfour Community	150	171	123	57	60
Riversdale Community	381	393	294	138	144
Lumsden Community	525	567	417	189	195
Edendale Community	570	588	444	210	210
Wyndham Community	663	699	519	234	243
Wallacetown Community	693	702	465	198	198
Oreti-Waikaia Area	1,986	2,049	1,413	633	648
Hokonui-Motoura Area	2,832	2,895	2,049	852	858
Winton Area	2,424	2,529	1,749	765	771
Awarua Area	2,370	2,418	1,701	708	714
Waihopai Area	2,817	2,937	2,136	840	852
Toes Toes Area	1,776	1,860	1,305	567	573
Wallacetown Area	2,556	2,610	1,893	777	801
	19,743	20,418	14,508	6,168	6,267
Winton Borough	2,028	2,079	1,590	717	717
WALLACE COUNTY					
Nightcaps Community	441	459	357	165	168
Ohai Community	651	675	501	216	219
Tuatapere Community	819	855	627	273	279
Otautau Community	813	837	618	279	291
Riverton Community	1,608	1,701	1,248	579	594
Central Area	1,044	1,083	762	330	336
Western Area	1,791	1,917	1,344	576	588
Eastern Area	1,986	2,022	1,383	615	615
	9,153	9,549	6,840	3,033	3,090
TOTAL FOR STUDY	30,924	32,043	22,938	9,918	10,074

Source: Census of Population and Dwellings, 1986, Series B Report 23, Southland Local Government Region, Table 1, Table 6, Table 15.

communities than in rural areas it is necessary to stratify the sample to take account of this difference. Failure to do so will result in a proportion of meshblocks with lower population density and the sample will under-represent the population. Table 8 shows the relevant data for the rural communities, and the lower half of the table shows the data for the rural areas, derived by subtraction of the community data from the totals. The percentage figures show the distribution between communities and rural areas and, for dwellings, can be applied to the sample total of 769 to yield 227 dwellings and 542 dwellings respectively. The 227 community dwellings divided by 26.34 dwellings/meshblock gives a sub-sample of 8.618 (say nine) meshblocks, which is one in twelve. The 542 rural area dwellings divided by 16.06 dwellings/meshblock gives a sub-sample of 33.748 (say 34) meshblocks, which is one in thirteen. Alternative calculations based on population rather than dwellings produces identical ratios. Hence the number of meshblocks to be sampled is 43.

The systematic sample produced by using these sampling ratios and starting at the beginning of each list of meshblocks yielded a sample of nine community meshblocks and 32 area meshblocks, a total of 41. This number is less than 43 because the ratios above were derived from rounded numbers. These meshblocks contained 745 dwellings and 2,737 persons in 1986. The sample number of dwellings is lower than the desired 769 but the population figure, when adjusted to working age persons using the appropriate ratio in Table 6, is 1,760 working age persons. This number is very close to the desired sample size of 1,752 persons.

3.4 Questionnaire Design and Administration

The questionnaire consisted of a letter of introduction; 13 pages of questions relating to employment and unemployment, and an Appendix containing a list of some of the supports and services available to rural Southlanders. The inclusion of the Appendix was a deliberate attempt to make the survey a two-way information flow as advocated by Lasley and Korsching (1984). The information provided in the Appendix was of potential relevance to both employed and unemployed persons. A question asked whether respondents were aware of the listed items of information, in order to appraise the interest in the information provided. Also, respondents were invited to pull out the Appendix so that the degree of interest could be estimated by the frequency of apparent use.

The questionnaire used forced-choice questions suitable for either interviewer use or for respondents to complete by themselves. Each question entailed selecting an option and putting a number in a box. The questionnaire provided for the four basic occupational categories of employed, unemployed, unpaid work and not working, and required respondents to go to the appropriate part of the

Table 8: Dwellings, Population and Meshblocks for Rural Communities and Rural Areas

Community	Number of Dwellings	Total Population	Number of Meshblocks
Otautau	286	827	13
Nightcaps	169	461	10
Ohai	217	673	10
Riverton	186	486	16
Tuatapere	274	851	9
Lumsden	196	569	5
Balfour	58	169	2
Riversdale	144	394	3
Wallacetown	197	698	5
Wyndham	211	617	8
Edendale	211	588	8
Winton Borough	745	2,027	21
Rural Communities	2,893(29.52%)	8,360(26.89%)	110
Rural Areas	6,906(70.48%)	22,730(73.11%)	430
Total (Adjusted)	9,799	31,090	540

Communities: $\frac{2,893}{110}$ = 26.34 dwellings/meshblock

Rural Areas: $\frac{6,906}{430}$ = 16.06 dwellings/meshblock

Source: Department of Statistics ad hoc table production, Census, 1986

questionnaire for specific questions relevant to their situation. The questionnaire was relatively short. For the two questions on occupation respondents also provided a description of their occupation.

Volunteers from Southland Federated Farmers, Women's Division of Federated Farmers, Young Farmers' Club, and Country Women's Institute undertook the interviewing in the field. The organisation to which each interviewer belonged was given $2.00 per completed questionnaire in order to cover travel costs. Interviewer training consisted of a meeting at which the questionnaire was examined closely and the potential problems discussed. Each interviewer was

given a set of instructions (see Appendix 2). The main objective of the meetings was to familiarise interviewers with all aspects of the questionnaire and the field sampling procedure.

Each interviewer was allocated a single mesh block close to their own location and given a Census User map which clearly identified the boundaries. In some cases a township map was provided also, in order to identify boundaries in towns (not shown on the Census User Map). Each interviewer visited each private dwelling within the meshblock and attempted on the first or second visit to complete a questionnaire for each person over 15 years old. Unoccupied households were left with sufficient questionnaires and a note inviting a response or else contacted later. Another approach was to telephone the household to arrange an interview time to either collect the questionnaire or to assist in its completion.

All questionnaires were identified by meshblock number only and were put into a sealed envelope at the household by either the interviewer or the respondents. Interviewers used a visiting record sheet (see Appendix 3) which listed names and addresses for all households in their meshblocks. This sheet facilitated follow-up where this was required, and provided data on the number of households in the meshblock and the number of responses obtained.

Completed questionnaires were collected along with the interviewer record sheet and then checked to tabulate the response from each meshblock. Prior to field work a number of items were released to the media (radio, television and newspaper) so that as many respondents as possible were aware of the research and its objectives.

3.5 Response Rate and Sample Characteristics

The overall result of the meshblock interviewing using volunteers was a successful retrieval of data from over 90 percent of dwellings. Most interviewers were able to secure a completed questionnaire from the appropriate people without having to conduct an interview. Typically, a number of blank questionnaires with unmarked envelopes were left at a household and then collected later. Most interviewers collected their questionnaires within seven to ten days. Surveying began on 1 August and all questionnaires were returned to Lincoln College by 1 September.

Table 9 summarises the data concerning the households in the sample. The table was prepared by counting the relevant data collected on the Interviewer Record Sheets and by analysing questionnaire data. Each record sheet indicated both the total number of dwellings and the number of dwellings that provided a response. For those dwellings that gave no response it was possible to record the circumstances. There were 50 cases of refusal and 44 cases where no one could be contacted, including people away on

holiday, in the process of moving or selling, or in hospital. There were 47 cases where the dwelling was not occupied, and this number is similar to the 53 not occupied dwellings found for the sample of meshblocks in 1986.

Table 9: Summary of Sample Data, and Comparison to 1986 Census Data

1986		
Population		2,426
Total Number of Dwellings		770
Number of Private Dwellings		760
Working-age Population		1,671
1988		
Total Private Dwellings		834
Refusals	47	
Away	44	
Not Occupied	50	141
Private Dwellings Responding		698
Total Occupied Dwellings		784
Working-age Population Responding		1,445
Total Working-age Population Contacted		1,562
Total Population Contacted		2,217

Each Interviewer Record Sheet also showed the total number of questionnaires received, and this was checked against the actual counts of processed questionnaires for each meshblock. However, since not every working age adult in each dwelling responded, and those that did gave the total number of adults in the household, it was possible to improve on this count and determine the total working-age population for those households contacted. Similarly, each respondent indicated the total number of people in their household, and summing these figures gives the total population for those households contacted.

The response rate can be calculated from these data and for dwellings is:

$$\frac{608}{834-(50+44)} \times \frac{100}{1}$$

$$= 94.3\%$$

The response rate for the working age population actually surveyed was 82.4 percent and for all those over 15 years contacted was 89.0 percent.

With an actual response from 1,445 people the sampling error is 1.6 percent for a ten percent - ninety percent split. This level is lower than the two percent originally considered because the sample size for two percent was doubled.

