THE EVOLUTION OF THE SETTLEMENT PATTERN OF NORTH-EASTERN Taranaki:

1891 - 1945

Being a Thesis presented to the University of Canterbury in partial fulfilment of the requirements for the Degree of Master of Arts in Geography.

by

Murray T. Brown

1969
Frontispiece

North-Eastern Taranaki Hill Country.
The deeply dissected and eroded hill country of the study area, with the Taranaki ring plain in the background.

(Photo by V.C. Browne)
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ABBREVIATIONS.

A.J.H.R. Appendices to the Journals of the House of Representatives.

P.D. Parliamentary Debates.

S.E.P. The Stratford Evening Post.

P.P. Parliamentary Paper.
Acknowledgements

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THE EVOLUTION OF THE SETTLEMENT PATTERN OF

NORTH EASTERN TARI\'NAKI: 1891 to 1945

CHAPTER I - INTRODUCTION:

Jobberns has said that, "The making over of the accessible parts of the North Island inland forest was the outstanding achievement of our people in the making of the present grassland landscape. The achievement of all these ordinary struggling people makes the really significant history of the North Island". In this thesis it is intended to study the evolution of the settlement pattern in one small portion of this area of 'inland forest' in order to help explain the landscape's final appearance. The settlement pattern forms the basis of any cultural landscape, and, as man is the principal agent in the formation of this landscape, the where, when and intensity of his occupation is a basic factor in its evolution. As Williams has noted "unless the fringes of the stages in the spread of settlement are defined in time and space, then there is little hope of the geographer being able to determine either the significant or the sometimes subtle changes in the changing landscape of the world".

The study area is located in the North-Eastern section of the Taranaki Uplands. The Taranaki Uplands
have been defined by Johnston as "the broken hill country that lies mainly within the Taranaki Province west of a line through Te Kuiti, Taumarunui and Wanganui and east of a line from Urenui to Patea". North Eastern Taranaki, for the purposes of this study, is defined as that area of the Taranaki Uplands within the administrative boundaries of Clifton County and what is now the Whangamomona Riding of Stratford County (Fig. 1.1)

The development of the settlement pattern in this area passed through several distinct periods that must be briefly summarised as they are essential to the basic approach used in this study.

As McCaskill noted "the 1890's were the 'boom' years of Taranaki when the population grew at a rate faster than in any other province. The lowlands were completely occupied and the farming frontiers advanced fingerlike into the valleys of the tangled mass of hill country to the east of Stratford". From 1891 to 1911, under the impetus of the land legislation policy of the Liberal Party, booming economic conditions and a keen demand for land, the basic features of the settlement pattern were established.

The second stage in development encompasses the years from 1911 to 1926, a period of consolidation and limited expansion. The 1914-18 war, the post-war boom from 1918 to 1920 and the depression of 1921, all played
COUNTY BOUNDARIES

MIIROMI RIVET

TONGAPORUTU RIVER

CLIFTON COUNTY

URUENUI RIVER

WHANGAMOMONA COUNTY

NAKAKU STREAM

TANGARAKAU RIVER

WHANGAMOMONA STREAM

MILES

FIGURE 1.1 : LOCATION OF STUDY AREA AND RIVERS
a part in the evolution of settlement. The latter stages of this period were characterised by a growing concern over the problem of the deterioration of pastures associated with the appearance of secondary growth. The period culminates in the Deteriorated Lands Act of 1925, which attempted to give settlers the means by which to deal with the problem of pasture deterioration.

The stage in development, from 1926 to 1945, was characterised by the widespread abandonment of many farms and the gradual reversion of large areas of grassland to secondary growth. This was due chiefly to the severe drop in prices for primary produce associated with the depression of 1929-33. The decline in population was rapid and this period was characterised by contraction and decay in the settlement pattern.

The settlement pattern as it exists today, is basically the same as in 1945 and 1945 is a convenient finishing point. However, a fourth period can be recognised from the early 1950's with the application of modern techniques and legislation, such as aerial topdressing, the use of bulldozers and assistance from the Marginal Lands' Board. This period, however, is still in its incipient stages, and has had very little influence on the basic settlement pattern.
METHODOLOGY:

The problem of describing an area at any point in time, such as the settlement pattern, is the problem of the static expression of what is essentially a dynamic situation. The basic framework to be utilised in this study, to alleviate this problem, is a series of cross sections illustrating the different stages of evolution, with a connecting narrative on intervening changes and the social and economic determinants of change. This was the method used by J.O.M. Brodk in his study of the Santa Clara valley in California and as Darby notes: "this device of formally separating the explanatory "social-economic determinants" from the description of the landscape at each period, serves not only to furnish a genetic explanation of each landscape but also to provide connecting links between the successive views". To obtain a reasonably comprehensive analysis, at least four cross-sections are needed; 1891, 1911, 1926 and 1945. The first cross-section sets the opening scene and each successive cross-section is set at the end of a distinctive period of development, with connecting narratives providing links between these successive views.
SOURCES:

The census data, which forms the basis of the maps of population distribution, is extremely detailed and valuable. Duncan said of the New Zealand census that "in the census tables showing the population of townships and localities within counties for every census from 1878 onwards, the historical geographer has a body of source material that is unrivalled in the records of New Zealand for detail and accuracy". Population density is one of the most revealing of all sources for delineating the spread of settlement, but it is also the most restricted in use, being limited to the years on which the census was taken. This hinders the selection and delineating of the critical periods in the development of settlement, which because of the short span of time involved needs to be defined carefully. This problem is compounded by the absence of the regular five-yearly census in 1931 and 1941 due to abnormal conditions within the country. A second problem arises in the areal definition of census categories, the boundaries of which are impossible to define precisely. Despite these problems and limitations, the data has proved extremely valuable in delineating the spread of settlement.

The second major source of statistical material has been from annual agricultural and pastoral statistics.
The area of land in occupation and cultivation, the number of holdings and the average size of holdings, give a sensitive indication of the progress and trends within the farming industry. The graphs plotted from this data compensate for the hiatus in census material and provide a continuous statistical link between the successive views of the landscape. The most severe limitation in the data is the absence of detailed statistics prior to 1916 and the lack of figures on early development in Whangamomona county, which was not formed until 1907.

The third major source of primary material has been the records of the Lands and Survey Department. The annual reports of the Lands and Survey Department in the Appendices to the Journals of the House of Representatives contain quite detailed information on the area of land available for settlement, land that was taken up for settlement during the year, and type of tenure. Although these figures apply to the Taranaki Land District as a whole, they are of relevance, as most of this new settlement was taking place in the inland areas. The reports on the progress of roads under the control of the Department also contain detailed information on the progress of settlement, the development of new roads to Crown Lands, the maintenance and development of the older roads and some of the problems that had to be overcome
in the development of good communications in the area. These all have relevance to a greater or lesser extent to the evolution of the settlement pattern. Reports on the progress of special government schemes give detailed statistics on the annual progress of these settlements which were common in Inland Taranaki. Associated with these annual reports are large scale maps showing land taken up during the year; land that was available for settlement, and a map showing the construction of roads serving to open Crown Lands.

The Lands and Survey Department in New Plymouth has a collection of the original Crown Grant maps showing the date of freehold purchase or the taking up of a lease, the type of tenure and the name of the owner. A map was constructed from these records in an attempt to show the growth of settlement. Problems in ascertaining the actual date of occupation, or whether or not land was occupied at all and the spread of settlement, meant that this map has had very little practical application.

Research in this region is handicapped, as D. M. Frank noted, "by the absence of any local newspaper". For much of the period the region looked towards Stratford and Waitara for their local newspaper. The collection of Waitara newspapers is limited and so the majority of research was concentrated on the Stratford newspapers.
This source proved unsatisfactory as most of the references to the region in "The Stratford Evening Post" were mainly concerned with social functions. The two provincial papers, the "Taranaki Daily News" and the "Taranaki Herald", because of their large circulation areas have little relevant detail. The personal point of view of settlers is, therefore, principally obtained from parliamentary debates and where farmer's remarks can be substantiated, such as before Government commissions.

The secondary sources of the region are limited, there being very little written on the settlement of the Uplands. The two most valuable secondary sources have been two unpublished M.A. theses. These are D.H. Frank's "The History of Land Development in the Taranaki Uplands" and W.B. Johnston's "The Development of Communication Lines Across the Taranaki Uplands". Local histories and jubilee handbooks are also limited. James Garcia's "The History of Whangamomona County" is quite detailed with regard to the growth and details of settlement, but rather parochial in analysis. Local Taranaki histories concentrate mainly on the early days of Taranaki settlement with little reference to the development of settlement in the inland areas. The remaining important source used was several articles on the problems of farming in Inland Taranaki found in the New Zealand Journal of Agriculture.
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(8) Duncan, J.S. Land for the People
Land and Livelihood, editor H. McCaskill,

(9) These categories were (a) Township - where the status
of a village had been attained - or there existed a
fairly definite nucleus of a village.

(b) Vicinity, allotted to such
districts in the neighbourhood to townships, etc.,
as were outside the borough boundary and were not
far enough away to have a separate name of their own.

(c) Locality, country districts
that had an individual name. (p.28 1936 Census of
New Zealand). Up to 1911 the categories used were
based on townships and roads. After 1911 the above
categories were used.

(10) For the location of these statistics see:
Statistical Publications 1840-1960
Department of Statistics,
Wellington 1961, p.47.

(11) Frank, D.M. The History of Land Development in

(12) The Taranaki Central Press based on Stratford published
newspapers under various titles from 1894 to 1937.
Back numbers of the "Stratford Evening Post" are
available from 1911 to 1937 in the General Assembly
Library. Collections of newspapers centred on Waitara are limited to the mid-1930's only. For a full summary of the newspaper material available see:


(13) Frank, D.M. op. cit.

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CHAPTER II - THE PHYSICAL ENVIRONMENT AND THE SETTLEMENT PATTERN BEFORE 1892

This chapter attempts to examine North-Eastern Taranaki, both in physical and human terms, before the main eastward expansion of settlement in the mid 1890's.

The physical environment needs briefly to be sketched as it had an important and modifying influence on the evolution of the settlement pattern. W.B. Johnston, commenting on the relationship between the distribution of population and communication lines in inland Taranaki, said that such study exemplifies "the restrictive and permissive relations of human activities to physical conditions." 

Because the settlement pattern of the region did not develop in isolation, a brief description of the development of Maori and European settlement in Taranaki is another necessary preliminary. The lowland areas of Taranaki, especially around the towns of Waitara, Inglewood and Stratford, were the bases from which most of the eastern penetration began.

Finally, a brief description and a map of the distribution of population in 1891 are a necessary preliminary. The 1891 census was the last census prior to the main eastward expansion of settlement. It provides, therefore, a description of the settlement framework from which expansion into the uplands took place.
The mass of the land in North-Eastern Taranaki is marine in origin; at the end of the tertiary period it was elevated to form an expanse of land made up of horizontally bedded, gently undulating mudstones and sandstones. Under the continuous action of weathering, an intricate drainage pattern developed on these soft sedimentary rocks, resulting in a landscape of deeply dissected hills. Isolated remnants of the original undulating surface escaped the influence of heavy weathering forming tablelands and terraces at high elevations. These are relatively small in area and apart from narrow valley flats, are the only areas of easy contour in the hill country. Part of the Taranaki lowland area, the northern extremity, is included in the region, forming the narrow tapering plain of the coastal lands in the south-west of Clifton County.

Land Forms - Clifton County:

This county contains the western limits of the Taranaki Uplands and consists of two contrasted types of landforms. Firstly; the continuation of the northern Taranaki lowland in a tapering plain from Waitara to Pukearuhe. Secondly; an area of steep hills lies beyond this coastal plain rising abruptly from the coast north of Pukearuhe to a height of 400 feet. East of the county boundary, the hills gradually increase in elevation to
approximately 1200 to 1700 feet. To the south of Tongaporutu the expanse of steep hills is relieved to some extent by many areas of table-land and narrow valley flats. The main catchments are those of the Mohakatino, Tongaporutu, Urenui and Mimi rivers.

Land Forms – Whangamomona County:

This county is an area of steep-sided hills, with a sharp crested ridge line rising to 1000 to 2000 feet and narrow valley floors at the 300 to 600 foot level. Dissection is widespread and the few areas of tableland are small in area and widely scattered. With an intricate pattern of tributaries, the Haeo Stream, Tangarakau River and the Whangamomona Stream, drain the north and central catchment areas into the Wanganui River. These main streams are channelled, confined and often incised as deep as 50 feet. A massive range of hills in a belt extending from near Mt. Humphries and north-west through the Pohokura and Whangamomona township area separates the south-west area of Te Wera and Makahu from the main catchment area. This small area forms a minor part of the Patea catchment.

The important physical features of the whole region are; the expanse of steep hills of low altitude with a uniform elevation and the interspersed lands of easy contour, the coastal plain, narrow valley flats and areas of tableland.
Soils:

There are three main groups of soils in the region; skeletal, volcanic and alluvial. The composition of these soils depends primarily on the nature of the parent material together with material laid down by volcanic ash showers.

Skeletal Soils:

These are the soils of the steep hills and are strongly influenced by the parent material. These soils are subject to considerable variation because the parent material was seldom uniform, but two principal soil types emerged; the yellow-brown earths derived from the weathering of mudstone and the yellow-brown earths derived from sandstone. Mudstones formed good soils, the most fertile derived from sedimentary rocks. A characteristic feature of these soils is the blue-grey subsoil known as 'papa' which is unstable and erodes easily. The sandstones weather to form thin soils very low in fertility. Erosion frequently occurs in shallow slips and heals slowly. The skeletal soils of North Eastern Taranaki form a series of complex types varying between the two principal classes, with deposits of volcanic ash present in the soils of lower hillslopes on the southern extremities of the region.

