AGRICULTURAL USE OF TASMAN PENINSULA

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(with two tables)

The format of agriculture on Tasman Peninsula will be influenced in the future by the same factors as in the past — the environment, enterprise viability and the desire and capacity of landowners to obtain expertise and raise capital.

The high levels of investment required to establish viable farming enterprises and the doubt about obtaining a good return restricts present landowners from changing the existing type and scale of primary production.

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INTRODUCTION

Agricultural use of Tasman Peninsula will continue to be influenced, in the future, by many of the same factors that have shaped the format of primary industry in the past.

These factors include the varying environment, availability of profitable markets, cost of resources (land, plant, labour and other consumables), technology and the equity of the landowners themselves, together with their capacity and desire to obtain the expertise and capital to continue farming in both existing and new enterprises.

One factor, often overlooked but of overriding importance in influencing land use, is the level of motivation in rural landowners to self-actualise in developing their farms and to undertake new enterprises. In addition, factors that will cause farmers on Tasman Peninsula to leave or enter primary industry need to be reviewed in determining the future agricultural use of the region.

A factor peculiar to the peninsula, that has influenced the general development/land use of the area, is that of convict settlement. Outstations provided the nucleus for development in what were once regarded as outlying areas.

Whereas the area of land under commercial agricultural use on Tasman Peninsula is in decline, it is apparent that the remaining rural landowners, in future years, will need to adopt specialist enterprises to provide the necessary cash flow to remain viable. Likewise, it is predicted that any new landowners wishing to develop a viable farm will adopt intensive enterprises in order firstly to develop viability and secondly, to continue a commercially viable operation.

However, considering the existing situation, with the number of small area titles, the existing demand for land in this form, and the large capital inputs that are required to establish viable intensive farming enterprises, it is very unlikely that there will be any rapid change from the present agricultural land use on the peninsula.

FACTORS AFFECTING LAND USE

Environment

The diversity of soils and topography, and variation in rainfall across the peninsula provide now, as they did for the first settlers, a wide range of environments for both agricultural and horticultural pursuits.

The topography varies throughout the area now in agricultural use. The naturally more fertile soils, the medium to heavy loams in the valley floors and on the lower slopes, attracted the early settlers with a need to quickly become self-sufficient. The less fertile and acidic grey sandy loams required a particular form of management to sustain useful levels of pasture production and hence were, and still are, less attractive. Some land developed many years ago

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is not suited to working with conventional tractors and, in places, has reverted to scrub and bush.

The climate favours mid- to late season production over most of the agricultural area, although it is generally acknowledged some localities are suited to mid-season crops. Annual rainfall varies from 1200 mm at Palmers Lookout to 680 mm at Saltwater River — over a distance of some 18 km. With the majority of the agricultural country receiving medium to high rainfall, the environment is reasonably conducive to "intensive" enterprises.

Title Areas

A feature of the area has been the number of small title area farms. As with many areas settled in Tasmania in the early 1800s, titles of 10–50 ha are common. Farmers with small area farms usually adopted intensive enterprises utilising favourable aspects of the environment in undertaking orcharding, dairying, growing berryfruit and vegetables.

Small titles are common around the early development areas/convict outstations such as Koonya and Stormlea. The more extensive area titles usually take in the country less encouraging for farming — steep slopes and poor soils that do not form a favourable environment for agricultural production.

Technology

Technology, particularly in the form of tractors, fertilisers, pesticides and transport, facilitated an improved scale of agricultural production, and from the 1930s orcharding and dairying were to become the most important rural activities on the peninsula. The larger and developing orchards, together with dairy farms, provided a significant source of employment for many smaller farmers struggling to establish themselves on viable properties. The costs of implementing some forms of technology were returned quickly in some instances — especially in areas of animal production and land development.

Income and Development

The developing farmer returned his profits to the farm, with the aim of improving the scale and format of production. However, those with only a small scale of production and small profits were handicapped unless they were in a position to raise capital to enhance production. With lower profits in recent years, development has all but ceased and it is unlikely to recommence in the short to medium term. For example, development of bushland into pasture is, today, prohibitive, in that the costs cannot be covered from the returns made in grazing livestock — except for deer farming.