3.6 Conclusion

The methods used in this survey of employment and unemployment were consistent with high levels of accuracy in the estimator of unemployment and other attributes in the population of rural Southland. A cluster sample design provided efficient use of resources, and the use of meshblocks provided for both precise comparison to Census data and for evaluating the quality of the survey procedure itself. Over ninety percent of households responded to the interview survey.

CHAPTER 4

RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the data from the questionnaire and provides analysis along with some discussion. The aim of the chapter is to show the general profile of respondents, their work situation, the character of unemployment and underemployment, and the interest respondents show in education, and awareness of supports and services. The final section describes the extent of change between 1986 and 1988 for a number of social and economic variables.

4.2 Profile of Respondents

Taking all respondents together it is possible to describe them in general terms by reference to basic social variables and by their attitudes to location and work. Table 10 lists some of these characteristics for all respondents showing the number of respondents in each category, and an average figure where applicable. Not everyone answered each relevant question, so that there are fewer than the total of 1,445 respondents for each variable listed.

Table 10: Profile of All Respondents

	No.	
Average	1,406	41 years
Gender	741	Male
	683	Female
Ethnicity	1,342	European
	28	Maori
	8	Polynesian
	32	Several
Education	767	3 years or less
	303	Fifth Form Qualifications
	85	Sixth Form Qualifications
	174	Trade or Technical Certificate
	30	University Qualification
Years lived in Southland	1,398	34 years
Years lived in present house	1,393	12 years

Other data, presented in Table 11, show that the family situation of respondents is typically with a spouse and with children at home (894 or 62 percent), and there are 22 respondents (two percent) by themselves and with children. The other major group are those with or without a spouse and for whom their children have left home, or who do not have children (429 or 29 percent). The data from Table 6 in Chapter 3 can be used to show that there is, on average, 3.2 people per household and 2.2 people over 15 years old per household. Most respondents (1,177 or 83.2 percent) live in homes that are owned, the remainder are rented (199 or 14 percent).

Table 11: Family Situation of All Respondents

	No.	%
With parents	226	16
With spouse and children at home	668	46
By self and children at home	22	2
By self and no children	60	4
With spouse, children left home	220	15
By self, children left home	43	3
With spouse and no children	106	7
Others (flatting, hostel, multi-generation household)	64	4
Missing	36	2
	1,445	100

Respondents report satisfaction with both their area and with their job. Most respondents (951 or 68 percent) would definitely stay or would quite like to stay in their area, and fewer (226 or 16 percent) would definitely like to move or would quite like to move away from their area. There are 226 (or 16 percent) with no preference. Most respondents describe their level of job satisfaction either as high (371 or 36 percent) or medium (459 or 44 percent), while there are some (127 or 12 percent) who describe it as low. The remainder (78 or 7 percent) are unsure.

These data show that the typical respondent is about 40 years old, either male or female and most likely to be European. He or she is likely to have either three years secondary education or less and to have lived in Southland most of his/her life and lived in their present home 12 years. The home will typically contain a nuclear family (two parents with one or two children) or else will be older people on their own. The typical respondent is satisfied with their area and has work which is found to be satisfactory.

4.3 Work Situation

The first question in the questionnaire provided for a three-way classification of all respondents with respect to their work situation. Results show that most respondents (921 or 64 percent) were in full or part-time employment (Table 12).

Table 12: Work Situation of All Respondents

	No.		%	
Working full-time or self-employed	741		51.3	
Working part-time or self-employed	180		12.5	
		921		63
Unemployed and seeking full-time work	64		4.4	
Unemployed and seeking part-time work	9		0.6	
Unemployed and not seeking work	13		0.9	
		86		6
Not in paid work, seek full-time work	19		1.3	
Not in paid work, seek part-time work	25		1.7	
Not in paid work, not seeking work	393		27.2	
		437		31
Missing		1		-
Total		1445		100

There were 86 persons (6 percent) unemployed and 437 persons (31 percent) not in paid work. Full-time work predominates

the working category and most of the unemployed seek full-time work. People in the 'not in paid work' category who want work tend to prefer part-time work and most of this group do not seek work. For the 44 respondents not in paid work but seeking work there over 15 (35 percent) in home duties looking after children.

Table 13 shows the five sub-groups of the 'not in paid work' group. Many (123 or 28 percent) are at home and looking after children and most (180 or 41 percent) are retired. For the 44 respondents not in paid work but seeking work (Table 12) there were 15 (35 percent) in home duties-looking after children and 17 (39 percent) who were students.

Table 13: Different Types of 'Not In Paid Work'

	No.	%
Home duties, looking after children	123	28
Home duties, not looking after children	45	10
Students	78	18
Retired	180	41
Handicapped	11	2
	437	100

For those respondents who were working, Table 14 shows the main types of employment. Nearly one half (446 or 48 percent) are wage or salary earners, while most of the remainder are self-employed (388 or 42 percent). There is a small number (21 or 2 percent) who are unpaid workers in a family business.

Table 14: Main Types of Employment

	No.	%
Self-employed, employing others	148	16
Self-employed, not employing others	240	26
Wages or salary	446	48
Unpaid worker in family business	21	2
Both self-employed and wage work	51	6
Other	15	2
	921	100
No response	524	
	1445	

The working or self-employed respondents were located in the agricultural industry (471 or 53 percent), manufacturing (107 or 12 percent) or in community, social or personal activities (137 or 15 percent). While most of these paid workers held one job there were some (56 or 8 percent) who had two or more regular paid jobs. There were also some who did seasonal work (116 or 16 percent) or occasional work (204 or 28 percent).

Some questions were directed to these 439 respondents who were self-employed in order to gauge their management situation. For this group, just over one half (240 or 55 percent) were not employing others and over 80 percent worked in agricultural occupations, typically as farmers. On the issue of change and adaptation in their business, there was a broad range of responses. Table 15 shows that there were 50 (12 percent) who said they have to change and diversify into new types of production or have done so already, and 96 (22 percent) who have to change and adjust their business system or who have done so already. Most respondents (148 or 35 percent) said that they had no choice but to stay with the present system. There were 121 (or 28 percent) for whom their business situation was quite adequate. Finally, there were a few (9 or 2 percent) who were looking for ways out of farming.

Table 15: Business Strategies For All Those Self-Employed

	No.	%	
Have to change and diversify into new types of production, or have done so already	50	12	(8)
Have to change and adjust present farm/ business system, or have done so already	96	22	(24)
No choice but to stay with present farm/ business system	148	35	(40)
Present farm/business system is quite adequate	121	28	(25)
Have to look for ways out of farming/business	9	2	(4)
Other	2	100	
No response	13		
	439		

Included in Table 15 are percentage figures in parentheses. These figures are taken from a report of farmers' responses to economic restructuring in nearby

Clutha County in August 1986 (Fairweather, 1987). The two sets of percentage figures are similar, but suggest a slight change away from staying with the present system or changing and diversifying to changing and adjusting the farm/business system.

On the issue of increasing or decreasing the scale of operation, there were just over one half (221 or 52 percent) who had cut back on inputs and production. For the remainder there were some (161 or 38 percent) who had kept inputs and production at the same level, and a few (45 or 11 percent) who had increased inputs and production. The question related to the last 12 months, so those who had kept to the same level probably had already cut back. Most of these self-employed respondents (282 or 68 percent) were not looking for new business activities, but some (81 or 20 percent) were looking, and a few (53 or 13 percent) had found and were working on new business activities.

There were 263 respondents who answered a question on the change in the number of employees over the last five years. For most (139 or 53 percent) the number was the same, but for 86 (or 33 percent) numbers employed had decreased and for 38 (or 14 percent) the number had increased. On the issue of what increase in income would generate increased employment, for those relevant self-employed respondents most (114 or 62 percent) said that a 50 percent or greater increase in income would be necessary, and the remainder (71 or 38 percent) said that a 10 or 20 percent increase would be necessary.

The typical respondent was engaged in work and is almost as likely to be self-employed as a wage worker. Most employment was in agriculture, and for the self-employed sub-group, while most had not been able to change their business strategy, there were some who have changed. The self-employed group had cut back on inputs and production recently, and a considerable lift in income would be required to boost on-farm employment. These changes are an unsurprising reflection of response to economic restructuring in rural society.

4.4 Unemployment

From the group of 86 respondents who selected the unemployment option in the first question on work situation there were a maximum of 82 who answered further questions about unemployment. The questions examined time unemployed, how they sought work, their registration and their attitude to moving to a new location to obtain a job.

Most of the unemployed had been continuously out of work for up to six months (Table 16). There were 22 (29 percent) unemployed for one to two months and 24 (32 percent) unemployed for two to six months. Smaller proportions had been unemployed for less than one month (11

percent) or for more than six months (51 or 65 percent). Most of the respondents (51 or 65 percent) had actively sought work in the past four weeks (Table 17), and the most frequent options selected were: in person to an employer, Labour Department, and contacted friends or newspapers.