Volcanic Soils:

The whole region was originally covered by the first
ash showers from Mt. Egmont. Later showers, however, only affected the southern portions of the region. Only the areas of easy country, the coastal plain, the fringing broad hills and the inland tablelands and terraces have retained layers of ash which have developed into fertile and easily worked soils.

Alluvial Soils:

These are recent soils found on the flats of the narrow valleys formed by the sediments of mudstones and sandstones mixed with volcanic ash. These soils are generally quite fertile as long as there is adequate drainage.

VEGETATION:

In the pre-European era, native forest consisting of podocarp/mixed hardwood types covered the entire area of the Taranaki Uplands. Scrubby growth and small scattered clearings cultivated by local Maoris were confined to the coastal lowlands. By the early 1890's, most of the coastal lowland in the south-west and the lower hill country on the fringes of the lowland areas had been cleared of this original forest. The great bulk of the north eastern inland area remained clothed in its original native forest. Tawa (Beilschmiedia tawa) was essentially the dominant primary forest tree. However, starting from the smallest river flats to the highest ridges there was a sequence of forest growth.
On the small graded flats between slopes kahikatea (Podocarpus Dacryiodes), rimu (Dacrydium Cupressinum) and Pukatea (Laurelia novae-zelandiae) predominated. As the ground began to rise, tawa comes in and on the lower levels and gullies is associated with rimu miro (Podocarpus ferrugineus), matai (podocarpus spicatus) and maire (olea Cunninghamii). The rimu, miro, matai and maire decrease in importance on the higher ground where there are almost pure stands of tawa. Within the lower mixed forest tree ferns were abundant, especially the weki (Dichsonia squarossa) and hemitelia (hemitelia Smithii) and in drier parts the mamaki (Lyathea medularis). The main forest floor was covered by terrestrial ferns. In the tawa forest the general forest floor was more or less free of ferns and other types of growth. Higher up on the slopes on to the poorer and higher ridges tawa became intermingled with the hinau (Eleocarpus dentatus), kamahi (weinmannia racemosa), rewarewa (knightia excelsa), rata (metrosideros robusta) and totara (Podocarpus totara). On the highest, poorest and driest knolls and ridges the tawa almost disappears and is replaced by the black beech (nothofagus Solandri).

**CLIMATE:**

Broadly speaking the climate is cloudy and warm in summer and rather bleak in winter with adequate rainfall at all times of the year. Summer temperatures are relatively warm, the mean daily maximum temperature in
January is 65 to 70 degrees on the coast and inland 70 to 75 degrees. Frosts occur from late April to early October. The mean daily temperature in July on the coast is 40 to 45 degrees and 35 to 40 degrees inland. The copious annual rainfall is reasonably well distributed with a minimum from December to March. Rain falls on approximately 180 days of the year with June and October having the highest figures. On most of the upland area the annual rainfall ranges from 60 to 80 inches. Along the belt of high country embracing the main N.E. - S.W. watershed which is exposed to the full sweep of the prevailing westerlies, rain is heavier; 80 to 100 inches per year. On the coastal plain the annual rainfall is between 50 to 60 inches. "Rain storms are of the warm front type, but they are rarely light drizzles - it rains hard for three or four days and falls of as much as two inches an hour may occur."

The prevailing winds are westerlies and the exposed coastal areas are very windy; but in the inland areas there is much less wind. Cold south-east and southerly winds are experienced at times, especially in winter and autumn, but the hills to the south and south-east afford some shelter. North-Eastern Taranaki, especially away from the coast is one of the cloudiest areas in the North Island. On the average, the region has two to three hours bright sunshine daily in winter, and in the spring, four to five hours. The annual hours of
sunshine range from 800 to 2000 hours. On the average Nelson and Blenheim have 2400 hours of bright sunshine with Westland averaging 1900 hours.

One additional characteristic of the physical environment, which is the result of an amalgam of the different factors in the environment is the propensity of the land to soil erosion. Although this is mainly a man-induced feature, consequent upon the removal of the original forest cover, the combination of heavy orographic rainfall and weakly consolidated sediments has considerably enlarged the problem. As Cumberland notes: "this compact region has probably suffered more severely than any other in New Zealand in the short period of ill-advised pastoral penetration. Its tortured slopes already form one of New Zealand's most disorderly landscapes."

It should be noted at this stage that the northern extension of the Taranaki lowland, comprising the Waitara, Tikorangi and Urenui regions, although within the boundaries of North-Eastern Taranaki, will be ignored to some extent. This thesis is concerned primarily with the expansion of settlement into the inland areas. The settlement pattern evolved in this lowland area on similar lines to the rest of lowland Taranaki. However, this area will not be ignored entirely as it was one of the bases from which eastward and inward expansion developed.
Maori Settlement:

Maori settlement before the arrival of the Europeans was confined mainly to the coastal areas of Taranaki. Apart from the upper reaches of the Wanganui river and a few other places, the inland areas were not occupied permanently, most of the settlements being seasonal in nature. Excursions were frequently made to obtain birds, eels and other products of the forest, and tracks crossed the inland areas serving to connect these scattered seasonal inland settlements with the coast. The Maori influence on the landscape was therefore confined mainly to the coast and their influence on the inland areas of Taranaki was negligible. "The changes introduced by a people in the neolithic stage were insignificant consisting principally in clearing the edges of the primeval forest by aid of the stone axe and fire, the cultivation of a little land here and there, and the building of fortified pas and villages."

European Settlement 1840-1890:

The first European settlers arrived at New Plymouth in 1841, but development was slow and very few immigrants came to Taranaki in the 1840's and 50's, mainly because of its isolation, limited opportunities other than for farming, and because of problems over land ownership with the Maoris. These difficulties came to a head with
the outbreak of war which drastically curtailed the growth of settlement in Taranaki. In 1861 Hursthouse noted "There are not any outlying little settlements in this province. The inhabitants are, or rather were, concentrated in the village capital and in a belt of farms, hamlets and clearings, lying around within a circle of eight to ten miles...The whole of the settlers have been compelled to abandon their cultivations and take up arms to defend the town..."

The 1870's and 1880's saw the renewal of slow but steady expansion of settlement on the lowlands under generally unfavourable economic conditions. Towards the end of the 1870's there was a serious fall in the price of wool in New Zealand and throughout the 1880's and into the early 1890's the country suffered the full effects of an economic depression. Expansion of settlement was at a low ebb. Coleman, speaking of New Zealand as a whole, felt that the slow expansion of settlement was due to "the lack of capital to purchase and develop farms with an absence of markets capable of absorbing the products of intensive agriculture at prices high enough to justify the investment." The railway from New Plymouth to Stratford was completed in 1879 and from then on the frontier of settlement was gradually extended to the west and east, reaching the edges of the uplands in the late 1880's and early 1890's. Clifton County was formed in 1885.
Although the main stream of development was to be found on the lowland areas of Taranaki, there was an increasing interest in the possibilities of settlement in the inland areas of the province. This interest was especially maintained by the debate surrounding the choice of the main trunk line from Auckland to Wellington. The route from Stratford to Ongarue emerged as the chief rival to the present central route and several reports dealing with the relative merits of each route were tabled in Parliament. There was a conflict between the Taranaki and Auckland interests, who were pushing for the Stratford route, and Wellington people who wanted the central route. Many statements on the country either side of the Stratford route need careful examination as to the originators affiliations. For example, Lawry (M.P. for Parnell) had this to say about the country on the Stratford route. "I am satisfied that there is no country in New Zealand, not even on the base of Mt. Egmont, more suitable as a whole for small settlers, especially those engaged in dairy work in the North Island." This is in direct contrast to the statement made by a young surveyor, Cussen, to the Assistant Surveyor-General in 1884: "I have not seen any considerable area of land suitable for general agricultural purposes, though much of the country might be profitably occupied by settlers holding one thousand acres and upwards, and here and there a small
farmer would find enough of good land to settle upon).

The influence of such descriptions as Lawry's is hard to gauge, but this and many other laudatory descriptions of Inland Taranaki must have influenced the public and Government's interest in, and the approach to the settlement of the region. Surveyors associated with the search for railway routes and with the continued eastward expansion of settlement from central Taranaki, contributed to an increasing knowledge and awareness of the uplands of North-Eastern Taranaki.

This then was the situation in the early 1890's and as can be seen in the population distribution map of 1891 (Fig 2.1) settlement was almost entirely confined to the lowland areas. The only area of dense rural population was in the south-west on the lowland area around the Waitara and Tikorangi districts. The upland areas of the region were as yet unpopulated, apart from several small enclaves of population at Mimi, Pukearuhe, and around the mouth of the Mokau River. Clifton County had a total population of 908, most of it concentrated on the lowland area in the Tikorangi Riding (530). Mokau Riding, which contained mainly hill country, had a population of 268, 132 of which were in the village of Urenui. The East Riding of Stratford County, which contained the future Whangamomona County, had a population of 135, most of it concentrated around the township of Stratford itself.
FIGURE 2.1: THE SETTLEMENT PATTERN IN 1891
The Inland towns of Inglewood and Stratford were the focal points of a steadily increasing rural population. Eastward expansion was limited to the lower hill country on the fringes of the lowland area. There are signs, however, of some embryonic movement towards the east and into the hill country with the development of the East Road from Stratford, the Junction Road east from Inglewood, and the Pukearuhe-Nimi Road up the coast. Associated with these lines of penetration was a rather sparse rural population.

This was the settlement pattern in 1891; from 1891 onwards the settlement of the uplands of North-Eastern Taranaki, under the stimulus of changing economic and political conditions, was under way, and the landscape that James Cowan saw in 1892, and which he described so eloquently, was soon to be changed completely.

"...a huge, shaggy, and lonely land. No grass field, no fence, no house or tent, no smoke of settlers burning of fire, gave civilised touch to the silent expanse. Valley and hill and glinting stream and dark solemn forest lay bathed in soft blue haze, mysterious, unpeopled; as untouched by man, it seemed to us gazing over it there, as it might have been a thousand years ago."
REFERENCES


(2) The majority of this section and the section on soils is from:

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See also the topographic maps in the end pocket.

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Cumberland, K.B. A Geographic Approach to Soil Erosion in New Zealand
Australian Geographer, June 1943.

(7) For example see:

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CHAPTER III - THE SETTLEMENT PATTERN IS ESTABLISHED 1892-1911.

This chapter deals with the initial period of settlement in the inland areas of North-Eastern Taranaki from 1892 to 1911. By 1911 the basic framework of the settlement pattern had been established and 1911 is also a convenient census date before World War I, which ushered in a new chapter in the evolution of settlement. The first section of this chapter deals with the economic conditions and land legislation of the period that stimulated the expansion of settlement into the region. Sections two and three deal with the growth and problems of settlement respectively. The fourth section deals with the settlement pattern of 1911 and finally there is a brief analysis of several of the major themes that contributed most to the evolution of the settlement pattern as it existed in 1911.

ECONOMIC CONDITIONS AND LAND LEGISLATION:

The stimulus to the settlement of North-Eastern Taranaki was due to three main factors. The first of these was the improving economic situation in New Zealand associated with the upward turn in prices for primary produce from the early 1890's, with a steady increase thereafter. Apart from one major setback in prices in 1907, the buoyant economic conditions lasted until 1921. These more favourable prices enabled the
benefits of technological innovations such as refrigeration, the cream separator and the Babcock test to be exploited more fully. Farming became more diversified, stable and intensive with the broadening of the range of products able to be exported and the increasing scope and demand of overseas markets. The dairy industry received a special impetus with the possibilities of greatly increased markets, especially for butter and cheese.

As Williams noted with regard to Australia and New Zealand as a whole in the nineteenth and early twentieth centuries: "The technological advances of the railway, steamship, agricultural machinery .... together with the presence of a vast urban population in the northern hemisphere that required the produce of these lands, combined for the first time to bring about phases of settlement that were rapid in their spread and revolutionary in their effect on the landscape.

The second factor in stimulating the development of settlement into the region was the shortage of good agricultural land suitable for settlement. In Taranaki the lowland areas had been almost entirely occupied and with increasing pressure and demand for land, settlement expanded eastward and inland onto the areas of hill country on the fringes of the lowland area. In New Zealand as a whole, the same situation applied. Upwards of 16 million acres of the best land had been alienated
in fee simple from the Crown and the estimated three million acres of Crown land remaining was mainly grazing country, interspersed with small pockets of agricultural land. The third major factor was the legislative policy of the Liberal Party which had come to power in 1890. Against this background of land shortage, Ballance, in a statement on future Liberal land policy, said in 1891 that "the time had arrived when suitable areas will have to be purchased by the Crown for small farm settlement .... if the population is to be retained the wants of intending settlers will have to be met."

The "Lands for Settlement Act" of 1892 was the most famous system of land settlement that evolved from this policy. This Act, however, had only a limited application in Taranaki and none at all in the settlement of North Eastern Taranaki. It was two lesser known systems of land settlement; the Special Settlement Association system, and the Improved Farm Settlement scheme, that provided the basis of settlement in North Eastern Taranaki. It should be noted here, that most of the land available for settlement in the region was either Crown or Maori land, there being very little freehold land.

The Special Settlement association lands were held in lease in perpetuity. The feature of these associations distinguishing them from land selected on ordinary lease in perpetuity, was that the ballot for selectors was confined to the members of the association. The maximum
area for each farm was limited to 320 acres; however the sections were considerably smaller than this, the average size being 200 acres.

