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LAND USE CONSTRAINTS TO INCREASING
HORTICULTURAL PRODUCTION IN THE
WESTERN BAY OF PLENTY

A thesis presented in partial fulfilment
of the requirements for the degree of
Master of Horticultural Science
in Horticultural Economics and Marketing at
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ABSTRACT

The Western Bay of Plenty, because of its climate, resources, and infrastructure, is an ideal place for the development of horticultural enterprises.

The development of the horticultural industry, and especially Kiwifruit, over the last 10 years, has resulted in dramatic changes in land use. These changes have been particularly noticeable in Tauranga County. In contrast the rate of horticultural development in Whakatane County is still very small compared to total land in agriculture.

The beneficial effects of the changing patterns of land use, i.e. increased economic activity, labour opportunities, and rural re-population seem to outweigh the costs in terms of social friction, effects on dairy companies, and land speculation.

In the period from 1972 to 1979, Tauranga County District Planning Schemes were found to have restrained horticultural development within the area. However in the present second review of the Tauranga County District Scheme, the Council was found to have liberalized its attitude towards land subdivisions for horticulture. Although land for horticultural uses, especially in the county's Rural B zone, must satisfy certain conditions as set out in the code of ordinances.

In the Whakatane County, with little demand for horticultural lots, horticultural subdivisions have been based on the productive capacity of the land. Subdivision plans are approved on merit.

An economic analysis of three orchards in the Tauranga County revealed that fruit production, especially Kiwifruit growing, is a profitable use of land. Orchard net farm incomes increase as orchard sizes increase and as orchards become more specialized. Financial benefits are accruing to the orchard owners through both income and property value appreciation. Small areas used for orcharding, e.g. 1 hectare of Kiwifruit, can be more profitable than 48 hectares used for dairying.

In 1983, the total area in horticulture in the Western Bay of Plenty could exceed 7,000 hectares. Kiwifruit plantings will comprise 68 per cent of this area. Ninety per cent of these expected plantings will occur in Tauranga County and the balance in the Whakatane district.

Tauranga County has 38,500 hectares of land potentially suitable for horticulture. The majority of this land is in the County's Rural B zone. The ordinances regulating horticultural subdivisions in this zone will be amended to encourage further horticultural development when horticulturalists and farmers demand change.

In 1990, the financial benefits from the region's proposed horticultural plantings to 1983, at current prices and costs, could reach \$319 million. In the period from 1980 to 1990, the casual labour requirements for Kiwifruit pruning and training in the Western Bay of Plenty is expected to increase by 1370 persons. The numbers of fulltime persons (this includes working owners and/or managers) will increase by 1330 persons. Casual labour for Kiwifruit harvesting and packing will increase by 10,000 persons.

CHAPTER 1

INTRODUCTION

1.1 STUDY BACKGROUND AND OBJECTIVES

"In scarcely more than three years, New Zealand horticulture has soared from Cinderella to fairy queen of the farming industry", wrote John D. Green in the New Zealand Economist (December 1979) and no-one is more aware of this than the people living in the Bay of Plenty. Although horticulture has always been an important part of the total industry in this area, the developments of the last five years have gone beyond anyone's expectations.

Few areas in New Zealand have experienced such rapid changes in land use and socio-economic climate as those experienced in the Western Bay of Plenty. It is with these changes and the associated impacts that this thesis concerns itself.

In this thesis the results of research conducted in the area over the period January-December 1980 are presented.

The aim of the research was to:-

- (a) describe the changes that have taken place in the area;
- (b) describe the impacts that these changes have had on the socio-economic climate;
- (c) identify constraints that have been and still may be hindering the development of the horticultural industry in the area (especially the place and role of district schemes);
- (d) determine the profitability at the farm gate of horticultural farming, (namely orcharding), and compare this profitability with traditional pastoral farming;
- (e) make recommendations on the formulation and use of district schemes; and

- (f) given the above findings build up a scenario of what could happen in future years.

From earlier work in the area it had become evident that land use planning, administered through district schemes, was one of the major factors that would aid or hinder the development of the horticultural industry in the area. Therefore, research emphasis has concentrated on the place and role of district schemes.

Most of the research findings are subjective. The time was not available to do extensive survey work to determine the details of changing land use patterns or the magnitude of the socio-economic parameters. The findings are based on interviews held with a large number of people. During discussions attempts were made to cover a wide spectrum of interests such as growers, councillors, directors of the dairy companies, planners, surveyors, town clerks, lawyers, bankers, input suppliers, processors, school teachers, and other people living in the rural areas and in the towns.

Because of the subjective nature of the results, it is acknowledged that personal biases will have crept in. However, the author believes that this report gives a fair description of what has occurred in the Bay of Plenty.

The thesis is divided into seven chapters.

In Chapter 2 the physical, economic and social characteristics of the Western Bay of Plenty are described and statistical and other information is presented to indicate the changes in the above three variables that have occurred.

Chapter 3 deals with the role that the district schemes have played in controlling land use. This section starts with a general introduction on land use planning in New Zealand and ends with a critical review of the Tauranga and Whakatane county district schemes.

In Chapter 4, three orchards are analysed for profitability. The three orchards have been chosen on the basis of their being representative of what new growers would like to achieve in ten years time. This section also compares the net farm incomes of the three orchards with those of a dairy farm, sheep and beef farm, and a sheep, beef, deer enterprise. Orchard profitability as a guide to land use is discussed.

Chapter 5. Using the findings from Chapter 4, Chapter 5 critically reviews land use planning in the Tauranga County and the attitudes of the Councils.

Chapter 6 deals with future land use trends in the Western Bay of Plenty. An estimation is made of the potential land area which could be available for horticulture in Tauranga County. Given this, the future financial benefits from the region's present and proposed plantings of Kiwifruit, Avocados, and Citrus Crops are determined. The labour requirements for the region's Kiwi-fruit plantings are also determined.

Chapter 7 contains conclusions and recommendations which are based upon the research findings of this thesis.