Table 16: Time Unemployed

	No.	%
Less than 1 month	8	11
1 - 2 months	22	29
2 - 6 months	24	32
6 - 12 months	9	12
1 - 2 year	7	9
More than 2 years	5	7
	75	100

Table 17: Approach to Work in Past 4 Weeks

	No.	%
Actively sought work	46	65
Not actively sought work	25	26
Have a job in 4 weeks	1	1
Have a job after 4 weeks	6	8
	78	100

Most of the unemployed respondents (62 or 76 percent) were registered with the Labour Department, and most respondents (37 or 45 percent) said they would move to a new location to obtain a good job. However, there were 28 (34 percent) who would not move, and 13 (16 percent) who were unsure. For those who would move, there was an even distribution over possible destinations ranging from Invercargill, through Southland, South Island, New Zealand or overseas. Members of this group would move to get a job and did not express much interest in a grant or loan to help

with the costs of moving. The main reason given for not moving was preference for their area. Finally, only two respondents (2 percent) were currently attending an Access training course.

The following data show calculations of the rural Southland unemployment rate using three different approaches: Labour Department, Census and Household Labour Force Survey (HLFS).

The Labour Department unemployment rate using registration figures is the first approach. The definition is as follows: the number registered as unemployed and seeking full-time work divided by the full-time workforce plus the number unemployed.

$$\text{UE Rate (Labour)}$$

$$= \frac{\text{No. registered, seeking full-time work}}{\text{Full-time workforce + numerator}} \times \frac{100}{1}$$

$$= \frac{62}{741 + 62} \times \frac{100}{1} = 8\%$$

There were 62 respondents registered as unemployed, and Table 12 (see earlier) shows that there were 741 respondents in full-time employment giving an unemployment rate (Labour Department) of eight percent. However, not all those unemployment and seeking full-time work are necessarily registered. In this study there are 64 respondents unemployed and seeking full-time work (see Table 12) and using this number does not change the unemployment rate (Labour Department).

The survey UE rate (Labour Department) of eight percent is lower than the August national rate of 9.4 percent but this difference is not statistically significant. The Invercargill rate for August 1988 was 13.3 percent, much higher than the national average, and significantly different than the survey rate of eight percent. The survey rate of unemployment (Labour Department) is thus the same as the national average but lower than the Invercargill rate.

The Census unemployment rate is defined as follows: the number seeking full or part-time work divided by the total workforce plus the number unemployed.

$$\text{UE Rate (Census)} = \frac{\text{Seeking full or part-time work}}{\text{Total workforce + numerator}} \times \frac{100}{1}$$

$$= \frac{(64 + 19) + (9 + 25)}{921 + 117} \times \frac{100}{1}$$

$$= 11\%$$

The census unemployment rate is 11%. The 1986 national figure was 6.8 percent and for rural Southland was 4.5 percent (from Table 5). There has been an increase of 7 percent since 1986. For the census measure of unemployment the individual defines him or herself as unemployed, in contrast to other measures. Respondents in this survey also made their own classification.

The Household Labour Force Survey (HLFS) unemployment rate is calculated as follows: the number without a job, available for work, and actively seeking a job plus the number having a job to go to in four weeks divided by the total labour force.

$$\text{UE Rate (HLFS)} = \frac{\text{No. without a job + job in 4 weeks}}{\text{No. employed + No. unemployed}} \times \frac{100}{1}$$

$$= \frac{(51-5) + 1}{921 + 47} \times \frac{100}{1}$$

$$= \frac{47}{968} \times \frac{100}{1} = 5\%$$

The unemployment rate (HLFS) is five percent. There were 46 unemployed respondents who had actively sought work in the last four weeks (see Table 17), and there was one respondent who had a job to start in four weeks.

The HLFS calculation can be altered by including in the numerator those respondents in the unpaid group who said they were seeking employment and adjusting this number for an estimated proportion of nine percent who used a newspaper only. There were 44 respondents in this situation and an estimated four who used a newspaper only. The modified HLFS unemployment rate is nine percent. This is an overestimate because it includes respondents who, while they say they are seeking work, may not be actively seeking work as officially defined.

A problem with the questionnaire was that it failed to use the issue of whether respondents had looked for work or not as the key determinant of unemployment status. The first question asked respondents to indicate work status by selecting the best option, and there may be some respondents in the unpaid category who would be better described as unemployed. The two measures above cover both extremes and represent an under and over-estimation of the unemployment rate (HLFS). What is unknown is the job search methods unpaid respondents may have used. This oversight results from all unpaid respondents omitting questions on unemployment and answering only the personal questions.

Data are available on the 44 respondents in the unpaid category who said they were seeking work. Table 18 shows that most were at home with children or were students.

Table 18: Characteristics of Those Unpaid Seeking Work

	No.	%
Home duties, children	15	35
Home duties, no children	6	14
Students	17	40
Retired	3	7
Handicapped	2	5
Missing	1	0
	44	100

Data from Table 18 can be used with earlier data to show the numbers of respondents in each of the five jobless sub-categories (Table 19). There are 28 discouraged workers and this number is derived from the 25 unemployed respondents in Table 17 who had not sought work in the last four weeks minus five who used a newspaper only, plus eight additional respondents who stated that they were unemployed but did not answer the unemployed question which clearly referred to those who had actively sought work and were available for work. The 12 respondents who were unpaid but seeking work may be fairly classified as seeking work, and using this number the unemployment rate is six percent.

Table 19: Numbers of Respondents in Respective Jobless Categories.

	No.	%
Official unemployed (HLFS)	47	36
Available for work, but not actively seeking work		
- Newspaper only	5	4
- Discouraged	28	22
- Unpaid, seeking work	12	9
Actively seeking work, but not available		
- Start in more than 4 weeks	6	5
- Home duties, with children	15	12
- Students	17	13
	130	100

The modified survey unemployment rate (HLFS) of six percent is higher than the June quarterly measure for New Zealand of 5.3 percent, but this difference is not statistically significant. Comparison with the June quarterly HLFS figure may not be appropriate because the June figure reflects the levels for the months of April, May and June, whereas the survey was conducted in the first week of August. However, assuming the June figure is a reasonable indicator of the August situation, then the survey estimate is the same as the national figure as was found for the modified Labour Department measure.

The jobless unemployment rate is:

$$\text{UE Rate (Jobless)} = \frac{130}{967} \times \frac{100}{1} = 13\%$$

The national jobless figure for June is 8.6 percent but for the sample is 13 percent, which is considerably higher and the difference is statistically significant. This discrepancy indicates that rural Southland has proportionately more people who are out of work and are not included in the unemployed definition than for New Zealand as a whole.

The section on unemployment shows that one household in nine has an unemployed person. Most of the unemployed have been out of work for one to six months. The survey unemployment rate (Labour Department) is the same as the national figure and significantly lower than the Invercargill figure. The modified Labour Department measure is slightly higher than the national average. The modified

unemployment rate (HLFS) is the same as the national average. Finally, the jobless figure is higher than the national average. These data suggest that official measures of unemployment, while showing figures similar to the survey results, do in fact give a poor indication of the extent of the number of jobless. The official HLFS data for New Zealand show that the jobless proportion is about three percent again on top of the number of unemployed, but for Southland, results show that the additional amount is eight percent.

4.5 Underemployment

Of the 921 respondents working full or part-time there were 148 (17 percent) who wanted more work, and there were 36 (4 percent) who are unsure. Thus, over 20 percent could want an additional work. Most of these respondents (85 or 58 percent) already had full-time work. There is significantly more (Chi-Square = 18**) wage and salary earners seeking additional work. Table 20 shows for what extent of time these respondents would want additional work.

Table 20: Numbers Wanting Additional Hours of Work

Additional Hours:	No.	%
5 - 10	56	37
10 - 20	26	17
20 - 30	14	9
30 -40	3	2
Full-time	18	12
Cannot specify/variable	33	22
	150	100

Most respondents seek modest increases in amount of time, so that 54 percent of this group want from 5 - 20 hours additional work. There are 18 respondents who seek full-time work and most of these (12 or 67 percent) have part-time work, typically on wages and working in agriculture or in manufacturing.

Nearly one-half of this group seek work at their present job and about one-fifth would like more work at either another job or as occasional work.

4.6 Interest in Education

All respondents were asked whether they were interested in learning more about their work or in gaining additional skills or qualifications. The educational questions were designed to cover their areas of interest,

the main hindrances to education, and preferred type of and place of instruction.