The Improved Farm Settlement system was a more ambitious scheme "whereby those with small means are enabled to make homes for themselves, and to obtain assistance from the State in clearing their lands". The main features of the system were "the formation of a small association from whom the Commissioner of Crown Lands of any district may select those who are to form the settlement .... the blocks of land set apart, are divided into areas of 100 to 200 acres in accordance with the suitability of the country .... The clearing of not more than 100 acres will be paid for by the Government .... Grass seed will be provided if required and also if necessary £10 will be advanced towards the erection of a house. .... The lands are let .... based on the value of the land together with the cost of clearing, roads, grassing or any other expenses advanced by the Government". An important feature of both schemes, was that the Government found these settlers employment in felling and clearing the roads for six months, under a co-operative scheme of labour. During the rest of the year the settlers were to work improving their own holdings. It was expected that work would also be available for Improved Farm Settlement settlers on the larger adjoining holdings, which would be extremely beneficial after most of the
Government assistance had ceased. The importance of this factor was pointed out in 1896 by the Taranaki Commissioner of Crown Lands. "The success of these Improved Farm Settlements to a large extent depends on the speedy and almost contemporaneous settlement by men with capital of the adjoining Crown Lands in larger holdings, and on which the Improved Farm settlers may reasonably expect to secure a considerable amount of work." 9

The chief features of these schemes then, were the acquisition of small sections by men with limited capital with the twofold purpose of having their sections felled and cleared and bush cleared for the formation of roads.

This was the economic and legislative background which gave the initial stimulus to the settlement of the inland areas of North Eastern Taranaki.

THE GROWTH AND PROGRESS OF SETTLEMENT:

The basis for much of this and the following section comes from the Annual Reports of the Lands and Survey Department. As this department dealt only with Crown Land leases and the special settlement schemes, it is difficult to find out how freehold properties developed. These properties were relatively few in number and although freehold, probably faced similar problems to Crown tenants.

From 1891 to 1901 the population of North-Eastern Taranaki increased dramatically (Fig. 3.1), the rapid growth in population being accentuated by its concentration
Figure 3.1: Population of M.E. Taranaki 1891-1966
into this relatively short period. From 1901 to 1911 there was a flattening off in growth and decrease in population as the initial impetus of settlement waned.

The rapid growth in population was the result of several years of intense activity in the implantation of special settlements into a previously unoccupied area. Much of the settlement therefore preceded road access and settlers often had to get into their holdings by means of bridle tracks through dense bush. The special settlement schemes were established between 1894 and 1897 (Fig. 3.3) and much of the land surrounding these settlements was taken up during these and following years, on either normal tenures or as freehold land. The special settlement schemes were in the main, usually centred on the limited areas of valley flats. They were relatively compact and intensive areas of settlement (Fig. 3.3) that contrasted with the scattered extensive nature of the rest of settlement. They were small settlements, both arrearally and demographically. In 1900 the area occupied by settlers on the Improved Farm Settlement scheme was only 10,971 acres which by 1907 had decreased slightly to 10,763 acres. The population of these settlements also remained relatively constant; in 1897 there were 415 on this scheme; by 1907 this number had declined to 367. The Improved Farm settlers, due to the small size of their sections, often concentrated more on dairy cows than sheep, and creameries and co-operative
FIGURE 3.2: THE LOCATION OF SPECIAL SETTLEMENT SOLDIERS
FIGURE 3.3: THE TONGAPORUTU IMPROVED FARM SETTLEMENT
factories soon became distinctive features in these settlements. The Special Settlement Association schemes were usually larger than the Improved Farm schemes, established earlier and generally were closer to the fringes of the hill country.

Despite their small size these settlement schemes were important in the evolution of the settlement pattern as they provided a nucleus to which further settlement gravitated.

Settlement expanded in an easterly and inland direction from the Taranaki lowlands along what were to become the two main road routes through North-Eastern Taranaki; the coastal road from Waitara to Lokau and thence to Auckland and the Chura road from Stratford to Ohura. A third penetration route into the Uplands, was the Junction road from Inglewood to the Chura road; however, most of the settlement associated with this road lies outside the study area.

A second element in the communication network was the establishment of the Stratford Main Trunk Line, which was started in 1901 and by 1911, had reached the foot of the Whangamomona saddle. Because its route was closely allied with the Chura road, the railway did not generate any new areas of settlement.

Once on their sections the settlers quickly set about transforming the dense bush into pasture. The bush was felled and burnt, and English grasses were sown amidst the stump-littered fields, and the natural landscape of
North-Eastern Taranski was rapidly altered. The speed of initial development is well illustrated by two consecutive reports on the Khangamomona Improved Farm settlement. The Lands and Survey Department report for 1895-6 noted that "948 acres were felled in 1895 and is now being grassed. None of the selectors have as yet erected houses .... no stock has as yet been taken on to the land, and the settlers all being poor men will have difficulty in providing stock for their clearing". The report for the following year showed the substantial progress that had been made. ".... 1,254 acres were felled in 1896 and are now ready to be grassed. Sixty-four houses have been built .... and 91 settlers are resident .... 37 are married with a total of 174 children .... over 300 head of stock is now running". Despite these impressive developments, from the initial stages of settlement many settlers were struggling to become established. This was reflected in several ways. One of the special settlement schemes, the Oxford Special Settlement Association, was abandoned in 1897 after three years of operation. The difficulties of settlement were further reflected in the number of abandonments, forfeitures and amalgamations within the settlements. The Special Settlement Associations by 1903 had lost their identity as settlements ".... on account of the surrenders and forfeitures that have taken place and on account of the bulk of the land
Plate 1

Whangamomona  c 1899

(Photo – Alexander Turnbull Library)
having since been taken up under ordinary conditions. The lands are now so interspersed with those of ordinary tenures that they may be regarded as independent holdings".

By 1902, however, the period of rapid expansion of settlement was spent. The demand for land was still apparent, however, the supply of reasonable agricultural land was limited, most of the land remaining being extremely rugged and difficult of access. Much of this land was unsuitable for men with limited capital as large areas were necessary to get returns. The expansion of settlement was slow and more extensive being further limited by a decision of the Taranaki Land Board in 1902, not to open blocks of land until there was at least access by a horse track. From 1901 to 1911 there was a decline in population as the extensive nature of expansion could not match the loss in population as disillusioned settlers gave up their sections. The demand for land was still great in 1911 but the continued shortage of accessible land hindered development. The only land available for small settlers was made up mainly of forfeited and abandoned sections within the original special settlement schemes. Despite this decline in population the cultivated area within the region steadily increased from 1901 to 1911 (Fig. 3.4), as the remaining settlers consolidated and expanded their pastures. Those settlers that did remain were relatively prosperous. This was due mainly
FIGURE 3.4: THE AREA OF LAND CULTIVATED 1891-1911
to the relatively high carrying capacities of the newly established pastures and the buoyant economic conditions that prevailed during this initial period. Despite tremendous problems and difficulties, which will be discussed in the next section, graziers, who made up the majority of the farmers, as well as dairy farmers, were doing reasonably well. In this respect the initial settlement of North-Eastern Taranaki could well be considered successful.

THE PROBLEMS OF FARMING:

This relative prosperity was achieved under some of the most difficult conditions encountered by pioneers in New Zealand. The difficulties and privations of settlers were myriad, ranging from a lack of religious, medical and educational services, to more mundane but basic problems such as bad roads. In fact most of the difficulties experienced by the early settlers could be directly attributed to the lack of access and to the abysmal quality of what access did exist. Many of the settlements and individual sections were initially occupied ahead of the point to which roads had been made. The Whangamomona settlement was established 12 miles from Pohokura in 1896, connected by a bush track, and the settlement stretched a further ten miles past this point. The Greenland's settlement was established 17 miles up the Tongaporutu river and the cart road supposedly connecting
This settlement had only reached four miles from the
main road in 1901. The main coastal route from Waitore
to Hakau was not in common use all year round until
1928, while the Chura road from Stratford to Tahora was
not classed as an all-weather route until 1929. The
railway was the only means of reliable communications in
1911 and its influence was restricted to the southern-most
portions of the region. Not only were the main routes
slow in being established but also the correspondingly
slow progress in the creation of side roads further
hindered the progress of settlement. One settler,
F. Geever, giving evidence to the 1905 Royal Commission
on Crown Lands said of his section five miles from
Whangamomona, "I have a road within a mile of the section
here. It is not very good; in fact, you have to climb
up a precipice by a wire to get on to the land. Even
when roads eventually reached the settled areas, the
presence of a rugged topography, many slips, the absence
of road metal within the region and the heavy rainfall
in winter, meant that roads were frequently impassable
for much of the year. These so called roads, were fre-
quently no more than six foot tracks; in winter, ribbons
of deep mud, and in summer, deeply rutted. These poor
roads affected settlers in two main ways:

Firstly; freight rates were extremely high, especially
during the winter months. In the Whangamomona area,
settlers were heavily handicapped through having to pay
Plate 11.

Whangamomona 1904

(Photo - Alexander Turnbull Library)
30% to 50% more for their food than in other areas of Taranaki. The relative cost of freight from the nearest railway station to Whangamomona in the summer of 1904, was 23 per ton rising to 38-10-0 per ton in winter. This cost was further increased because in winter, goods had to be packed from Whangamomona to settlers at 4/- per hundredweight. Supplies were expensive and the profit margin from farming was thus reduced, limiting the amount of capital that could be sunk back into the farm.

Secondly, the poor access hindered farmers in transporting produce to the markets and even milk to the local creamery or factory. Speaking of the Taranaki back country in general the Lands and Survey report of 1903 said "... now often through bad roads the settler cannot take his milk to the factory before December; he ceases to go around February-March, whilst with good roads he can start in August and end in May." The dairy industry, which was very important especially to the small settler, was thus handicapped in its role of placing the small settler on a sound economic footing. Settlers concentrating on pastoral farming were affected in a similar way often being unable to get their wool or stock to the market, either in time or at an economical price.

The lack of social amenities was a further result of poor access. There are many specific examples of hardship but a quote from an unsourced Taranaki paper gives an indication of the general conditions that
existed for many settlers during much of this period. The writer speaking of the Hokau and Whangamomona districts states "I have seen children riding seven miles to school, three on each horse. I have seen a good many children getting no schooling at all; I have seen a farmer sledge his two dead children 20 miles through mud to bury them. I have seen a good many serious cases of illness and no knowing whether a doctor will be brought in time". The slow development of the railway and road communications, meant that these drastic conditions were gradually alleviated. However, educational and medical facilities have continued to be pressing problems, especially for the more isolated settlers, even up to the present day.

The second basic problem of the settlers of North-Eastern Taranaki, especially on settlement schemes, was the small size of sections.

"Surveyors, accustomed to lowland concepts of an economic size of farm, made many properties too small for the hill country." These small sections containing as they did, only limited areas of flat land, were in many cases insufficient in size to provide an adequate living. The representatives of the Special Settlement Associations, who selected land on behalf of its members, did not always make their selections wisely. Blocks were chosen in parts of the country, unsuited to holdings of 200 acres, with much of the land being extremely broken and more suited for pastoral farming in large holdings.
Plate III

The Uruti School and Store in the early 1900s - the hub of commercial and social life for the Uruti District.

(Photo Alexander Turnbull Library)
The number of forfeitures and abandonments in early settlements was partly a result of these small sections. Amalgamation of sections was also a feature of settlement in most of the special settlement schemes, without which, many of the settlers would have failed. A report on the Tongaporutu Special Settlement in 1909 illustrates the incidence of amalgamation and also raises another interesting point.

"The settlement around Tongaporutu, the settlers appear to be holding their own, they have taken all the opportunities to extend the area of their farms taking up adjoining land or selecting adjacent land. Most of the settlers depend on dairying, although the country is not at all suited for that purpose." The emphasis on dairying in these small special settlements was primarily due to the combination of small sections and the prospect of quicker and more reliable returns with a greater chance of self-sufficiency. These were the important factors that influenced settlers to concentrate on dairying when much of the land was better suited for pastoral purposes.

Because of these basic problems the later expansion of the settlement pattern was slow, the settlers having difficulty in becoming established on a sound economic basis.

THE SETTLEMENT PATTERN IN 1911:

The most characteristic feature of the settlement pattern was its sparseness and the manner in which sette-
Plate IV

A farm at Uruti at the turn of the century. Note the small area of flat land, stump littered field typical of early established pasture.
ment was confined to the river valleys. The only area with a relatively dense rural population and a regular communication network was on the northern extension of the Taranaki ring plain. However, this area is outside the region under study. Whangamomona county had a population of 1615, a density of 3.6 people per square mile. Clifton county had a population of 2,198, density per square mile being 4.8. The Hokau and Ureunui ridings of this county encompassing most of the hill country had an overall population of 1207 at a density of 2.6 persons per square mile. The settlement pattern was based on the two main routes through the region and their associated feeder routes. (Fig. 3.5) The main routes and their branches were confined to narrow river valleys characterised by convoluted courses. Settlement was almost entirely confined to these valleys with very limited expansion on to higher areas. There was a lack of towns of sufficient size that could constitute any type of urban focus or market. Ureunui (200) and Strathmore (82) were the only settlements that were considered as a township and village respectively in the census of 1911. Both of these were service centres for a relatively long established and dense rural population. Strathmore was the earliest township in the Whangamomona serving the Strathmore, Te Wera and Makahu districts. However, the decline in bush felling and other development work, coupled with the decision to re-route the main trunk railway through
Douglas meant the business of the town had declined. Urenui, on the borders of the hill country was the largest service centre in the region serving both the lowland and hill country areas adjacent to it. Lukearuhe, and Tongaponutu were the other main concentrations of population in the western area of the region. Benefiting by their proximity to the main road north they were service centres consisting mainly of a cross-road collection of general store, boarding house and hotel.