Present Land Use

In 1984–85 the Bureau of Statistics listed 54 rural establishments operating on Tasman Peninsula, each with gross income of \$2500 or more from the sale of agricultural produce. On briefly reviewing the local scale of operation, it is suggested that less than 50% of these are fully supported by income realised from farming. Present agricultural land use is summarised in table 1.

The present grazing level base of some 4500 ha of improved pasture cannot be considered to be very significant from the State viewpoint, in that the total area is only equivalent to three medium-sized midlands grazing properties.

The number of orchards has declined from 36 in 1960 with 350 ha to approximately five in 1985 with 120 ha. Allowing for a number to have been marginal/sub-economic units in 1960, it is apparent that few have had the resources (in management and income) to survive.

Human Related Factors Influencing Land Use

The major human related factors that have and will continue to influence agricultural land use are summarised in the sections which follow.

Amount of Capital Available

The early settlers wishing to support themselves from farming required sufficient financial resources to either develop bushland and/or pay for land already cleared and capable of supporting crops and livestock. The same situation applies today, in that significant capital is required to purchase and/or establish properties viable in both extent and intensity of use.

Farmers with sufficient equity to borrow capital for agricultural investment have to demonstrate a capacity to meet repayment terms. Whereas many borrowers in the past have ben able to show adequate profits, there are fewer enterprises today that will generate the level of profits required to meet costs associated with substantial capital borrowings.

TABLE 1

1984/5 Agricultural Land Use: Tasman Peninsula*

Size of area — 48 000 ha; area utilised for agriculture — 14 504 ha; number of rural establishments — 54.

Aajor agricultural enterprises Size of oper (ha or he) (ha or he)		Annual production
Sown pasture and grasses	4 466	
Native pasture	2 034	_
Oats-silage/green feed	27	_
Rape seed — green feed	59	
Stock feed — turnips etc.	52	_
Apple orchard (productive)	81	2442 tonnes
Other	18	
Pear orchard	21	443 tonnes
Sheep and lambs	17 446	60 tonnes
Beef cattle and calves	2 800	_
Dairy cattle	200	
Pigs	549	
Goats — mohair	19	27 kg fleece
Area irrigated — 123 ha Forest as part of farm — 7 000 ha		

*Source: Bureau of Statistics (Stock and Crop Returns). Data apply to properties with gross income of \$2500+ from agricultural operations.

A summary of the amount of capital required to undertake a range of operations on a commercial scale is presented in table 2.

It is important to note, from the point of view of investment analysis, how quickly profits are generated after capital is first deployed. The data in table 2 depict total capital required to establish the enterprise, the time (in years) when the first significant income is received and the number of years until full production is realised. The "possible income" is the profit likely to be received after paying direct costs — but *not* making allowances for the manager/ operators' labour and loan payments.

Investors taking a true business approach to deploying capital will note the return they can expect over a set period of time, taking into account all costs associated with bringing the venture on line, from the first draw down of capital in year one. The return on capital invested, with the exception of some horticultural enterprises and raising deer, is less than that received from investing in Government Bonds and well below that available from other recognised forms of investment, e.g. Bank Bills. With the risks that one faces with uncertain markets and variable seasonal conditions, it is only the entrepreneur with a strong desire to "go farming" who will invest large sums of capital.

The adage that "money makes money" is well known to those frustrated by a lack of sufficient equity to obtain capital for their needs. Those with substantial levels of equity and a desire to achieve are usually successful in finding the financial assistance required. With the prospects of less than attractive returns to capital and the outlook bleak for good capital gains, business people are no longer keen to invest large sums in rural enterprises such as those outlined in table 2.

Nevertheless, the innovator and entrepreneur will invariably seek out a market for a particular product and set about the task of supplying the goods. Such operators hold the key to future enterprises and agricultural use of Tasman Peninsula.

Self-Actualisation

The level of motivation of individuals to achieve specific goals in primary industry production is of overriding importance in influencing the level and format of farming within a region. Those with the will, the desire and the wherewithal to achieve their goals in farming will impinge upon and influence the activities of other farmers.

However, the basic values of the individual will influence the type and level of activity that is eventually undertaken. Some people have a feeling for horticultural pursuits such as orcharding, while others will favour various forms of animal production such as raising beef or dairying. Landowners with a desire to achieve will seek out the information and help necessary to assist them to reach their goals and, in doing so, will influence the format of agriculture in the region.