A large proportion of respondents (750 or 56 percent) said they were interested in education, and 121 (9 percent) were unsure. Most of those respondents interested in education were between 15 and 50 years old, and when the over 40 year olds are excluded, the proportion interested in education rises to 66 percent. This question on interest in education was answered by all respondents regardless of whether they had work or not, and there were significantly more (Chi-square = 79**) respondents who were working or sought work interested in education compared to those not seeking work. Taking those working or seeking work, the proportion who said yes to learning increases to 68 percent. Further, those not in paid work, those with home duties looking after children and students were typically more interested in education, whereas those with home duties without children and retired people were not interested in education. There were roughly equal proportions of self-employed and wage earners interested in education.

Table 21 shows the distribution of respondents by choice of main interest area. The main choices are agriculture (21 percent) and business skills (17 percent), with interest also in personal or intellectual growth (13 percent), trade (eight percent) and people-related skills (ten percent).

Table 21: Main Area of Interest in Education

	No.	%
Personal or Intellectual Growth	99	13
Business skills	129	17
Horticulture	12	2
Agriculture	155	21
Trade or technical skills (e.g., photography, shorthand, drawing)	70	9
People-related skills (e.g., nursing, teaching, journalism)	77	10
Engineering	21	3
Handcraft	44	6
Basic High School skills	5	1
Recreation (personal)	27	4
Job-seeking skills	18	2
Other	6	1
More than one option	90	12
	753	100
No response	692	
	1445	

Finally, there were 179 (or 17 percent) of all respondents who would like to change their current work and train for another job.

It is possible to consider how interest areas may vary depending on work situation. Table 22 shows the main types of work situation and the main areas of interest, and accounts for 504 respondents, or 67 percent of those answering the questions.

Table 22: Area of Interest in Education by Work Situation

	Full-time		Part-time		Unemployed Seeking Full-time		Not Paid Not Seeking	
	No.	%	No.	%	No.	%	No.	%
Personal	59	(18)	10	(14)	3	(9)	21	(29)
Business	79	(24)	19	(27)	11	(34)	13	(18)
Agriculture	132	(40)	10	(14)	6	(19)	3	(4)
Trade	36	(11)	7	(10)	8	(25)	14	(19)
People-related	23	(7)	25	(35)	4	(13)	21	(29)
Total	329	100	71	100	32	100	72	99

The table suggests that both full and part-time workers are interested in business skills but more full-time workers than part-time workers are interested in agriculture. Part-timers along with those not in paid work and not seeking work are interested in people-related skills. This latter group are also interested in personal or intellectual growth. Finally, the unemployed show interest in business skills and trade skills.

Further, it is possible to see how type of employment is related to interest area. Table 23 shows that the self-employed sub-group are interested in agriculture or business but wage and salary earners are interested in all topics.

Table 23: Area of Interest in Education by Type of Employment

	Self-Employed		Wages/Salary	
	No.	%	No.	%
Personal	27	14	40	21
Business	50	25	46	24
Agriculture	95	48	44	23
Trade	14	7	29	15
People-related	12	6	34	18
	198	100	193	100

While there is enthusiasm for learning there is also recognition of the hindrances to further study. Table 24 shows the frequency for a number of hindrances. The main choices are lack of time (26 percent), lack of money (16 percent), and family commitments (16 percent). Not surprisingly, other data show that full-time workers lack time, unemployed lack money, and part-time and those not in paid work and not seeking work have family commitments.

Table 24: Main Hindrance to Undertaking Further Education

	No.	%
Lack of time	187	26
Lack of money	113	16
Isolation and distance from place of learning	93	13
Family commitment	119	16
Lack of motivation	35	5
Uncertainty about abilities	48	7
Other	22	3
More than one response	105	14
	722	100
No response	723	
	1445	

For type of instruction, most respondents (296 or 41 percent) said they would prefer one-to-one teaching or on-the-job training (Table 25). However, there is also interest in group learning other than classroom instruction

(203 or 28 percent) and in correspondence courses (109 or 15 percent). Only 77 (or 11 percent) preferred classroom teaching. Additional analyses suggest that unemployed prefer one to one teaching and that while those not in paid work prefer one to one teaching a relatively greater proportion would prefer classroom instruction. Further, self-employed respondents prefer group learning but wage and salary earners prefer one to one teaching.

Respondents appear to be willing to travel to receive instruction with 284 (39 percent) who would travel to Invercargill and 247 (34 percent) who would travel to the nearest main centre. There are 199 (27 percent) who would prefer not to travel. Full-time and part-time workers are evenly spread over choice of travel destination, but more unemployed and those not in paid work and not seeking work say they would travel to Invercargill.

Table 25: Preferred Type of Instruction

	No.	%
One-to-one teaching or on-the-job training	296	41
Classroom teaching	77	11
Group learning, other than classroom	203	28
Correspondence course	109	15
Other	34	5
	719	100
No response	726	
	1445	

The typical respondent is keen on education, especially learning agricultural or business skills. Agriculture is particularly preferred by full-time workers, self-employed or unemployed. Respondents recognise that lack of time, money and commitment mean that they may not undertake education. There is a strong preference for one-to-one teaching.

4.7 Awareness of Supports and Services

Table 24 shows that the majority of respondents have never heard of, or have some knowledge of, the main services and supports available to rural Southlanders.

Table 26: Extent of Knowledge of Five Services and Supports

	Never Heard		Some Knowledge		Accurate Knowledge	
	No.	%	No.	%	No.	%
Department of Labour visiting schedule	811	(71)	290	(25)	45	(4)
Access training courses	199	(17)	843	(74)	105	(9)
Southland Promotions Incorporated	561	(49)	513	(45)	75	(6)
Export Institute and Market Development Board Grants	835	(73)	281	(24)	29	(2)
Regional Development Investigation Grants	840	(73)	277	(24)	27	(2)

Respondents selected the option they thought best describes how well they knew of each service or support. For this question there were about 300 respondents who made no response. The Access training course is most widely known followed by Southland Promotions Incorporated; in both cases over half the respondents said they had knowledge of each option. For the remaining three options nearly three quarters of respondents had not heard of them. Finally, out of all respondents there were 232 (or 16 percent) who removed the Appendix to the questionnaire which contained information on these services and supports. Given that some motivation is required to remove the Appendix, the 16 percent of respondents probably underestimates the number who would find this information useful. The proportion who did remove the Appendix clearly indicates interest in the information.

4.8 Social and Economic Change Between 1986 and 1988

Section 3.5 presented sample data and showed some sample population characteristics in comparison to the 1986 census data. It is relevant now to examine this comparison more closely. Table 9 in Section 3.5 shows that there were 2,217 persons of all ages contacted by the survey. We also know from the table that not all dwellings in the survey area were included because there were 44 people away and there were 47 refusals. For the 698 dwellings responding there were 2,217 persons, therefore for 784 (693+44+47) total occupied dwellings there is an estimated 2,490 persons. This is an increase since 1986 of 64 persons, or

two percent. The number of occupied private dwellings has changed from 760 to 784, an increase of 24 dwellings, or three percent. These data suggest that the population of rural Southland has increased slightly since 1986. Some of these data are included in Table 27.

There are two considerations necessary in interpreting the slightly higher dwellings and population level in the sample. The first is the assumption that the household size for responding dwellings is the same as the household size for those who were away or who refused. It is likely that single person households would be more frequently away, and it is evident from the interviewer record sheets that some older, retired people refused to respond to the questionnaire. These factors suggest that the group who were away or refused were of smaller household size. Thus, the above simple extrapolation from the sample population to the total population overestimates the total population. The second consideration is the 1.6 percent sampling error, which means that sample characteristics have to be more than 1.6 percent greater or less than the census figure before a statistically significant difference is observed.

In the light of these two considerations the sample estimate of population increase of two percent is unlikely to be significant. The number of dwellings has increased slightly and is statistically significant because it is a three percent change. This increase is in line with trends in census figures showing that the number of dwellings tends to increase over time as the number of people per dwellings declines, presumably because there are increasing levels of separations, solo parents and elderly.

Table 27 shows the numbers and proportions of the population in different age groups. The first set of figures shows the distribution for the 1986 census and there were 30 percent of the total less than 15 years old. For the survey results the same distribution was obtained, showing that there is not a greater relative proportion of younger people in 1988. The population estimate appears to show increases in the number of the the under and over 15 years old sub-groups. While the estimated total number of people at 2,490 is not significantly more than 2,426, when the actual 1986 census total of 2,426 is split into 70 percent (1,698) and 30 percent (728) these sub-totals show that there is an increase of three percent in the over 15 year old group. It is likely that this is a statistically significant increase.