Whangamomona was an important focal point for the central and eastern areas of the region. Although not classed as a village in the 1911 census, the township probably had a population of between 100 and 200. In 1911 "the number of the buildings in the township numbered 30. During the year 1911 there was considerable building activity with seven permanent dwellings and three shops erected. There were 63 pupils on the roll of the school". With a general store, Post Office, hall, school, saleyards and a bakery, Whangamomona served an important function during this initial period, as a service and cultural centre for much of the county. The other main centres of population were centred around Tahona, Pohokura and Kohuratahi. These localities were centred on a small collection of crossroad service facilities similar to those in Clifton County. This settlement pattern was the result of and dependent on the
needs of the farming community. There was, however, a second element in the communication and settlement pattern of 1911.

The Railway:

Construction of the Stratford Main Trunk Railway from Stratford to Ohakahukura was started from Stratford in 1901 and by 1911 had reached the foot of the Whangamomona Saddle. The railway was constructed primarily to serve the settlers' transport needs because of the chronic state of road transport. Its route lay mainly through the already settled areas, closely following the Chura road. Its influence therefore lay mainly in the intensification of the already existing settlement pattern. An important additional element was the shifting population associated with the construction of the railway. The workers' camps gradually moved eastwards with the construction of the railway and by 1911 were centred around the Whangamomona area. Early in 1912 the Kohuratahi correspondent of the Stratford Evening Post observed that "the railwaymen's camps have reached here at last. Some have pitched right in the township and all the way from Whangamomona to here is to be seen the thin white line of canvas homes".

Because of the slow and fitful progress of the railway the camps for construction workers were a distinctive feature of the landscape for a considerable time.
The settlement pattern that evolved by 1911 was the result of the complex interaction of numerous different factors. To discuss each of these individual factors would involve one in a myriad of detail, but several main themes can be distinguished:

The role of the central government was important during this initial period. The creation of the Special Settlement Associations and Improved Farm Settlements was an ambitious and generous attempt to place unemployed men and small farmers without capital onto the land. It was state aid for settlement on a comprehensive basis. Many of the future problems and initial difficulties of settlement can be directly attributed to faults within these schemes and in the application of them. The establishment of farmers on small areas of land receiving much of their initial income from the State and neighbouring farms, was an expedient policy that failed to put into proper perspective the land of North-Eastern Taranaki. It was an expedient policy conceived to help solve the unemployment problem and implement the Liberal Party policy of placing small men on the land. Unfortunately, much of the land in North Eastern Taranaki was hardly conducive to the establishment of small farms. The principle was sound but its application in this region was an unfortunate choice. The almost indecent haste in which many of the settlements and individual sections were occupied
helped to magnify the problems. Much of the settlement was ahead of the roads, especially in its initial stages, and what roads did exist were hardly deserving of the name. The high freight rates, difficulties in getting supplies and the uncertainty associated with transporting produce to a market or factory, meant that settlers were often struggling to farm economically despite the high prices for farm produce at that time. The folly of settling the hill country of Taranaki without proper roading was pointed out as early as 1896 in an editorial in the Taranaki Budget. A reply by a Special Settlement settler pointed to the internal dilemma of settlement policies. J. Hogg felt that if roading preceded settlement ".... settlement would be retarded as from the nature of the country road making is a very expensive affair .... and if this had to be done before the land was taken up it would require such an enormous amount of money that the State would be unwilling and unable to supply it as quickly as it was needed for settlement." The demand for land was such that a slower, better planned and more permanent expansion of settlement failed to eventuate. The other important weakness in these schemes was that many of the sections were too small for the class of land and were often laid out without due consideration to the contours or areas of flat land. There were many forfeitures, abandonments and amalgamations of sections until some settlements reached a "size of section" equilibrium.
The reasonable progress of most Improved Farm settlements up to 1903 was attributed in one report to the amalgamation of holdings, "... in other words it is a survival of the fittest". The chief fault of these special settlement schemes was basically the hurried application of the right scheme in a hopeless geographical situation. This criticism must however, be placed in the context of the early 1890's. There was a large demand for land, the land left available for settlement was limited and not of the best quality. Contemporary observers had, moreover, extolled, but overestimated, the possibilities of the land for small farm settlement. These settlement schemes were the practical result of a pragmatic politician's assessment of the contemporary situation and "each Minister of Lands sought to solve the problems of his department as he saw them at the time, and could only conjecture what the future would hold for the forms of tenure he devised as a result".

Despite these faults, the State did place people on the land, in some cases with a great deal of generous assistance, and overall in the period 1892-11, settlers were relatively successful. Without this Government initiative settlement would have expanded into the area at a much slower rate, but probably much more successfully. Government policy acted as a catalyst to the settlement of the region which was undertaken at a tremendous speed.
with all the associated problems of rapid growth.

The topography of the region had an important modifying influence on the development of the settlement pattern. The location of agricultural activities, lines of communication and the location of population was a reflection of the deeply dissected hill country of the region. The rugged hill country, with areas of flat land confined to the narrow valley floors meant that settlement was confined to these limited areas, giving the settlement pattern its characteristic "dendritic", shape. The lack of access was not only due to bad planning, but also to the fact that roads were slow and expensive to form and expensive to maintain. Within the 'papa' and sandstone country, metal available for surfacing the roads was practically non-existent and metal had to be obtained from outside the region. Experiments with burnt papa as a road-making material were attempted, but proved as expensive as ordinary metal. The absence of metal on the roads, the numerous slips and the ability of the wet winters to produce mud of the highest possible quality meant that roads were frequently impassable for over six months of the year. The uncertain and costly nature of transport produced by the lack of access and poor quality of the roads meant that rural communities were often isolated and remained centred on their local cross road or township. Communication with the larger market towns of Stratford and Waitara was difficult and there was little regional
integration. The railway's influence, at this time, was confined to the southernmost part of Whangamomona County, and was therefore limited. The physical environment was the important modifying influence on man's efforts to establish himself in the region from 1892 to 1911.

A third underlying theme which contributed to the evolution of the settlement pattern was the influence of the economic boom and associated good prices for farm produce throughout this initial period. This boom and growth in the pastoral and dairy industries not only gave impetus to settlement, but was also the chief reason for the relative success of the settlers. The problems and difficulties of farming were such that, without good prices for farm produce many more settlers would have been forced to abandon their holdings. Abandonment of holdings in this period was usually only temporary, only in the most hopeless cases were sections abandoned permanently. This fact, in itself, points to the general prosperity of the region and the confidence felt in its future.

There was a constant interplay between these three dominant factors throughout the period. The dynamic impulses of the State, pioneering endeavour and favourable economic conditions being limited and shaped by the physical characteristics of the environment. The settlement pattern and landscape that had evolved by 1911 was pioneering in character. The inland areas of North-Eastern
Taranaki were a 'frontier' of settlement; the poor roads, the stump-littered hillslopes, the isolation and privations of settlers, the sparse rural population with the lack of any urban focus combined to reflect this basic immaturity.
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CHAPTER IV

CONSOLIDATION AND CRISIS: 1911-1926

This chapter deals with a period in North-Eastern Taranaki's history when the slow consolidation of settlement was interrupted by the 1921 depression. The depression was followed by a period in which the problem known as 'deterioration' developed and gave increasing concern to the settlers within the region.

The first section of this chapter deals with the progress of farming from 1912 to 1926. The second section examines the question of deterioration, its causes and remedies and the extent and location of the problem. The final section examines the settlement pattern as it existed in 1926 and changes that had occurred in population from 1911 to 1926.

THE PROGRESS OF FARMING:

CONTINUING PROSPERITY, 1911-20:

The wave of prosperity and high price levels continued in New Zealand from 1911 to 1920. Despite these favourable conditions the population of the region continued to decline (see Fig. 3.1) although the cultivated area in both counties increased steadily (Fig. 4.1 and 4.2). Development of the bush-clad areas into pasture prior to World War I was restricted by a shortage of labour, especially competent bushmen. This problem increased during the war when many
Figure 4.1: Area Cultivated and Occupied in Manganarona County 1917-1925.
FIGURE 4.3: AREA CULTIVATED AND OCCUPIED CLIFTON COUNTY 1917-1925
young men left the region to serve overseas. This labour shortage was exacerbated by the abnormal increases in the costs of buildings, fencing materials, grass seed and manures due to the wartime conditions. The costs of bush-felling increased from £1.3.0 - £1.5.0 per acre in 1911 to £2.5.0 per acre in 1917. As a result bush felling and maintenance work tended to come to a halt, especially amongst the settlers on the remoter, partially improved land, while settlers on the better holdings were compelled to 'mark time' with the development of their land. These increased costs were compensated for by unprecedented returns for most classes of stock and primary products associated with the wartime demand for raw materials.

From 1918 to 1920 the New Zealand economy boomed with prices for agricultural products, land speculation and land values reaching spectacular levels. Butterfat, for example, rose from 1s. 5d. per pound in 1915 to 2s. 6d. per pound in 1920. The number of registered land agents in New Zealand in 1920 was 1400, compared with 919 in 1913 when the Land Agents Act came into operation. The boom was aggravated by unsound public finance, especially lavish borrowing for Public Works and, at times, indiscriminate purchase of land for the costly policy of settling discharged soldiers.

The Discharged Soldiers' Settlement Act of 1915, set aside land for occupation by discharged soldiers with advances to improve and utilise their holdings. Various amendments
Plate V

Whangamomona 1920.

Alexander Turnbull Library.
to this Act extended its powers and authorised advances to discharged soldiers to enable them; to purchase and develop farms, to pay off mortgages on land held by them and to purchase or erect houses for their personal occupation. Up to £2,500 could be advanced to purchase the freehold of private land with a further £750 advanced for improvements. Within the Taranaki Land District, 112,737 acres for 369 soldiers had been acquired by 1925, most of the land being taken up from 1918 to 1920. The extent of such settlement in North Eastern Taranaki is difficult to ascertain. Only two specific soldier settlements, Kohura and Marco, were established in the region. (Fig. 3.2) Both these settlements were small; Marco being 356 acres in extent, divided into three sections and Kohura with 11 sections had a total area of 4,459 acres. Discharged soldiers who did settle in the region were located, in the main, on improved or partially improved individual holdings, rather than on unimproved bush sections. This fact is borne out by a report in 1920 from the Commissioner of Crown Lands for Taranaki. "There have been a number of bush sections on the market .... The discharged soldiers are not showing a very keen desire to take up unimproved land, although some offered is handy to the railway ...." Despite the current economic boom, all classes of settlers were, in many cases, struggling to remain solvent. Labour shortages continued and noxious weeds, blackberry and
ferns were proving troublesome to the farmer. Land speculation had led to excessive values being credited to land with correspondingly high valuations. A settler in Whangamomona County, giving evidence before the Commission on Deteriorated lands said that land had been revalued at up to four times its proper cost. Land was being valued, in some cases, at 37/6d per acre when its actual value was around five shillings per acre. Jennings also made the important point that in the ten years since the formation of the Whangamomona County in 1907, rates had increased threefold, and it was quite possible that this would occur again in the next ten years. This increase in rates was not compensated for by a corresponding increase in the quality of roads within the county. In fact finance available to the Whangamomona County Council was hopelessly inadequate to even maintain the roads in a reasonable state and settlers often had to maintain their own roads. The creation of the Whangamomona County entirely out of an area of rugged country with a sparse rural population who had encountered many problems and difficulties in settling the area showed a lack of geographical planning and foresight.

The development of land was increasingly hampered by the increased costs as "an excessive percentage of returns had to be swallowed up in rents, rates and interest on 'fictitiously high values', thereby limiting the amount of capital available for land development.

The continuing lack of access was a major problem to
settlers, especially access to individual holdings off the main communication routes. The Stratford Evening Post reported in 1920 that settlers on the Marco Road, in Whangamomona county, had been on their land for 20 years and were still only served by a six-foot track.

The post-war boom and settlement by discharged soldiers failed to expand the settlement frontier, to any great extent, into previously unsettled areas. (see Fig. 4.1 & 4.2). Settlement and development were concentrated in the main, on holdings that were improved or partially improved. In fact, the excesses of this economic boom, in the long run, outweighed its benefits, laying the foundations for many future problems.

Before dealing with the 1921 depression and its aftermath a brief look must be given to the rise in importance of the dairy industry from 1912 to 1920. (see Fig. 4.3)

As early as 1913 it was noted in a report of the Lands and Survey Department, that dairying had expanded onto areas of the back country where previously it was regarded as impossible. The development of home separation meant that distance from the factory was not the same drawback it used to be. The extension of the industry in the region received renewed impetus after World War I (Fig. 4.4)

A report in 1920 noted that, "the collection of cream from farms in the back blocks by different co-operatives is becoming very useful to holders of sheep farms with a little flat or easy land to run a few cows .... giving
Figure 4.3: The Growth of the Dairy Industry 1917-1926
FIGURE 4.4: NUMBER OF HOLDINGS AND AVERAGE SIZE OF HOLDING 1917-1925
a little money for current expenses to tide over the longer intervals of returns from ordinary grazing".

DEPRESSION AND ITS AFTERMATH: 1920-26:

The depression of 1921 had an important influence on the farming of North-Eastern Taranaki. After 25 years of continued prosperity the price bubble had burst and the problems of settlement and farming that had been marked by high prices, were starkly revealed. Prices for the products of sheep farming were the first to fall, followed by dairy products, and many farmers were immediately struggling to make ends meet. Especially hard hit were the settlers who had obtained land at the height of land speculation, such as the discharged soldiers. With a drastic drop in income, many settlers could not pay off the high rents and mortgages, that had resulted from the recent land speculation. The Tahora correspondent of the Stratford Evening Post pointed out the absurdity of such high valuations on this class of country. Speaking of a person rated on an unimproved value of £4 per acre he noted that, "... butter-fat would have to be 5/- an ounce and wool 10/- per pound before a man could parade before a banker without running the risk of being spoken to with a pick handle".