Table 27: Population Distribution for Census and Survey

		CENSUS								
	<15	15-17	18-19	20-24	25-29	30-39	40-49	50-59	60 and Over	TOTAL
		132	63	171	186	363	276	219	276	1,681
%	-	8	4	10	11	22	17	13	17	100%
	702		(∑ 15-29=552)			1,686		(∑ >30's=1,134)		2,373[1] (2,426)
	30%					71%				100%
		SURVEY								
Survey Raw Score		100	55	118	137	331	238	191	235	1,406
%		7	4	8	10	24	17	14	17	39 No Response
										1,445
Estimated Actual Number		124	69	147	171	413	297	238	293	1,765
Survey Population Contacted	655		(∑ 15-19=511)			1,562		(∑ >30's=1,241)		2,217
	30%					70%				100%
Population Estimate	736					1,754				2,490
	30%					70%				100%

Note 1: This figure derives from a Statistics Department table before an error in census enumeration was corrected. The revised population total is 2,426. The distribution is available only for pre-revised data.

Table 27 also shows the distribution among the over 15 year olds for both the census and the survey. When compared with each other, the percentages suggest that there is a lower proportion of 15-17 years, 20-24 years and 25-29 years in 1988. The estimated actual survey number for each age group was obtained by multiplying the survey raw score by 1.247, the ratio of the estimated total number over 15 years (1,754) and the survey total (1,406). The row of estimated actual numbers when compared to the census shows a decline in 1988 for the 15-17, 20-24 and 25-29 age groups and an increase in all the older groups. These data suggest that there has been some loss of younger working age people and an increase in older people. In fact, the sub-total for the 15-29 year olds is 552 in 1986 and 511 in 1988, a decline of 41 or 7.4 percent. Conversely, the sub-total for the over 30 year olds is 1,134 in 1986 and 1,241 in 1988, an increase of 107 or 9.4 percent. These differences are statistically significant. Thus, while the over 15 year old group as a whole has increased in number between 1986 and 1988, within this group there are now fewer young adults (15-30 years) and more older adults (30 years and over).

Finally, population data are available for both rural areas and rural communities and these data show different changes since 1986. For the rural areas since 1986 there is an increase of 17 dwellings (three percent) and for the rural communities there is an increase of seven dwellings (two percent). However, while the rural area population increased by 161 persons or ten percent, the community population declined by 98 persons or 11 percent, to give a net increase of 64 persons. All these percentage changes are statistically significant. In general, it is the rural areas that have sustained a population increase and the communities that have had a decline.

There are a number of other dimensions to the change since 1986 and the following tables illustrate these changes. Survey data are available on occupations, industries, work status, employment status and benefits received. These data are directly comparable to the 1986 census data because they are based on identical questions. However, it is possible that some responses were misclassified, especially on the subject of occupation. To minimise this source of error the official classification of both occupations and industry were used to code the open-ended responses to questions five and seven in the questionnaire, in the same way as census researchers would do.

The following five tables compare the census and survey estimate for the percentage of people in a number of groups for each of five major social variables. Any change between 1986 and 1988 will show up in a change in proportion, however, some indication is needed as to what amounts to a statistically significant change. The Z statistics for proportions gives a high value, even for a

difference of one percent and taking the percentages at 50 percent each for maximum value. The sampling error is 1.6 percent. These considerations suggest that a difference of two percent is statistically significant.

Table 28 shows that there are now more people not working when compared to 1986, and that the full-time component of the work force has decreased in size.

Table 28: Work Status Comparison Between 1986 and 1988

	1986 Census %	1988 Sample Estimate %
Full-time Work Force	59.	51.3
Part-time Work Force	11.3	12.4
Not Working	29.8	36.3
	100	100

Table 29 shows the employment status comparison. There are now more self-employed people and less wage or salary earners. The proportion of those unemployed and seeking work has increased by 3.8 percentage points to 7.7 percent.

Table 29: Employment Status Comparison Between 1986 and 1988

	1986 Census %	1988 Sample No.	1988 Sample %
Employer of others in own business	11.1	148	15.7
Self-employed and not employing others	22.7	240	25.4
Wage or salary earner	56.5	446	47.3
Unpaid worker in family business	4.6	21	2.2
Unemployed and seeking work	3.9	73	7.7
Not specified	1.2	15	1.6
	100.0	943	99.9
Other (Both self-employed and wage work)		51	
		941	

Table 30 shows the main occupational categories. Professional and technical occupations have increased in relative size as have sales. Production occupations have declined in proportion.

Table 30: Occupation Comparison Between 1986 and 1988

	1986 Census %	1988 Sample %
Professional, technical	7.6	9.7
Administrative, managerial	1.7	0.8
Clerical	7.2	6.8
Sales	5.3	7.5
Service	5.0	5.9
Agriculture	49.5	50.7
Production	22.9	18.6
Not adequately defined	0.6	-

Table 31 shows changes in the industrial classification, notably a possible decline in mining and quarrying, and a definite decline in manufacturing. There is an increase in the proportion of people engaged in the community industries.

Table 31: Industry Comparison Between 1986 and 1988

	1986 Census %	1988 Sample %
Agriculture, hunting, forestry	51.6	51.5
Mining and quarrying	2.2	0.9
Manufacturing	13.7	11.7
Electricity, gas and water	0.6	1.3
Building and construction	3.5	2.2
Wholesale, retail restaurant	8.6	9.2
Transport, storage, communications	4.8	5.6
Finance, insurance, property	2.8	2.7
Community, social, personal	11.0	15.0
Not adequately defined	0.6	-
	100.0	100.1

Finally, Table 32 shows changes in the distribution of welfare payments. There are now relatively more recipients of family benefit and unemployment benefit and relatively fewer recipients of national superannuation.

Table 32: Welfare Benefits Comparison Between 1986 and 1988

	1986 Census %	1988 Sample %
Family benefit	36.5	44.2
National superannuation	47.4	36.5
Domestic purposes benefit	0.8	1.0
Unemployment benefit	9.1	11.3
Sickness or invalid's benefit	2.9	1.8
Widow's benefit	0.8	0.5
Other	2.2	4.6
	100.0	100.0

The comparison to the 1986 census shows that there has been no change in the population total, although there is a suggestion of a slight population increase. Because some of the sampling errors cannot be estimated conclusively, it is not possible to be definitive, and the prudent conclusion is that the population has not changed. The number of people in this over 15 years group has increased and there are fewer people between the ages of 15 and 30 years and more people over 30 years old. In 1988 there are more people in rural areas and fewer in the rural communities. In terms of the workforce, there are now fewer full-time workers and more people not working. There have been increases in the number of self-employed people, in the professional/technical and sales occupations, and in the number on the unemployment benefit. There are fewer wage and salary earners and fewer national superannuitants. Finally, numbers in manufacturing industries have declined, while those in community, social and personal industries have increased.

CHAPTER 5

CONCLUSION

5.1 Introduction

The present chapter provides a summary of the main findings and undertakes a brief discussion of the general implications of the results. Also briefly considered are the implications for both policy and for research.

5.2 Summary of Main Findings

The objectives of the research were to document the work situation in rural Southland, to measure the rate of unemployment, to describe interest in education, and to compare results with the 1986 Census.

The review of literature shows that unemployment is a recent phenomenon in post-war New Zealand and that it can be measured using Labour Department registered unemployed, the Census definition, or by the Household Labour Force Survey definition (following international definitions). Overseas literature on rural unemployment shows that it is often underestimated by official measures. For New Zealand, an analysis of 1986 census data shows that the Southland unemployment rate is lower than the national average and that within Southland the unemployment rate is higher than the county average in the cities and rural communities but lower than the county average in the rural areas.

The method for this research was based on a cluster sample of 41 Statistics Department meshblocks. All working-age people within each of the selected meshblocks were approached by a voluntary interviewer and asked to fill out a questionnaire. The sample size provided for a tolerable error level of two percent. Ninety-three percent of all dwellings responded to the survey yielding 1,445 usable questionnaires.

Results from the survey show the typical respondent was about 40 years old, either male or female, and European with about three years secondary schooling. They have lived in Southland for most of their life and were satisfied with living in their area. Respondents were equally likely to be self-employed or wage and salary earners, typically working in agriculture. Most of the self-employed respondents had not changed their business strategy, but some had changed or diversified into new types of production. Most of the self-employed sub-group had cut back on inputs and production.

One in nine households in rural Southland have one person unemployed. Most of the unemployed had been out of

work for one to six months. While the survey unemployment rate (Labour Department) and the HLFS figure are the same as the national average, the number of jobless in rural Southland is much higher than the national figure.

Many respondents are keen to undertake further education, especially in the areas of agriculture and business. However they also recognise that lack of time, money and commitment are major hindrances to further study. Few rural Southlanders are aware of the available supports and services.

In comparison to the 1986 Census, there are now the same number of people in rural Southland but the workforce is smaller. There are more people over 30 years old, and less people between 15 and 30 years old. Rural communities have lost people and rural areas have gained people since 1986. There are more self-employed people and fewer wage or salary earners.