The continual lack of access became even more relevant with the drop in farmers' incomes. This was exemplified by Masters, the member of Parliament for Stratford,
when speaking of a settler in his electorate, said: "He is supposed to have a six foot track to his homestead .... there are portions of that track .... that are not more than three feet wide; and before that settler can sell his wool he has to carry it out in sacks on a pack horse and put it in bales at the end of the road, he then sends it on to the market, where he receives only 3d. or 4d. a pound".

The particular severity of the depression on the products of extensive sheep farming accelerated the increasing importance of dairying within the region. (Fig. 4.3) Economic motives were the prime reason for many farmers shifting the emphasis on their farms, from sheep to dairy cows. Prices for the products of extensive grazing, remained depressed longer than prices for dairy produce and farmers opted for a regular if small income from dairying rather than a low irregular income from sheepfarming.

Figures 4.1, 4.2 and 4.4 show the influence of the depression of 1921 on the farming industry, with a decrease in the cultivated area, as well as the number of holdings within the region. The figures for Clifton County are biased, to a certain extent, by the large area of Taranaki lowland within its boundaries. As speculation was most rife in dairyland the fall in prices, although less sustained, was more drastic and the number of holdings declined sharply. Whangamomona County gives a more factual picture of the situation in the inland areas of North Eastern Taranaki.
The depression, although making conditions extremely difficult, did not result in any large scale abandonment.

The slump in prices was fortunately short lived. By 1923 "butter had returned to prices more on the lines of sound finance .... and wool was stabilising on a figure 100 per cent in advance of the preceding year". Prices revived from 1923 to 1925, but in 1925 fell again. However, in the middle twenties the level of prices, sustained by rapidly increased production and lavish public spending, although below the wartime peak, were reasonably satisfactory. Figures 4.1 and 4.2 reveal this increase in the cultivated area as settlers attempted to increase production to make up for the lower price levels. By 1926 this expansion had tapered off, in the face of steadily increasing problems.

The depression and following years had accentuated a serious problem that was steadily increasing in scope and intensity within the region. The problem was the replacement of pasture by secondary growth, consisting in the main of scrub and fern, with a subsequent decrease in carrying capacity and productivity of the land. The steady increase in deterioration of pasture had been masked to some extent, prior to 1921, by the continual good prices for primary products. Now that the price levels had slipped, the effect of deterioration became particularly noticeable. The increasing concern over this phenomena was reflected in new research, especially by Levy, into the problems of farming within the
hill country pastures of New Zealand. This research was especially concentrated on the mid-western areas of hill country, especially the Taranaki back-country. A series of articles published in the New Zealand Journal of Agriculture from 1923 to 1928, contain the results of Levy's research and proved extremely valuable in providing information on the causes of deterioration and the necessary steps to alleviate the situation. However, research was not enough, and the Stratford Chamber of Commerce, in a letter to their Member of Parliament, Masters, pointed out the need for positive concrete action. "The experimental work initiated by Mr Bruce Levy last autumn will certainly bear good fruit. The process of deterioration gathers speed, and the longer efforts of reclamation are delayed the greater and more expensive and more doubtful these efforts must be." As the situation became more critical these representations bore fruit with the setting up of a Special Committee in 1924 to discuss and investigate the problem of deterioration fully, concentrating on areas of North Taranaki and the South-west King Country. Before discussing the attempts taken to deal with deterioration, the causes of deterioration need to be discussed in detail.

DETERIORATION:

Frank has discussed the reasons for deterioration and the necessary remedies fully. However, because the whole question of deterioration is basic to the evolution of the
settlement pattern this ground must be re-covered, albeit briefly.

Deterioration, or reversion of pasture was the term given to the process whereby pasture grasses were replaced by various classes of fern and scrub—consisting of bracken (Pteridium esculentum), hand fern (Paesia scaberulia), wineberry (Aristotelia serrata), manuka (Leptospermum scoparium), fuschia (Fuschia exorticata), tutu (Coriaria arborea) and Hutiwai (Acaena anserinifolia). The appearance of secondary growth did not mean that the land was too poor for grass, but reflected a strong natural tendency for the land to revert to its original forest cover. In fact, the land was capable of comparatively high carrying capacities when properly grassed. Cockayne noted, that if it was not for the high carrying capacity of much of the remaining areas of farmland in the Whangamomona County, he would have grave doubts about the redevelopment of reverted land. Indeed, much of the initial prosperity of the region was due to the good pastures that were originally produced from the bush covered hills.

Basically, deterioration was the result of two main factors. Firstly, the land with its low to medium natural fertility coupled with the heavy rainfall, was particularly conducive to the establishment of secondary growth. This was especially noticeable once the induced fertility of the soil, provided by ash from the first burn, was depleted. The second basic factor was the inability of farmers,
through a number of different factors, to stop the establishment of secondary growth and control its spread.

Deterioration usually appeared six to ten years after the initial pasture had been established, but did not become a serious problem in the region until 1912, according to Cleland, Chairman of the Whangamomona County Council in 1924. At this time the costs of development and maintenance, such as bushfelling, fencing materials and manure, rose sharply. The price of land also rose from ten to fifteen shillings per acre to thirty to thirty-five shillings. These increased costs reduced the amount of capital available for development and maintenance. Consequently, deterioration gradually increased in scope and intensity.

However, several factors prior to 1912 had contributed to the deterioration of pasture after only ten to fifteen years of farming.

Climate was an important factor in the conversion of bushlands into pasture. The effectiveness of pasture establishment depended to a large degree on the efficiency of the first burn. Unless the initial burn was a good one, the seeds and spores of secondary growth remained untouched. A bad burn, usually due to a wet summer, meant that pasture grass had to compete with secondary growth. Such dependance on the climate is reflected in the following quote from the Kohuratahi correspondent of the "Stratford Evening Post" in 1912.
"There are thousands of acres waiting for the match, but the very wet summer has made burning impossible. Many settlers are trying to dispose of their grass seed ordered many months ago."

The heavy rainfall of the region meant that good initial burns were difficult to attain and pasture development suffered as a consequence.

Ignorance of the special local conditions and unsuitable management techniques also weakened the ability of pasture to withstand secondary growth. Firstly, a lack of local knowledge was evident with the initial sub-division of much of the land into units that were unsuitable both in size and in the proportion of flat land. (see Chapter three). Economic development of this country would have been facilitated by larger, more rational units. The amount of amalgamation of small sections in the special settlements, in the initial period of settlement, is indicative of the general unsuitability of small sections to this type of country. The government, however, still persisted on certain occasions in subdividing large areas of land, made up of amalgamated sections, into small units for soldier settlement. The early settlers, with confidence gained from experience in developing other hill country areas of New Zealand, such as Rangitikei, used the same techniques on the hill country of North Eastern Taranaki. The different conditions made this experience and their techniques of little value. The luxurious forest cover
gave every indication of fertility and high fertility demanding English grasses, such as clovers, rye and cock-foot were sown amidst the tangled mass of burnt stumps. Initially these grasses did well on the ash of the primary forest burn. Growth was spectacular in the first few years and frequently crops of turnips were grown in the first six months after the burn. After six to ten years the combined effects of heavy rainfall and fertile demanding grasses soon depleted this initial fertility. The English grasses could not adapt to the lower fertility levels inherent in the mudstones and sandstones and were gradually replaced by poorer grasses such as Danthonia pilosa and secondary growth. The English grasses proved unsuitable for much of the farming land of the region, only surviving on the fertile flats and lower hillslopes. Early farm management techniques also hastened the deterioration of pasture. Settlers were generally concerned with the extensive clearing, rather than the consolidation of good pastures on their holdings. The importance of stock management in the creation of good pasture was frequently not realised in the early days. There was insufficient fencing for controlled stocking and little use was made of beef cattle, for the control of secondary growth. This lack of beef cattle was often accentuated by injudicious heavy and continuous grazing by sheep, that quickly wore down the pastures. The shortage of beef cattle was due to
a lack of initial capital amongst early settlers and the absence of profit associated with the sale of beef cattle. It was a peculiarity of the region that cattle were usually bought in the spring, when prices were high, and sold in the autumn when prices were low. The chief benefit of cattle was felt indirectly in their ability to control secondary growth, but the lack of direct profit made settlers diffident about their purchase. The increase in importance of dairying noted in this chapter, also played its part in the deterioration of pasture. Much of the dairying, especially during the depression, developed on land that was more suited for sheep farming than dairying. Dairy cows were unable to control the spread of secondary growth and furthermore reduced the area available for grazing by sheep and beef cattle. Consequently deterioration, to a certain extent, went uncontrolled even on farmed areas. Coupled with this fact was a reduction in the area effectively farmed. With the concentration of dairying on the valley flats and more fertile lower hill slopes, the steeper slopes and less accessible areas of properties were frequently neglected or only lightly stocked. These areas quickly deteriorated into secondary growth.

The effects of these factors were accentuated by a lack of finance, especially after the decrease in returns that followed the 1921 depression. Many of these increased costs such as bush felling, materials, the price of land, increased valuations and rates have been discussed earlier.
in this chapter. Increasing costs had also hampered the
development of the communication network. Many properties
were still without a 12 foot track to their farms twenty
years after the land had been alienated. Although much
of this was in fact due to the early settlement policy of
putting settlers on land to earn money and delay the road-
making, the slow development of access thereon was mainly a
financial one. Before 1913 it was not customary to 'load'
land for roading in excess of 5 s. an acre. This proved
hopelessly inadequate and was increased. By 1925 it was
estimated, in the counties covered by the Special Committee
on deteriorated lands (see reference 32) that the construc-
tion of unmetalled roads with bridges would cost £1. 4 s.
for every acre occupied. Part of this cost was due to
the fact that roads had to be carried through land that
did not pay rates, such as Crown and Native Land, to reach
occupied areas. But also the cost of roadmaking had risen
dramatically. Prior to World War I, roading costs were
from £150 to £500 per mile, depending on the type of country.
By 1925 these costs had doubled. These figures exclude
the cost of metalling the roads which, because of the
limited deposits of metal in the region, was extremely high.
Railway facilities had reached Tanganakau by 1925, but even
this line of communication was subject to the vagaries of
the climate. For example a cloud-burst centred on
Whangamomona and Uruti in 1924 closed the line for five
months and once again the settlers were dependant upon
the Chura road.

The increased costs of farming, accentuated by unreliable and expensive communications, severely limited the settlers' ability to control deterioration and was the main reason for the continued spread of deterioration after the causes of the problem had been established.

**THE EXTENT AND LOCATION OF DETERIORATION:**

By 1925 it was estimated from questionnaires that in the counties under study by the special committee (see ref. 32) approximately 40% of the total area felled and grassed had deteriorated into secondary growth. Cockayne estimated a similar percentage for Whangamomona County. Good farmers, as well as the incompetent, were affected. Levy noted that, even on the best farms, it would "not be too hard to say on the average 30% of the farm was growing nothing but hard fern manuka and other rubbish". These figures give a fair indication of the general incidence of deterioration in North Eastern Taranaki. From the same questionnaire data it was estimated that the average total indebtedness per acre on fairly clean land was £7.14s.0d. The costs of development were estimated at from £1.15s. to £2.3s.6d. per acre and it was obvious that some form of financial assistance was rapidly required. Deterioration was extremely widespread in the Taranaki back country as a whole, there being a much larger area on the hills covered by secondary growth, than by grass. Along the flats and easy sloping foothills there
was usually good grass. Further up the slope the grass usually weakened and weeds increased, gradually merging into zones of secondary growth. On stocked land the first zone of secondary growth was usually hard fern followed by a zone of bracken.

This was the situation investigated by a Special Committee in 1924 and in 1925, as a result of their findings, the Deteriorated Lands Act was enacted. Revaluation committees were set up under this Act with power "to revalue land and to recommend the remission of rent or interest; to consolidate and reclassify farms and to recommend advances and define the purposes for which these were to be used". These loans and rent remissions were to enable settlers to make a start in controlling reversion through fencing, logging, resowing and stocking after burns and topdressing.

The farming industry of North Eastern Taranaki had thus reached an extremely critical period in its development. Because of the dependance of the settlement pattern on the industry, its future evolution would be closely allied with the ability of the settlers, to utilise these legislative provisions and re-establish farming on a sound economic basis.

**The Railway and Settlement:**

Apart from farming, the construction of the Stratford Main Trunk line was the other major factor that had a determining
Plate VI

Whangamomona c 1920

(Photography: Alexander Turnbull Library)
influence on the settlement pattern. By 1926 the railway had reached Tangarakau leaving only a small section, through rugged country, to complete the line. The railway, which had been originally constructed to serve the existing settlers, helped to facilitate the brief expansion of settlement after 1918, but had little influence in checking the spread of deterioration. As in the initial period of settlement, its main influence on the settlement pattern was in the location of the workers associated with its construction. In 1912, the main construction camp was at Tahora, which, in the words of the Taho correspondent to the Stratford Evening Post became "a regular township with residential flats, library, blacksmith's shop and numerous other accessories". By 1926 most of the workers had gravitated to the Tangarakau flat area. The heavy construction work, including several long tunnels, in the last stretch of line, necessitated a large number of workmen. Overnight a township sprang up at Tangarakau which was destined for some spectacular, but short-lived, growth. This will be dealt with in the next chapter.

THE SETTLEMENT PATTERN IN 1926:

From 1912 to 1926 the population of the region slowly declined. (Fig. 3.1) The settlement pattern in 1926 was very similar in shape and character to that of 1911, (Fig. 4.5) overall there being a slight contraction in settlement, especially on the fringe areas. The steady expansion of the cultivated area from 1912 to 1920 had
FIGURE 4.5: THE SETTLEMENT PATTERN IN 1926
been offset by the steady reversion of pasture to secondary growth. This deterioration by 1925 had led to little actual abandonment of holdings. The report of the Special Committee on the Deterioration of Crown lands estimated that in the counties investigated, 3.77% of the total holdings, and 4.9% of the total area occupied had been abandoned. The percentage of abandoned holdings in North Eastern Taranaki was therefore only slight overall, although there was a sharp decrease in Whangamomona County in 1926 (Fig. 4.4) Deterioration resulted, at this stage, in a reduction of the cultivated area of the region limiting its economic base and weakening the individual settler's economic position.

There were, however, several changes in the general location of population within the region, which were reflected in the settlement pattern. Within Whangamomona County, the Strathmore-Pahokura area declined in population. This area of moderate hill country was one of the first areas settled in the region and deterioration had gained a firmer hold on the pastures of this area. The loss in population was also due to the eastward movement of railway construction workers away from Pohokura, which, prior to 1911 had been an important base camp. In Clifton County, population loss was more evenly distributed, occurring mainly on the fringes of the settlement pattern.

There were also indications of limited growth within this settlement pattern. Settlement had gradually extended
along the Whangamomona Valley Road from the early 1900's and by 1926 there was a sizeable population in the Totuhia area. Growth also occurred in the Tahora-Tangarakau area associated with the establishment of the railway camps, and by 1926 this area was the second main focus of population within Whangamomona County. In Clifton County there are little signs of definite growth, the lower inland valleys of the Tongaponutu, Uruti and Urenui rivers providing the main foci of settlement.

The townships of Whangamomona and Urenui were the main service centres for the region. Both towns had slowly increased in size until by 1926 Urenui had a population of 284 compared to Whangamomona's 262. Whangamomona's growth was due to the development of the railway and 'through' routes of communication and it gradually replaced the small cross-road settlements, such as Kohuratahi, in providing services for farmers. Urenui in its position on the fringes of the lowland and upland areas, continued to serve mainly the dairying areas of the northern Taranaki lowland. Both Whangamomona and Urenui, however, were still extremely small and relatively insignificant in the overall pattern of population distribution in the Taranaki province.

CONCLUSION:

The evolution of settlement during this period was an important one, despite the lack of obvious changes within the pattern. Settlement had reached a crucial stage in its
development. Its future progress depended to a large degree upon the ability of settlers to increase the economic base of the region through the control and eradication of secondary growth.

As in the initial period of settlement, the physical environment played a major role in the progress of settlement. Its most important influence was in providing the physical basis for the development of deterioration. The local conditions of soils, relief and climate were quite different to other hill country areas of New Zealand and ignorance of these local conditions, hampered settlers in their attempts at pasture development. The heavy costs of road construction due to the rugged terrain, heavy rainfall, absence of road metal and heavy erosion restricted the development of good access. The slow development of access was an important contributory factor in lessening settler's economic ability to control deterioration.

Government activity was less dominant than in the early period of settlement. One major positive attempt at settlement was the Discharged Soldiers' settlement schemes, but these had very little influence on the settlement pattern. The increasing problem of deterioration saw the establishment of the Deteriorated Lands Act in 1925, which attempted to give settlers the financial assistance necessary to control deterioration. As this Act falls at the end of the period, its influence was limited and it is in the next chapter that the efficiency of these
measures will be discussed.

The changing economic conditions within New Zealand were responsible for many of the problems experienced throughout this period. From 1911 to 1926 settlers were handicapped by limitations in capital. This lack of capital stemmed from direct sources, such as the drop in prices for primary produce and also indirectly from high transport costs and increased rates and rents. The combined result was a decrease in the ability of farmers to combat problems, such as deterioration, when they appeared.

Economic factors were the prime reason for the spread and growth of deterioration to the stage where special legislation was enacted to try and help solve the problem.

A third major feature that contributed to the evolution of the settlement pattern was the legacy of initial settlement. Settlers were, in a sense, victims of the past in that the mistakes of initial settlement were masked by continued prosperity and only when economic difficulties became acute, in the 1920's, were these mistakes indubitably apparent. When this occurred the settlers had the knowledge, but lacked the means to put the findings of research, such as Levy's, into practical use.

The amalgam of all these factors was seen in the phenomenon of deterioration, the 'bete noir' of the inland areas of North Eastern Taranaki. The counter measures needed to combat deterioration were comprehensive in scope and expensive to mount, ranging from rent reforms to increased stocking.
by beef cattle. The task of bringing reverted land back into production was not only one of the leading pastoral problems New Zealand had to face at that time, but also extremely crucial to the future of settlement within North Eastern Taranaki in particular.

The settlement pattern and landscape of North Eastern Taranaki in 1926 was the result of a period of transition. The settlement pattern was immature and unsecurely based; in fact, very similar to that which had existed in 1911. The important difference was that in 1911, despite many problems, settlers were reasonably prosperous and prospects looked bright. In 1926 the reverse applied and unless the problem of deterioration was remedied a substantial decline in the settlement pattern would be the result. Government legislation provided substantial financial measures to combat the problem, but the efficacy of this was limited, unless farmers were receiving reasonable prices for their products. Thus, the future progress of settlement hinged a great deal on factors beyond the settlers' control; the demand and prices for primary produce in overseas markets.
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CHAPTER V

DEPRESSION AND WAR: THE SETTLEMENT FRONTIER RETREATS.

1926 - 1945

This chapter deals with a period in the history of North-Eastern Taranaki when the fortunes of the farming industry underwent a severe recession, which by 1945 had resulted in a greatly reduced population and contracted settlement pattern. The first section deals with the progress of the farming sector and its relationships with the settlement pattern. The next section deals with the continuing influence of the railway and the advent of coal mining on this settlement pattern. Thirdly, the changes in population and settlement pattern are evaluated. The final section examines the most important influences on the period and places them in perspective.

THE PROGRESS OF FARMING:

1926 - 1928 CONSOLIDATION:

From 1926 to 1928 prices for primary produce, although below the wartime peak, were reasonably satisfactory and stable. The New Zealand economy was being sustained by rapidly increasing production and lavish public spending.

Within the context of North Eastern Taranaki, the most pressing problem was the continuing decline in the carrying capacity of pasture associated with the spread of secondary growth. The financial provisions of the Deteriorated Lands Act of 1925 (see Chapter IV) were being increasingly utilised
in an attempt to halt deterioration. In 1928, in the Taranaki Land District, 404 applications for relief were dealt with under the Act, with remissions of rentals of up to 12 years, in exceptional cases, being granted. Both the State and private mortgagees co-operated in the securing of these rent concessions for lessees. The progress that was being made during this period was evident, not only on the properties themselves, but also in the settlers' attitudes. Walter, the M.P. for Stratford, noted that in his district; "the settlers there are now working well, whereas previously they were despondent. They saw no daylight ahead of them, but now they have been granted concessions and reductions in rent they are doing good work on their farms, and one can already see an improvement in the deteriorated farmlands in my district. Many properties which appeared to be hopeless propositions twelve months ago are rapidly improving".

This renewed Government interest in the area was reflected in the establishment of a demonstration farm at Whangamomona in 1928. This was a practical demonstration, for the farmers' benefit, of the proper methods to be utilised in dealing with deterioration.

Although positive attempts were made to solve the problem of deterioration, farms - especially ex-soldiers' properties - were being abandoned. The struggle to maintain the carrying capacity of reverting areas, requiring as it did a greater use of labour, fertilisers and better stocking, was beyond
the capacity of some farmers and from 1926-7 to 1928-9, 57 soldier farms were vacated in the Taranaki Land District. Usually, however, this loss was balanced by the disposal of many of these farms to new occupiers, although abandoned properties were difficult to dispose of in the grazing country of the back districts. By 1928-9 there was a greater demand for these areas, reflecting the gradual improvement in the apparent prospects of the region.

Overall between 1926 and 1929 the negative aspects of deterioration were balanced and to some extent outweighed by the positive advantages gained from Government, reinforced by a period of relatively stable prices. With new-found confidence from financial backing, settlers were making determined efforts to halt the spread of deterioration and re-develop reverted areas into good pasture. The number of farms in the region remained stable, (Fig. 5.1) with an increase in the occupied and cultivated areas (Figs. 5.2 & 5.3). Farms were getting larger as a result of the establishment of larger, more economic units, either as new farms or - more often - the amalgamation of several small properties (Fig. 5.4).

1929-33, DEPRESSION:

The attempts to check the reversion of pasture within North-Eastern Taranaki received a severe set-back during the depression from 1929 to 1933. Prices for primary produce fell dramatically. By 1930 wool had dropped an average of 50% to 7d. per pound. The grazier's existence depended to
Figure 5.1 The number of holdings 1926-1945
Figure 5.2: The area cultivated and occupied Whangamomona County 1926-1945
Figure 5.3: The Area Cultivated and Occupied Clifton County 1926-1945
FIGURE 5.4: THE AVERAGE SIZE OF HOLDING 1926-1945
a great extent on the remittance of rents to the fullest possible extent. There were numerous requests for rental concessions, especially from the grazing areas of North-Eastern Taranaki. Farmers were compelled to lean heavily on finance-institutions, stock and station agents, and the State. Every year an increasing number of farms were being abandoned with very few being taken up. This was especially true of grazing properties for which there was little demand. Folson, the M.P. for the Stratford electorate, which included a substantial area of North Eastern Taranaki, noted the effects of low prices on farmers in his area. "The values are so low today that the backblock sheep farmer cannot pay for the shearing and marketing of his wool after the sheep are delivered into his woolshed."

Dairy farmers were also hard hit by the depression. With the price of butterfat around one shilling per pound, only the most capable farmers, with a reasonably large herd, were able to make ends meet. Despite these poor prices for butterfat, many graziers ran, in addition to their sheep, small herds of dairy cows as a means of ensuring a reasonably regular secondary income. In the Whangamomona Valley and Motuhia area settlers "raised cattle in the bottom of the valleys. One settler carried his cream on his back through the bush for miles to the Wanganui River where it was put on a boat and sent to Wanganui, 100 miles away .... These settlers lived on the products of dairying in the valleys,
and the hill land deteriorated. The farmers could not keep the hills clean or stocked." The increasing importance in dairying can be seen in Figure 5.5. Associated with this trend to dairying was the development of fat lamb raising, in lieu of pure wool production, as fat lambs were paying nearly as much as dairying.

The depression was a severe blow to the settlers of the North-Eastern Taranaki Uplands for several reasons. Firstly, because it occurred when the settlers were struggling to adapt farming methods to the peculiar local conditions and needed financial support. The lack of capital resulting from the depression, prevented the lasting introduction of methods essential to hill country improvement such as sub-division, topdressing, scrub-cutting and increased stocking by cattle. Secondly, because of the tendency during the periods of depression to reduce the amount of hired labour and postpone maintenance, the recession of prices had a more serious and lasting effect on the hill country liable to reversion than highly productive areas. The switch to dairying and fat lamb raising by many farmers meant a concentration of production on the more accessible areas of farms, usually the valley flats and lower hill slopes. The poorer surrounding hill country, under-stocked and under-maintained, quickly reverted or remained in secondary growth. Not only were the hilly areas neglected, but much of the dairying was on unsuitable land. The result often was that half the farm was worked and the balance was surrendered to scrub and
FIGURE 5.5: DAIRY COWS PER THOUSAND ACRES OCCUPIED 1926-1939
weeds.

The consequent increase in the incidence of secondary growth resulting from the depression, quickly negated the steady expansion that had been achieved in the late 1920's. The number of farms declined steadily (Fig. 5.1) with a large decrease both in the cultivated and occupied area (Fig. 5.2 & 5.3). Both large and small properties were abandoned. This is reflected in Figure 5.4 where, despite the fall in occupied area, the average size of holdings remained comparatively stable. The accelerated growth of deterioration that resulted from the depression had, according to one report, sealed the fate of the settlers.

1934-39 THE AFTERMATH OF THE DEPRESSION:

From 1934-5 onwards, prices for primary produce gradually recovered, especially for wool and fat lambs, with dairy prices lagging behind. The decline in the number of the farms stabilised in the middle 1930's, but many of the properties were in a pitiful state and were on the verge of being abandoned. A valuer's report on a farm in the Whangamomona Valley in 1937 illustrates the extent to which some farms had deteriorated.

"This property should never have had its bush felled. It is questionable if it has any marketable value now. Undoubtedly some cattle and sheep are run on it, but always with heavy losses. Manuka is steadily closing in over it, and money spent fighting this on such a property .... would
be thrown away. The present occupier is abandoning the prop-
erty penniless." Gradually the disillusioned settlers, who had managed to survive the depression, left their farms, as the position became increasingly hopeless and the rate of abandonment increased.