5.3 General Implications of the Findings

The cluster sample design using meshblocks is an effective way to undertake survey research which requires high accuracy. Such a design is relatively easy to execute in practice because field work involves visiting a definite number of dwellings within a clearly defined area.

Rural Southland is experiencing a demographic pattern in which the population size is unchanging but the workforce is decreasing in size. The number of unemployed and jobless is higher than in 1986. Further, the number officially unemployed is close to available national measures but there are many more jobless people less closely attached to the workforce. This means that there are many rural people not working for financial gain and who believe that there are few jobs available so they do not actively seek work. It seems likely that rural people would adopt such a policy and there would be many rural people who would have unpaid work-related activities to pursue while they are unemployed. Such people could work on their small holdings or for other agriculturally-related occupations while they wait for a future job opportunity. These two factors suggest why the jobless rate can be high in rural areas. The high jobless figure indicates that there is a potential workforce available when and if workers are needed.

The data on unemployment match very well the findings from overseas literature. This study, like most of the others, finds that rural areas have a relatively larger group of jobless people, including the underemployed and discouraged workers, than occurs in urban areas.

The results from this study are similar to those reported by Kearsley (1987) for Northern Southland. Similar percentages of people have seasonal work (20 percent in 1987

and 16 percent in 1988) and the same percentage are underemployed (20 percent). While six percent of households had an unemployed person, for the present wider study of Southland the figure was 11 percent, perhaps due to the different time of survey. Kearsley reports that 14 percent had a second job; here it is eight percent. Some differences occur in occupations: in Northern Southland most jobs are in the primary sector or in services but for this study manufacturing is about equal with services. Generally, the results show similarities and any obvious differences are probably due to regional variations.

The other studies of rural communities cited in Chapter 2 all describe decreases in population for rural communities, and this pattern is found in this survey. However, a new finding is that rural areas have gained in population while communities have declined.

In very general terms the findings of this survey confirm general beliefs about adjustments in rural society. There have been demographic changes and more people out of work. However, the survey qualifies these obvious changes by showing that these changes are not universal: rural areas have gained in population for example. The population loss is not for all ages but only between 15 and 30 years.

5.4 Policy

Many people are aware of Access training schemes, and many people are interested in education. However, few people have been on Access courses so there appears to be considerable potential for training in general and for Access courses in particular.

Any policy relating to rural unemployment should take into account the specific characteristics of this group. Some obvious points are the interest in education which indicates an awareness, at least in principle, of the importance of learning and adjusting to current changes. There are also a number of people who seek to retrain and move into new work. The fact that people consider agriculture and business topics important suggests that the interest in education and retraining is practical and relevant to the economy. Perhaps there is considerable potential for economic growth if these interests were fostered in some way.

The demographic changes observed between 1986 and 1988 suggest that the composition of the rural sector is changing. While there are fewer people in the workforce the total number is not declining and there is an increasing proportion of over 30 year olds. Rural society faces the potential burden of increased costs for welfare and public services.

Self-employed people are an important part of the rural economy and this fact should be recognised by any economic and employment policy. There are some optimistic signs for increasing employment in future. Over one-third of those self-employed say that with a 10-20 percent increase in income they could take on additional employees. Presumably, farmers are already on low incomes, so a large percentage increase in income may not be so hard to achieve. Any general improvement in the economy as it affects employees would carry through to increased employment levels, typically on farms. Further, the available supports and services, some directly relevant to this group, are not widely recognised, suggesting that better communication about these is necessary.

5.5 Future Research

Any further research could improve on the present study by designing a questionnaire that used job search method as the key characteristic for deciding whether people are either unemployed or not in paid work. Such a modification would allow far better comparison of results to the Household Labour Force Survey. Another useful modification along this same theme would be to ask those not in paid work questions about possible job search methods.

There is scope for undertaking studies similar to this one in other areas in order to build up a generalised picture of the work situation in rural areas.

A remaining problem concerns the differences between survey results and census figures. This research and some of the Australian studies point out the different findings and as yet there is no good indication of why the census data show relatively low rates of unemployment in rural areas.

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APPENDIX 1

LINCOLN COLLEGE

WORK SITUATION SURVEY OF

RURAL SOUTHLAND:

A Survey of Selected Rural Southland Dwellings -

All Persons over 15 years Old to Reply

July, 1988

LOCALITY OR MESH BLOCK NUMBER: [ ]

AGRIBUSINESS
& ECONOMICS
RESEARCH UNI
LINCOLN COLLEGE
CANTERBURY
NEW ZEALAND
Phone Christchurch (03) 252 8

July, 1988

Dear Rural Southlander,

People in New Zealand face many changes today, and the people of Southland are no exception -- many have had to face changes in their work or even adjust to no work at all.

We need your help to record what is happening to your work situation. Please fill out a questionnaire for each person over 15 years old in your household, and give the completed questionnaire to the interviewer.

Your information is important so that it can be put together with others and help draw an accurate picture of the work situation for all of rural Southland. This is a picture of the current economic pulse and needs to be told to government and other interested policy makers. Local organisations, like the Invercargill Access office, can also learn from the results of this survey and cater their training courses to the needs of rural people.

Please act now to record your situation and have your say. We need to hear from every selected household so that the results have maximum effect.

Your answers to all questions are confidential to me. You can seal all the questionnaires from your household in an envelope after the interviewer has provided assistance.

Please take note of the Appendix at the back of the questionnaire. It contains a list of some services and supports available to rural Southlanders, and you may find it of use. Just detach it from the questionnaire if you want to keep a copy.

We thank you for your assistance.

Yours sincerely

John R Fairweather (PhD)
RESEARCH SOCIOLOGIST

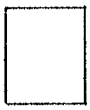
Reg Dalzell
DEPUTY CHAIRMAN
SOUTHLAND REAC

EVERYONE ANSWER QUESTION 1.

Please select the best option and put the number in the box.

1. You are:

Working full-time or self-employed - 30 hours or more per week (1)
Working part-time or self-employed - 1 to 29 hours per week (2)
Unemployed and seeking full-time work (3)
Unemployed and seeking part-time work (4)
Unemployed and not seeking work (5)
Not in paid work and seek full-time work (6)
Not in paid work and seek part-time work (7)
Not in paid work and not seeking work (8)



IF WORKING OR SELF-EMPLOYED FULL OR PART-TIME, PLEASE GO TO QUESTION 3, PAGE 4.
IF UNEMPLOYED, PLEASE GO TO QUESTION 14, PAGE 7.
IF NOT IN PAID WORK, PLEASE ANSWER NEXT QUESTION.

2. For those who, in the current week, are not in paid work which option below best applies to you:

Home duties - looking after children (1)
Home duties - not looking after children (2)
Full-time student (3)
Retired (4)
Unemployed and not seeking work (5)
Permanently unable to work due to physical or mental handicaps (6)
Temporarily unavailable for work this current week (7)
Other, please specify _____ (8)

FOR ALL PEOPLE NOT IN PAID WORK, PLEASE GO TO QUESTION 25 PAGE 10.

3. For those who are now in paid work or self-employed in the current week, full-time or part-time, please select the option below and put the number in the box.

Self-employed and employing others (1)
Self-employed and not employing others (2)
Wage or salary earner (3)
Unpaid worker in family business
- for 15 hours/week, or more (4)
- for less than 15 hours/week (5)
Not specified but working 1 or more hours weekly (6)
Both self-employed and wage work (7)
Other, please specify _____ (8)

4. If you usually work but were not at work this current week the reason is:

Own illness or injury (1)
Personal or family responsibilities (2)
Bad weather or mechanical breakdown (3)
Direct involvement in an industrial dispute (4)
On leave or holiday (5)
Other, please specify _____ (6)

5. Your main occupation or main type of work is:
(CONSULT WITH INTERVIEWER FOR HELP IN SELECTING BEST OPTION)
(SELECT THE ONE BEST OPTION FOR YOU)

Professional, technical (e.g.,Doctor, Scientist) (1)
Administrative, managerial (e.g., M.P., Government official) (2)
Clerical (e.g., Typist, Computer operator) (3)
Sales worker (e.g., Shop assistant, Shop owner) (4)
Service worker (e.g., Hairdresser, Police) (5)
Agricultural, animal husbandry and forestry, fishing and hunting (e.g., Farm manager, Farm worker) (6)
Production, transport, equipment operators and labourers (e.g., Plumbers, Painters, Freezing workers) (7)
Other, please specify _____ (8)

6. Please write down your occupation in your own words:

My work is _____

7. The industry in which you work is:
(CONSULT WITH INTERVIEWER FOR HELP IN SELECTING BEST OPTION)
(SELECT THE ONE BEST OPTION FOR YOU)

Agriculture, hunting, forestry, fishing (1)
Mining and quarrying (2)
Manufacturing (Industrial or small-scale and including freezing works (3)
Electricity, gas and water (4)
Building and construction (5)
Wholesale, retail and restaurant (6)
Transport, storage, communications (7)
Finance, insurance, property (8)
Community, social, personal (9)
Other, please specify _____ (10)

8. Please write down your industry in your own words:

My industry is _____

9. The number of regular paid jobs you have this current week is:

One (1) Two (2) Three or more (3)

10. Do you do any seasonal work:

No (1) Yes (2)

11. Do you do any occasional work:

No (1) Yes (2)

12. Would you like additional work, that is, more hours per week:

No (1) Yes (2) Unsure (3) ☐

IF YES,

a. You seek an additional:

5-10 hours per week (1)
10-20 hours per week (2)
20-30 hours per week (3)
30-40 hours per week (4)
want full-time work (5)
can't specify, or variable amount (6) ☐

b. You would like to have more work at your:

Present job (1)
Another job (2)
Occasional work (3)
Seasonal work (4)
Other, please specify _____ (5) ☐

13. You have worked at your present job for how may years? ☐☐

(Tick this box if less than 1 year) ☐

ALL THOSE IN BUSINESS OR SELF-EMPLOYED, PLEASE GO TO QUESTION 20, PAGE 9.

ALL OTHER PAID WORKERS, PLEASE GO TO QUESTION 25, PAGE 10.

14. FOR THOSE WHO ARE UNEMPLOYED IN THIS CURRENT WEEK, that is - without a paid job and
- available for work

You have been continuously unemployed for:

Less than 1 month
For 1 - 2 months
For 2 - 6 months
For 6 - 12 months
For 1 - 2 years
More than 2 years

☐

15. Have you actively sought work in the past 4 weeks:

Yes (1)
No (2)
Have a job to start within 4 weeks (3)
Have a job to start after 4 weeks (4)

☐

16. If actively seeking work, which of the following activities have you undertaken in the past 4 weeks:
(more than 1 box can be ticked)

Written, 'phoned or applied in person to an employer ☐

Contacted a private employment agency ☐

Contacted the Department of Labour's employment centre ☐

Placed advertisements about a job ☐

Contacted friends or relatives about a job ☐

Taken steps to set up own businesses ☐

Contacted career advisors or vocational guidance officers ☐

Any other form of active job search (_____) ☐

Looked at job advertisements in newspapers ☐

17. Are you currently registered as unemployed with the Labour Department:

Yes (1) No (2) Unsure (3) ☐

17a. Are you currently attending an Access Training Course:

Yes (1) No (2) Unsure (3) ☐

IF YES, were you registered with the Department of Labour before starting your Access course? ☐

Yes (1) No (2) Unsure (3)

18. Would you move to a new location to obtain a good job?

Yes (1) No (2) Unsure (3) ☐

IF YES, you would move to:

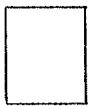
Invercargill (1)
To a Southland rural town (2)
Somewhere in Southland (3)
Somewhere in the South Island (4) ☐
Somewhere in New Zealand (5)
Overseas (6)

IF NO, the main reason for not moving is:

Commitment to farm or business (1)
Too old (2)
Too young (3)
Prefer this area (4)
Commitment to present house (5)
No jobs in other areas anyway (6)
Married to employed person (7)
Kids too settled at school (8) ☐
Other, please specify _____ (9)

19. Under what conditions would you move to a new location to obtain work:

If a suitable job was available (1)
If there was a grant or loan to help pay the costs of moving (2)
Would never leave my area



PLEASE GO TO QUESTION 25, PAGE 10.

20. FOR ALL THOSE IN BUSINESS OR SELF-EMPLOYED,

At the present time which one of the following business strategies best describes your management situation:

I/We have to change and diversify into new types of production, or have done so already (1)

I/We have to change and adjust our present farm/business system, or have done so already (2)

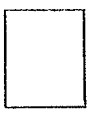
I/We have no choice but to stay with our present farm/business system (3)

My/Our present farm/business situation is quite adequate (4)

I/We have to look for ways out of farming/business (5)

21. Over the last 12 months has your farm or business:

Cut back on inputs and production (1)
Kept to the same level (2)
Increased inputs and production (3)



22. Are you:

looking for new business activities (1)
Already found and working on new business activities (2)
Not looking for new business activities (3)
Unable to consider any new business activities (4)

23. Over the last 5 years, the number of employees in your business has:

Increased by 1 - 5 people (1)
Increased by 6 - 10 people (2)
Increased by over 11 people (3)
Stayed the same (4)
Decreased by over 11 people (5)
Decreased by 6 - 10 people (6)
Decreased by 1 - 5 people (7)
Not applicable - no employees (8)

24. For you to take on additional employees would require a:

10 percent increase in income (1)
20 percent increase in income (2)
50 percent increase in income (3)
More than 50 percent increase in income (4)
Would not anticipate increasing labour regardless of income (5)

EVERYONE ANSWER THESE QUESTIONS.

25. Your age is ..... years

26. Your sex is:

Male (1) Female (2)

27. Your ethnic or racial origin is:

European (1)
Maori (2)
Pacific Island Polynesian (3)
More than 1 ethnic origin (4)
Other (5)

28. Your educational level is:

3 years secondary school or less (1)
School Certificate - some subjects (2)
- all subjects (3)
Fifth form Certificate (4)
UE or Bursary (5)
Trade Certificate (6)
Nursing Certificate/Diploma (7)
Technicians Certificate/Diploma (8)
N.Z. Certificate/Diploma (9)
Undergraduate Certificate/Diploma (10)
Bachelors Degree (11)
Post-graduate Certificate/Diploma (12)
Other, please specify _____ (13)

29. Your family situation is:

Living with parents or guardian (1)
Living in a flat, or boarding, with other people (2)
Living by yourself and have no children (3)
Living with a spouse or partner and have no children (4)
With spouse or partner and children at home (5)
By yourself and children at home (6)
With spouse or partner and children left home (7)
By yourself and children left home (8)
Multi-generation household (9)
Other (10)

30. The total number of people in your household is ☐

31. The number of people over 15 years in your household is ☐

32. Your house is:

Rented (1)
Owned (2)
You live with the owner/renter (3)
Other, please specify _____ (4) ☐

33. You have lived in this house for .....years ☐

34. You have lived in Southland for .....years ☐

35. Would you like to stay in your area or move away:

Definitely like to stay (1)
Quite like to stay (2)
No strong preference or unsure (3)
Quite like to move away (4)
Definitely like to move away (5) ☐

36. Are you interested in learning more about your work or in gaining additional skills or qualifications:

Yes (1) No (2) Unsure (3) ☐

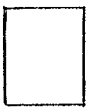
IF YES,

a. Your main area of interest is:

Personal and/or intellectual growth (1)
Business skills (2)
Horticulture (3)
Agriculture (4)
Trade or technical skills (5)
(Please specify _____)
People-related skills/nursing (6)
Engineering (7)
Handicraft (8)
Basic high school skills (9)
Recreation (personal) (10)
Job seeking skills (11)
Other, please specify _____ (12)

and b. The main hindrance to your undertaking further education is:

Lack of time (1)
Lack of money (2)
Isolation and distance from place of learning (3)
Family commitments (4)
Lack of motivation (5)
General uncertainty about my abilities (6)
Other hindrance, please specify _____ (7)



and c. For any instruction you would prefer:

One-to-one teaching or on-the-job training (1)
Class room teaching (2)
Group learning, other than classroom situation (3)
A correspondence course (4)
Other, please specify _____ (5)

and d. For any instruction you would travel

To Invercargill (1)
To nearest main centre (2)
Prefer not to travel (3) ☐

37. Your current level of job satisfaction is:

High (1) Medium (2) Low (3) Unsure (4) ☐

38. Would you like to change your current work and train for another job?

Yes (1) No (2) Unsure (3) ☐

39. For each of the following services and supports please state how well you know of them:

Never heard of it (1)
Some knowledge (2)
Fairly accurate knowledge (3)

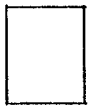
a. Department of Labour visiting schedule for your area ☐

b. Access training courses already running ☐

c. Southland Promotions Incorporated ☐

d. Export Institute and Market Development Board Grants ☐

e. Regional Development Investigation Grants

f. Southland Access - Training for Employment 

LAST QUESTION FOR THOSE WHO HAVE RECEIVED ANY SOCIAL WELFARE BENEFITS OVER THE LAST 12 MONTHS

40. You have received:

ONE BENEFIT ONLY

Family benefit (1)
National superannuation (2)
Domestic purposes benefit (3)
Unemployment benefit (4)
Sickness or invalids's benefit (5)
Widow's benefit
Other (e.g., family care, War pension, Miners Benefit, Orphans Benefit, Death Benefit, etc.) (7)

MORE THAN ONE BENEFIT

Family care and any other benefit(s) (8)
Unemployment benefit and any other benefit(s) (9)

FINAL INSTRUCTIONS:

Please ask the interviewer for help with any questions, especially questions 5 and 7 which describe your occupation and your industry. When all the questions are answered please put this questionnaire, and one for each household member over 15 years old, into the large brown envelope and seal it down. Please ensure that your interviewer can collect your envelope.