The Government's attitude to the re-development of abandoned and reverted areas took an increasingly harder line, as evidenced in a report by the Taranaki Daily News in 1939. One young would-be settler, wishing to take up abandoned land in the Whangamomona area was told: "... that the Lands Department was reluctant to take any action that would have the effect of establishing another settler in the Whangamomona district .... It is only a matter of time when these lands will revert to their natural state and the sooner this happens the better". Land development by the State in the early 1930's and '40's was limited; development being confined mainly to isolated areas that were unsuitable for closer settlement, a total area of 7,403 acres. Much of this land did not warrant this capital expenditure, but an effort was made as a contribution to the war effort. Even this modest attempt at rehabilitation was thwarted when a cloud-burst that destroyed the road in places, forced the Whangamomona scheme (4,000 acres) to be abandoned.
1939-45 THE WAR YEARS:

During World War II, from 1939 to 1945, deterioration of pasture again regained impetus as development and maintenance work was neglected. A shortage of labour and phosphatic fertilisers were the main reasons for the continuing spread of secondary growth. The abandonment of holdings continued, placing a large burden on the shoulders of the remaining settlers, especially in the form of rates. The position became so serious within the Whangamomona County that in 1944 the County Council delivered a petition to Parliament asking that a loan for roading in the Whangamomona Valley be written off. The council was collecting virtually no rates from an area in which the rateable value had fallen from £30,224 in 1921 to £3,856 in 1944. The assumption of the liability by the rest of the county it was felt would "throw an undue burden on these areas for the following reasons. Firstly, that the areas are partially developed second and third class lands. Secondly, that they already carry their own rating burdens in respect of roading which, from the nature of the country entail heavy annual maintenance and require considerable expenditure before roading services are adequate". This petition illustrates the delibating effect abandonment had on local body finances. The loss in ratepayers was not compensated for by a decrease in the expenditure necessary for normal maintenance and development work on important rural services, such as roading.
The decline in the number of farms (Fig. 5.1) occupied, and cultivated area (Fig. 5.2 & 5.3) continued during the period between 1939 and 1945. The decline is not so marked as perhaps could be expected, but the demands of wartime production undoubtedly kept many farmers on their land. The average size of holdings continued to increase rapidly as the smaller, less economic units disappeared, usually into amalgamations into larger holdings. (Fig. 5.4)

This, very briefly, was the outline of development of farming within the region from 1926 to 1945. Before examining the influence of these developments on the settlement pattern, several other contributory factors need to be examined.

THE RAILWAY: 31

The Stratford Main Trunk line was finally completed in 1932, twenty-one years after the first spike had been driven. Its influence on the settlement pattern was limited because of its location along the already existing lines of settlement. The continuing poor state of feeder routes to the railway meant that its advantages could not be utilised to the fullest possible extent. Roads were a continual problem, as in previous years, and as late as 1935 a deputation from Tahora met the minister of Public Works to draw his attention to the roads of the district which were "badly in need of attention". This problem was accentuated by the decision of the Railway Board in 1932 to regard the line as the main
Plate VII

Tangarakau Railway Camp 1929

means of transport for the district, retarding the development of better road communications still further. The route also had lost much of its economic importance because of the establishment of the coastal highway as the main communication route across the uplands. Although the railway did mean an improvement in communications to settlers, it was too late to halt and save large areas of land from being abandoned.

The biggest impact of the railway on the settlement pattern in this period was the establishment of a large Public Works camp at Tangarakau. From 1925 to 1932 the main base for the heavy construction work needed to complete the line was at Tangarakau Flat. Overnight a township had sprung up which in its heyday was the most populous and busy town on the Stratford Main Trunk Line. Before the line was opened in 1932, one thousand people lived at the 'Flat' which had a substantial business area, sports facilities, power house and most other civic amenities. The provision of railway facilities also facilitated the working of coal deposits in the Tangarakau area which resulted in a further concentration of population at the town. With the completion of the railway in 1932 the town had fulfilled its main function and the population rapidly declined, leaving little evidence behind of its former importance.
Plate VIII

Typical canvas town of the railway workers. Mangatete 1929.

Parliamentary Paper - Public Works
COAL MINING:

As early as 1892 Thomas Kelly spoke of the great potential of the coal deposits in the Taranaki Uplands, but it was not until 1920 that the first coal was mined in NorthEastern Taranaki. This was the Old Stockman Line on the Lokau River. However, this mine and several other small collieries within the region had very little influence on the settlement pattern — (see reference 37 for a description of these mines).

The only mine to have any influence on the distribution of population was the Egmont colliery, three miles north of Tahora at Tangarakau, which was established in 1927. This mine supplied the coal for the Public Works power station at Tangarakau. In 1929 seventy men were employed in installing modern machinery and generally modernising the mine. From production of 1180 tons in 1929 employing 13 men, the mine's production rose to 13,554 tons produced by 50 men in 1930. By 1932 fifty-six men worked at the mine with an output of 26,557 tons in that year. Production of coal, however, and the number of employees, declined from this 1932 peak and by 1934 the mine was closed. Total production had been 84,447 tons. The mine was closed, due to the stony nature of the seam, plus the fact that nearly half of the remaining seam was unmarketable. The mine machinery was moved to a new mine at Tatu, in the Chura Valley, and the hopes of the mine providing a valuable industry for Tangarakau, now the railway workers had gone, were
dashed. The main influence of the mine was in re-inforcing the growth of Tangarakau as an important focus of settlement from 1925 to 1932. Its influence, however, like the railway, camp was ephemeral, and had little lasting influence on the settlement pattern of the region.

Coal mining failed to provide any permanent basis for settlement. The numbers employed and production figures were low (see reference 34). The mines were located in remote areas necessitating expensive equipment such as aerial ropeways and tramlines to transport the coal to the nearest outlet. Roads to the mines were poor and the vagaries of river transport meant that the industry had difficulty in establishing and maintaining production.

**CHANGES IN POPULATION AND THE SETTLEMENT PATTERN:**

From 1926 to 1945 the population of inland North Eastern Taranaki declined drastically (Fig. 3.1). Within Whangamomona County between 1926 and 1936 the population loss was less than five percent. In Clifton County an increase of ten to twenty percent was registered. These figures encompass both the hillcountry and lowland areas of the county and an examination of the figures for the two ridings, Mokau and Uruti, that encompassed the hill country, showed a definite decline.

The apparent anomaly within Whangamomona County of only a small loss in population during a period that included a severe depression and definite abandonment of holdings (Fig. 5.1) can be partially explained by the
absence of a census in 1931. A census in that year would have shown an increase in population within the county from 1926 to 1931, for several reasons. The solid progress made in the latter stages of the 1920's in the fight against deterioration would have meant a stabilisation in the declining rural population. Secondly, the establishment of a sizeable population centred on the Tangarakau construction camp and coal mine would have been reflected in the census. Although this concentration of population was shortlived, its decline was not as spectacular as its growth and residual elements of this population most likely remained for several years. These elements compensated for the definite loss in population in the farming sector. Another factor that could have contributed to this lack of growth was the reluctance of farmers to immediately abandon their farms and join the ranks of the unemployed in the urban areas. At least farmers had their breakfast tables supplied and it was not till the position became untenable that farmers left their holdings.

The loss in population between 1936 and 1945 was, however, definite and drastic (Fig. 3.1). Whangamomona County's declined 34% and Clifton County's 12%. The lowland area within Clifton County has biased the figures, and in the hill country ridings of Wokau and Uruti, the decline was more on a par with the loss of population experienced by whangamomona County. This accelerated population loss was due to widespread abandonment of farms as deterioration
increased in scope and intensity, forcing farmers to leave their holdings.

Before proceeding to an examination of the location of deterioration and the associated loss in population, it is instructive to look at the development of deterioration in the Aotuhia area where the most spectacular abandonment within the region took place. In the early 1920's this area supported 30 to 40 settlers and their families, but by 1944 only one or two settlers remained. The stock carrying capacity of the pastures in this region reached a peak in about ten years. With the decline in fertility from the ash of the first bush 'burn' and the lack of topdressing, pastures gradually deteriorated. Consequently, there was a drop in stock numbers, to the stage where heavy reversion reached uncontrollable proportions. The settlers were forced to abandon their properties from 1930 to 1937. Graziers then moved into these abandoned areas "their sole purpose is to get the maximum returns from the area with almost no expenditure beyond keeping their holdings stock proof. Deterioration accelerated with an ultimate loss in all improvements." This was the sequence of deterioration in Aotuhia and it was typical of the other areas of deteriorated and abandoned land within North-Eastern Taranaki.

In delimiting the location of deterioration, the distribution of the vegetation associated with this phenomena, is an accurate indication of its location.
Furthermore, the distribution of scrub and scattered grass "generally represents the limits of past attempts at farming". A map of the vegetation cover can be reasonably indicative therefore of the areas where population loss occurred, because of the high correlation between deterioration and abandonment of holdings. The data used for this vegetation map (Fig. 5.6) was collected in 1958, but the distribution of scrub and scattered grass at this time gives a relatively accurate indication of the situation as it existed in 1945. Between 1945 and 1958 the population of North Eastern Taranaki declined further and development work has been limited. If anything, the map errs on the side of leniency as the area of scrub and scattered grass was, most probably, greater in extent in 1945. It must be remembered that this map represents the total result of deterioration since it first developed. However, by combining the use of this map with a comparison of the sequence of maps on population distribution, an accurate delineation of the location of population loss since 1926 can be made.

The expansion of deterioration from 1926 to 1945 confirmed closely to the locational extent of deterioration noted in Chapter IV. Deterioration occurred mainly along the steeper slopes of the valleys along which the penetration of settlement had occurred from the two main axes; the Stratford to Chura railway and road and the main coastal
highway. Distance alone, from the main communication routes, was not a specific criterion of deterioration as large areas, such as Strathmore-Te Wera, Uruti and Tangaponutu districts, astride these main routes, all suffered serious deterioration. The areas still farmed were on the whole small, linear, and confined to the narrow river flats, so characteristic of the region, with the slopes of the valley usually clothed in scrub. The only compact areas of grass were in the Whangamomona-Kohunatahi area and the lower valleys of the Uruti and Tangaporutu rivers. Reversion also occurred on the more difficult portions of these areas of relatively easy contour, forming extensive belts of scrub lying between the occupied grasslands and forest. (Fig. 5.6).

During this period, the settlement pattern contracted before the steadily encroaching scrub and secondary growth. Farms survived in the valley floors, near the centres of communication and where dairy cows could be used to supplement incomes. (Fig. 5.7) Population loss was widespread, there being very few areas that remained unaffected. In Whangamomona County the greatest population loss was in the Motuhia and Whangamomona Valley, the Tabora-Tanganakau district and the area around Te Wera and Pohokura. These were the main concentrations of population loss, but many isolated sections throughout the county were abandoned. The pattern in Clifton County was very similar, abandonment occurring mainly along the narrow valleys that provided the
FIGURE 3.7: THE SETTLEMENT PATTERN IN 1945
basic structure of settlement. There was, however, an absence of large areas of abandonment similar to that which occurred in Whangamomona County. As the economic base of the region declined, so did the importance of the larger townships, such as Whangamomona, and smaller centres like Tongaporutu and Urutí. Enforcing this decline was the gradual improvement of communications and the increasing importance of the motor car. The small centres supplying the needs of the local community became increasingly redundant as the links with the market towns of lowland Taranaki were strengthened.

Overall the settlement pattern contracted drastically in this period, the settlement pattern in 1945 (Fig. 5.7) being restricted and confined mainly to the narrow valley flats and more fertile lower slopes. Settlement within the region had reached its nadir.

CONCLUSION:

The reasons for the decline in the population on contraction could be summed up in the one word 'deterioration' of pasture. The basic reasons for deterioration have been discussed fully in the previous chapter. The period from 1926 to 1945, saw the intensification of deterioration due to the depression and the severe drop in the prices of primary produce. It was these economic factors that led to the increased incidence of deterioration and which halted the progressive and positive attempts made
to halt deterioration in the late 1920's. This lack of income from farming meant that capital was not available for normal maintenance work, let alone redevelopment of reverted areas. Also, the increasing trend towards diarying and fat lamb raising on the valley flats and lower hill slopes meant that the steeper hill country was frequently neglected, facilitating the expansion of secondary growth. The financial provisions of the deteriorated Lands Act of 1925 alone were insufficient to compensate for the decrease in income from farming. Attempts to combat deterioration only placed increasing financial burdens on farmers' shoulders until they were forced to abandon their farms.

Frequently mentioned factors such as the small size of holdings, the lack of access and poor state of communications generally were accentuating factors to this economic situation. Levy noted that "access, however, is not the primary consideration as much of the land on the main road from Te wera to Whangamomona will show. The size of holdings also had no significance....small holdings, however, in that class of country are hopeless". Attempts to ease the financial situation were seen in Government legislation, such as the Mortgagors Relief Act of 1931 and the Rural Mortgages Final Adjustment Act of 1935. This legislation was able to ease the situation with mortgage and rent concessions, but they were unable to halt large scale abandonment.
The year, 1945, saw perhaps the logical ending of fifty years of hasty and ill-advised settlement. All that remained was the basic 'skeleton' of (Fig. 5.7) what had been a relatively extensive network of settlement. The areas where settlement survived were the remnants of the whole range evolution of settlement since the early 1890's. They represented, therefore, a stable base from which any future development and expansion of settlement was most likely to take place.
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9. In all these graphs the figures for Whangamomona county give the best indication of processes operative
in the region as Clifton County figures are influenced by its lowland area. Whangamomona County consists entirely of upland area.

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32. S.E.F. May 22nd 1935, p.4


34. The Taranaki Herald 75th Jubilee Number, March 1954
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35. These figures on coal mines are from:

The Mines Statement
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A.J.H.R. 1925-39 and 1945
36. Kelly, T. *Narrative of a Journey Through the Upper Waitara Valley and Across the Tangarakau Country to the Wanganui River* New Plymouth, 1892, p. 21

37. The Old Stockman Mine: 20 miles up the Lokau River - produced from 1920-45 - total production by 1945 was 16,349 tons - on the average the mine employed 2-3 men - output used for local consumption by settlers on the river, output was limited by the depth of the Lokau river and the liberal snags and willows.

Faparata Colliery: 11 miles north of Tahora - produced from 1928-36 - total production 5,716 tons - average employed 5 men. Because of its isolation and poor clay roads it was only worked in the summer-time, and was eventually closed.