Don't forget to look at the next page in case there is information there that is helpful to you. Tear off the last page if you want to keep it.

Thank you for completing the questionnaire.

John Fairweather and Reg Dalzell

APPENDIX

LIST OF SOME SERVICES AND SUPPORTS AVAILABLE TO RURAL SOUTHLANDERS

1. Southland Promotions Incorporated
(82 Dee St.,Invercargill 'Phone (021) 86-091)

This is a promotional society established to project, promote and market Southland. It provides a public relations and visitor information service, and promotes tourism development and conferences in Southland. In addition, the society identifies opportunities for new business activity and collates information about the region. Generally, the society seeks to stimulate interest in the development and expansion of industry, trade, commerce and employment opportunities.

2. Regional Development Investigation Scheme
(Contact: Mr Ian Alsweiller, Southland Regional Development Council, Oreti House, 120 Esk St., P O Box 311, Invercargill 'Phone (021) 89-860)

The scheme helps stimulate innovative, economically viable, new businesses by assisting with costs of investigating the technical feasibility or commercial viability of a proposed development. Grants cover 50 percent of the costs of investigation and are up to a maximum of $100,000 per project.

3. Export Institute of New Zealand - Southland Branch
(Contact: Mr L Sangster, P O Box 311 Invercargill 'Phone (021) 84-538)

The Southland Branch of the Export Institute plays a vital role in coordinating local activities, promoting export-related educational opportunities, assisting new and existing exporters and facilitating involvement in a wide range of trade missions. Local businesses involved in, or considering, exporting should contact the Institute for information on Market Development Board Grants, forthcoming trade missions, export diploma details, travel discounts and trade information.

4. Southland Area - Training for Employment
(Contact: Mrs Pat Dennis, P O Box 157 Invercargill, 'Phone (021) 44-014)

5. Labour Department Visiting Schedule to Rural Locations
(Contact the Labour Department, 21 Gala Street, Invercargill,'Phone (021) 44-919 or Main South Road, Gore, 'Phone (020) 85-553.))

People employed, who are available and seeking work, may wish to meet Labour Department staff at Ohai, Tuatapere, Riverton, Massburn, Bluff, Winton and Tokanui. A full-time centre operates in Gore and covers Eastern Southland towns including Mataura, Edendale and Wyndham.

LIST OF MAJOR OCCUPATIONS OR TYPE OF WORK

1. Professional, Technical:
   Scientist, architect, engineer, surveyor, aircraft and ships officers, medical, dental, veterinary, accountant, legal, teachers, minister, writer, photographer, composer, artist, librarian, social workers.

2. Administrative, Managerial:
   MP's, senior government and local body, managers.

3. Clerical and related Workers:
   Supervisors, government and local body officials, stenographers, typists, computer operators, bookkeepers, cashiers, postmasters, post and transport supervisors, conductors, mail clerks, telephone operators, clerical, receptionists.

4. Sales Workers:
   Managers, working proprietors, sales supervisors and buyers, travellers, agents, insurance-real estate-securities-business services sales, salesperson-shop assistant.

5. Service Workers:
   Catering and lodging managers or working proprietors, housekeeping, cooks-waiters/waitresses-bookkeeper, caretakers, cleaners, charworkers, launderers, dry-cleaners, pressers, hairdressers, barbers, beauticians, fire, police, protective, service workers (prison officers-nightwatchman), guides.

6. Agricultural, Animal Husbandary and Forest Workers, Fishermen and Hunters:
   Farm managers and supervisors, agricultural-animal husbandry-horticulture workers, forestry, forestry managers, fisherman, hunters.

7. Production and Related Workers, Transport Equipment Operators and labourers:
   Production supervisors, general foremen/forewomen, miners, quarry person, drillers, metal processors, wood preparation workers and paper makers, chemical processors, spinners, weavers, knitters, tanners-fellmongers, pelt dressers, food and beverage processors, (butchers, slaughter workers, bakers), tailors dressmakers, sewers, upholsterers, shoemakers, cabinet makers, woodworkers, bladesmith, toolmakers, machine tool operators, machinery fitters-assembles-makers,electrical-electronic fitters, broadcasters, projectionists, plumbers, welders, metal workers, jewelry and precious metal workers, glass blowers, potters, rubber-plastic-paper makers, printers, painters, bricklayers, carpenters, construction workers, equipment generators, material handling, dockers, freight handlers, transport equipment operators, labourers.

Note: Managers occur in many of the 7 main classes and they are placed by reference to their type of work (e.g., sales managers under sales, forestry managers under agriculture).

LIST OF MAJOR INDUSTRIES OR TYPE OF ACTIVITY

1. Agriculture, Hunting, Forestry, Fishing:
   Farming, horticulture, agricultural services and contracting, hunting, trapping, forestry, logging, fishing, fish farming.

2. Mining and Quarrying:
   Coal, petrol, metal ore.

3. Manufacturing:
   Slaughtering-preparing-preserving meat, dairy product, canning, grain mills, bakery products, beverage industries, textile-leather-clothing,footwear, wood and wood products, furniture and fixtures, paper-paper products-boards-boxes-printing-publishing, chemicals-petrol-coal, rubber-plastic products, non-metallic mineral products, fabricated metal products, machinery-mechanical-electrical, transport equipment, measuring equipment.

4. Electricity, Gas and Water:
   Electricity, gas, steam, water works and supply.

5. Building and Construction:
   Residential and non-residential buildings, all building trades.

6. Wholesale and Retail Trade and Restaurants and Hotels:
   Unprocessed primary products, food-beverages, tobacco-products, textiles-clothing-footwear, building materials-supplies-hardware, household appliances-furniture-floor coverings; books and stationery, pharmaceuticals-chemicals, metals-machinery-equipment, restaurants-cafes, motels-hotels-guest houses-hostels-camps.

7. Transport, Storage and Communication:
   Land-water-air transport, allied services storage-warehousing, communication-post office.

8. Finance, Insurance; Real Estate and Business Services:
   Banking, investment, allied services, insurance, superannuation and mutual funds, real estate and business services-legal-accounting-advertising,machinery and equipment rental.

9. Community, Social and Personal Services:
   Public administration and defence, sanitary services, education, research, health, welfare institutions, religious organisations, recreational and cultural services-pictures-radio-t.v.-theatre, libraries-museums-gardens, amusements, repairs, laundries, barber and beauty shops.

APPENDIX 2

INSTRUCTIONS FOR INTERVIEWERS

Please list all the households in your meshblock on the interviewer record sheet and continue on separate paper, if necessary. Write down the address or rural road name and note the outcome of your visit by putting a tick in the appropriate column. The telephone number is only required if you have to arrange a follow-up visit. Please state the circumstances for any incompleted questionnaires (e.g., people away on holiday, refusal, house not occupied, etc.)

When you have finished interviewing in your meshblock, please tie (four way) all sealed envelopes into a secure bundle and include this record sheet on the top.

Please note the following definitions:

Definitions of Occupied Dwelling:

A dwelling is any accommodation unit which is self-contained at least in respect of sleeping, cooking, and dining facilities, and which is used as living quarters for a household. We are studying occupied, permanent, private dwellings but please record both the number of occupied dwellings and the number of unoccupied dwellings on your interviewer record sheet.

Where a building is occupied by two or more households, in separate flats, or has a self-contained flat or a detached house, each such flat or house is a separate dwelling.

For shared accommodation, each household is taken to occupy a discrete dwelling. One dwelling may be shared by others, so that each household refers to the same dwelling. In this case interviewers record all households.

Definition of Household:

A household is a group of persons, whether related or not, who live together and normally consume at least one meal together daily. People away temporarily are assigned back to the household and people temporarily present are excluded.

Definition of Current Week:

The current week is the week of the survey. In most cases interviewers will have a response from the households in the first week. Questionnaires completed after that should still refer to the survey week.

APPENDIX 3

INTERVIEWER RECORD SHEET

Name: _____

Address and 'Phone Number: _____

_____

_____

_____

Meshblock Number: _____

Name of Area: _____

Date Started Interviewing: _____

Date Complete Interviewing: _____

Address or Location	'Phone	Q'aire Completed 1st Visit	Q'aire Completed 2nd Visit	Not Completed

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