Lokau Colliery: 13 miles from the township on the river - produced from 1931-34 - total production 4,288 tons - average employed 6-9 men. A small steamer was bought in 1932 to transport coal to New Plymouth and Waitara. The company ceased due to transport difficulties and because the steamer was always running into contact with the Lokau River bar.

38. *Mines Statement*
Parliamentary Paper C-2
A.J.H.R. 1935, p.62
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40. *The Land Utilisation Survey of North-Eastern Taranaki*
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Since 1945 the development of farming, still the basic resource of the region, has been slow and difficult. The pattern of development, has been largely influenced by the historical pattern of settlement. There has not been a wholesale reoccupation of reverted areas. Instead existing farms, or new settlers taking up existing farms, have been concentrating on increasing the carrying capacity of their individual units. Several legislative and technological innovations have been utilised extensively in this respect.

The Sheep Farming Industry Commission of 1949, drew attention to the need to help those men who were unable to obtain capital or credit, through the normal sources, to develop their properties to an economic level. The Marginal Lands Act of 1950, was the direct result of this recommendation and a Marginal Lands Board, with committees in every Land District, was established to administer the Act. Broadly speaking the functions of the Board were to assist farmers to restore, increase and maintain production on marginal lands. These cover every aspect of farm improvement, including such relatively non-productive sides of farming as housing. 2 Within the Taranaki Land
District, from 1951 to 1969, 230 applications for loans had been received, 67 of which have been taken up, representing a total amount of 923,594 dollars. 3

An important technological innovation in the development of the region has been the introduction of aerial topdressing. The importance of the application of fertilizers in the establishment of pastures able to withstand the encroachment of secondary growth had been realised for many years. The problem was in getting fertilizer on to the isolated rugged areas of hill country economically. The advent of aerial topdressing in Taranaki in 1949 was a partial answer to the problem and the use of aerial topdressing has increased rapidly. By 1957 in Clifton County 24,000 acres were topdressed by air. By 1960 this figure had risen to 42,333 acres. 4 The use of the aeroplane has been increasingly diversified to include the spraying of noxious weeds, seeding, dropping of fencing materials and winter fodder. These operations now occupy an increasing percentage of the work. 5

The utility of aerial topdressing is limited however by the steep nature of much of the country, tricky wind currents and the lack of landing fields. 6 This has meant a concentration of aerial topdressing on areas of more
moderate topography reinforcing the present trends of selective development.

Another noteworthy addition to farming techniques is the increased use of heavy machinery. The use of bulldozers, especially in the creation of access routes in less accessible areas, has been important in the development of individual properties.

LAND DEVELOPMENT BY THE STATE:

The largest redevelopment work within the region is being undertaken by the government. The Lands and Survey Department has six blocks in the area, totalling 32,322 acres of mainly reverted land, at present under development. At the present time none of these blocks have been subdivided and released to the individual farmer. "When development is complete the blocks will be divided into 27 sheep farms which will be an important stimulus to the economy of the region. (Table 6.1).

FORESTRY:

An important development since 1945 has been the establishment of a State Forest at Te Wera in 1951-52 as part of a policy of establishing exotic forests in provinces short of timber. By 1969, 13,259 acres of land had been set aside for this forest, 1,954 acres of which was planted in trees.7
<table>
<thead>
<tr>
<th>NAME OF THE BLOCK</th>
<th>DATE</th>
<th>AREA (ACRES)</th>
<th>POTENTIAL SUB-DEIVISION</th>
<th>ACRES FARMED</th>
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<tr>
<td>LOHURATAPU</td>
<td>57/58</td>
<td>6,400</td>
<td>6 SHEEP</td>
<td>4,327</td>
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<td>MAKAHU</td>
<td>52/56</td>
<td>1,530</td>
<td>1 SHEEP</td>
<td>1,530</td>
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<tr>
<td>HOHAKATINO</td>
<td>59/68</td>
<td>8,227</td>
<td>4 SHEEP</td>
<td>4,833</td>
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<td>Mount Batorer</td>
<td>53/55</td>
<td>7,264</td>
<td>9 SHEEP</td>
<td>3,272</td>
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<td>POKOKURA</td>
<td>60/65</td>
<td>1,448</td>
<td>1 SHEEP</td>
<td>1,402</td>
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<tr>
<td>URETI</td>
<td>54/61</td>
<td>7,783</td>
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<td>32,322</td>
<td>27 SHEEP</td>
<td>19,961</td>
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**SOURCE:** THE ANNUAL REPORT OF THE LANDS AND SURVEY DEPARTMENT

Parliamentary Paper C-1
FUTURE AND POTENTIAL DEVELOPMENT:

Within the farming sector of the region's economy development can take two courses. Firstly, the more intensive utilisation of already farmed holdings. Secondly, the rehabilitation of scrublands to the limits of the forest. Both these methods are limited, as pointed out by the Minister of Lands in 1952, referring to Inland Taranaki, by the shortage of available land.

"There seems to be a widely held opinion that there are millions of acres of unoccupied Crown Land available for settlement. Long years ago, the best of the Crown Land was opened for settlement and what remains is, or was, problem or marginal land."

Within Clifton County the developed areas closely agree in location and extent with the land physically suitable for farming. (See Table 6.2) Development prospects are mainly confined to the neglected portions of occupied holdings. The potential increase in the scope of the farming industry is greater however in Whanganui County. (See Table 6.2) Around Tahora, Pohokura and Takahu there is scope for a greater utilisation of already occupied areas. The large areas of scrubland within the county, especially the Aotuhia area, have potential for development. In 1958 it was estimated that there were 11 blocks totalling 54,611 acres suitable for development. Abandoned lands, farmable areas lacking access and areas of low steep hills
<table>
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<td>% Area</td>
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<td>Grass</td>
<td>25.9</td>
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<td>17.2</td>
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<td></td>
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<tr>
<td>Scattered</td>
<td>4.0</td>
<td>Scattered</td>
<td>4.4</td>
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<tr>
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<td>Tableland</td>
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<td></td>
<td></td>
<td></td>
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<td>Moderate</td>
<td>5.9</td>
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<td>Hills</td>
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<td>Hills</td>
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<td>Total</td>
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<td>30.5</td>
<td></td>
<td>32.4</td>
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**Source** - Land Utilisation Survey

N.E. Taranaki.

Lands and Survey Department
Wellington 1962 pp. 12 and 16
with sandstone soils account for most of the more suitable country that remains idle. Development of these areas is extremely slow and costly. Allen in a study on the economics of development in the Aotuhia area estimated that 25-30 years of continuous farming would be necessary to recoup original development costs. Development plans in this area, which contains the largest compact area of scrubland in the county suitable for re-development, have been shelved for the present. This is due not only to the cost of development but also to the uncertainty of the future of the Tangenui River power scheme which if completed would flood most of the lower Whanganui valley.

Development work is limited areally by the restricted amount of suitable land. Attempts to extend the amount of pasture or increase the carrying capacity of land are also reliant to a large degree on the general level of prices in the sheep industry. As Johnston notes, "The developing farm is characterised by a commitment of resources in the present to attain some potential level of farm income and personal income in the future". With any fall in prices, such as occurred in 1967,
the farmer is in a very vulnerable position. Development programmes are either modified or expenditure is reduced to a minimum and the farmer turns to consolidation rather than expansion of pasture.  

Despite these problems the land physically suitable for farming has considerable potential. With the high rainfall and if a new level of soil fertility can be achieved the carrying capacity can be brought to four to five ewe equivalents per acre. With the maintenance of this level of fertilizers such a carrying capacity can be kept indefinitely with pasture competition itself preventing further regeneration of secondary growth species.

FORESTRY:

The future expansion of forestry will play an important role in any extension of the economic base of North Eastern Taranaki. By 1975 the State Forest at Te Vera should be producing 9 million board feet of indigenous timber and 38 million board feet of exotics. It is hoped to make the province of Taranaki self sufficient in timber from this source by 1980. Successful development of the forestry industry would mean associated commercial development which would be invaluable in diversifying the economy of the region. In fact, due to the expense of large
Part of the exotic forest at Te Wera - a pointer to the future.
scale redevelopment of reverted areas into farmland, future development of less accessible areas could well be more economic if based on forestry. At the present time however, pastoral farming remains the chief resource on which the settlement pattern is based.

THE SETTLEMENT PATTERN SINCE 1945:

The population of Whanganui County continued declining and by 1955 the county was forced to merge with Stratford County because of its lack of financial resources. From 1956 to 1961 this decline was stabilised but by 1966 a further decline has been evident. The population of Clifton County increased slowly between 1945 and 1956 but since the latter date there has been a gradual decline in population.

These population trends are indicative of the general decline of rural population in New Zealand rather than the result of any unique factors operating within this specific area.

The settlement pattern of 1966 is very similar to that which existed in 1945. If anything there has been a further contraction with the overall decline in population. Farming development has been limited and selective, concentrated mainly in the existing areas of population. The Lands and
Plate X

Reversion - a typical hill slope in the Whangamomona Valley.
Survey development blocks at Mohakatino and Mount Dampier are the only areas of large scale development that occur in relatively undeveloped areas. Otherwise development by the individual farmer has been concentrated on already occupied holdings and by the State in more well established areas such as Kohuratahi and Uruti. The camp for Forestry workers has been established at Te Wera reinforcing the trend of a concentration of population in already settled area. With the advent of better roads and increasing numbers of motorcars in the post-war period, the beach resorts of North Taranaki have undergone considerable growth. At Urenui, Wai-iti, Tongaporutu and Mokau there has been a large increase in the number of holiday cottages or 'baches'. These resorts experience a large growth in population during the summer holidays but such increases are ephemeral and have little permanent influence on the distribution of population.

CONCLUSION:

CHAPTER VI

The contemporary landscape of North Eastern Taranaki, as in 1945, is still at a 'pioneering' or developmental stage. Franklin's description of the Western Uplands of the North Island as a whole, can be applied equally well to North Eastern Taranaki. "The areas and communities within this region are characteristically pioneer in their relative undeveloped state, their isolation, their great need for roads and other capital works, the overwhelming importance of primary industry, the relative absence of nucleated settlement and the youthfulness and high masculinity of their populations." 17 settlers still require government assistance and favourable economic conditions to aid their establishment and development.
Plate XL

The effect of reversion - an abandoned wool shed - Whangamomona Valley.
The cultural landscape reflects not only these developmental characteristics but also is a reflection of large areas of unsuccessful settlement. From the lowland areas of Taranaki roads strike inland into a landscape that is immature, untidy and scarred by erosion. Along these routes the well established pasture on the narrow valley flats, contrasts vividly with the large areas of scattered grass and scrub that dominate the higher slopes and ridges that have been cleared of native forest. Scattered intermittently are areas of felled and burnt scrub that are reminders of the continuing processes of development. Side roads, usually of clay or metal, often peter out into tracks as they reach the limits of the settled area. In the isolated valleys and areas of abandoned settlement, derelict houses and farm buildings, run down fences and bridges often standing isolated in a sea of scrub are mute testimony to unsuccessful attempts at settlement.

Not only are the occupied areas immature and untidy, settlement has also failed to penetrate deeply into the region. From the air, the overwhelming impression is of large areas of rugged hill country clothed in dense native bush broken indeterminently and infrequently by the narrow 'ribbon like' lines of settlement penetration.

Development since 1945 has failed to alter the basic appearance of the landscape or the location of settlers. With the only likelihood of large scale expansion in settlement being associated with forestry, the settlement pattern is likely to remain very similar to that which exists at the present time.
Plate XII

The Whangamomona Valley Road – once a busy road serving the Aotuhia area.
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4. Statistics on aerial topdressing do not appear by counties until 1957, therefore figures are unavailable for Whangamomona County. These figures are from FARM PRODUCTION STATISTICS DEPARTMENT OF STATISTICS GOVERNMENT PRINTER WELLINGTON 1957 p.50 and 1966 p.44.


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13. JOHNSON, R.W.M. opcit p.3

14. ibid p.3.

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18. Refer to the topographic maps in the end pocket especially in the Aotuhia area.
CHAPTER VII - CONCLUSION:

The evolution of the settlement pattern of North Eastern Taranaki was the result of the complex interaction between a number of different themes. The evolution of this pattern was characteristically different to that seen in the development of the settlement pattern of Lowland Taranaki. In the Lowland area the settlement gradually evolved through a successive number of stages to reach its final maturity, characterised by a dense rural population and regular communication network.

In North Eastern Taranaki the order was reversed. Settlement reached its greatest extent and density during the initial period. After the initial impetus was spent the population declined steadily with a consequent contraction in the settlement pattern. The final pattern which evolved was more stable and suited to the potential of the country than the initial period of development. In this sense it is a more logical pattern in that settlement has reached the stage whereby a full exploitation of the potential of the region can occur.
At different stages in the evolution of this settlement pattern certain basic themes, such as Government legislation and economic conditions have contributed to the distinctive processes operative at that time. However, one major theme which has had a continual influence on the evolution of settlement emerges. This basic theme has been the influence of the physical environment. The relief, soils, climate and vegetation have all continued to limit and shape the extent, location and progress of settlement. The decline in settlement, evident through much of the period, was due initially to an insufficient appreciation of the problems involved in settling this type of country and the injudicious haste at which much of the settlement took place. The progress of settlement since then has been concentrated on man's attempts to utilise the land to its fullest possible extent and to encounter the problems that evolved. The present settlement pattern is primarily the result of these attempts and the accommodation and adaption that the physical environment forced upon the location of settlers and their economic activities.

It is for this reason that the present landscape
and settlement pattern can only be completely comprehended by an appreciation of the historical context of settlers' attempts to adapt to a difficult environment. These attempts at accommodation and the utilisation of the physical environment in the past are still indubitably apparent today.
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