Others desire a more simple form of existence, retreating from the cities and professions with the aim of enjoying a more peaceful lifestyle in order to gain contentment. Many are to be disappointed, in that they find farming on a small area of land no easy matter. Some are unable to generate the necessary level of income to maintain their properties in sound condition — as is evidenced in some areas of the peninsula.

Some young people will look to the "bright lights" of the cities leaving the family farm with its associated parental ties and influences, and thereby will inflict on the parent-farmer a need for a particular form of enterprise structure and level of management input that can be conducted at a pace suitable to those remaining at home on the farm.

Communication of Technology

The level of communication between different groups within and outside the Tasman Peninsula community has a marked influence on the adoption of technology and management practices deployed by farmers.

The following forms of rural communication both directly and indirectly affect the agricultural use of the peninsula:

(1) *Mass media*: newspapers, agricultural newsletters, farming magazines and television programmes.

(2) *Interpersonal communication*: interaction within and between local community groups (especially on an informal basis) and with contacts outside the municipality.

Farmer contact on the peninsula with potential "change agents" is not as frequent today compared with the past. The area was once serviced regularly

by representatives of a number of firms and agencies. In particular, staff of stock and station agents, fruit exporters, machinery dealers, agricultural contractors and Government extension personnel enhanced rural activity by providing a service, communicating and effecting the transfer and adoption of technology. The cost to business of keeping an agent "on the road" now limits the level of activity on the peninsula to a fraction of that some 10–15 years ago. As a consequence, farmers now have to attend field days, shows, seminars, and seek out commercial agents in order to keep abreast of technology and transact business.

Availability of Labour Willing to Work

In developing new enterprises, casual labour is required, often intermittently, to bring a new venture on stream and later to maintain operations on a parttime basis throughout the year.

Reliable casual labour, with an interest in undertaking an effective day's work, has proved very difficult to obtain on Tasman Peninsula. Apparently the majority of individuals without work only wish to provide their labour occasionally, so as not to penalise entitlements for unemployment benefits. Consequently, farmers find themselves in the position of not having a number of local people interested and wanting to undertake part-time work. This, understandably, has led to a significant degree of frustration among those farmers wishing to develop their operations with the aim of maintaining viable farms. Some farmers are extremely bitter towards the Federal Government for providing a benefits system interpreted as not inspiring the work ethic.

It is interesting to note that in late winter (1986) there were 94 persons living within the Tasman Municipality drawing unemployment benefits; of these, 44 were males between the ages of 26 and 45 years.

Expertise

Having the desire, the capital and guarantees of profitable markets will not ensure profits, unless one also has the necessary expertise to manage the enterprise successfully. One can only acquire so much from reading books and listening to experts. It is from actually working alongside the successful operator, for at least one full cycle of the enterprise, that the practical steps can be learnt in a manner necessary for correct application.

Those who enter farming with little knowledge of practical agriculture, very quickly find they have to be "Jack of all trades". Endeavouring to acquire

Enterprise type	Capital required (\$)	Year first sig. income	Years to full production	Possible income*
Apples — 10 ha (Red Delicious)	370 000	4	7	60 000**
Blueberries — 2 ha (netted; store)	100 000	4	7	40 000
Cherries — 2 ha (Hi-tech)	120 000	4	7	10 000- 50 000
Strawberries — 2 ha (open)	90 000	1	1	25 000
Raspberries — 2 ha (good site)	55 000	1	4	10 000
Deer farming — 250 does	360 000	2	3	56 000
Wool flocks — (i) 2000 wool ewes — celf replacing	535 000	1	1	27 000
(ii) 4000 wool wethers	537 000	1	1	26 000
purchase replacements (iii) 2000 XBD ewes — purchase replacements	535 000	1	1	13 000
Beef cattle 275 breeders, store and vealer production	630 000	1	2	26 000
Floriculture various crops — small areas	10 000– 20 000	1	1-2	5 000- 15 000
Dairying — seasonal herd 80 cows 96 cows	275 000 287 000	1 1	1	20 000 26 400

TABLE 2

Capital Required to Establish in Agriculture 1986

*A guide only as there is variation depending on yields, prices and level of management. Excludes management fees, interest on borrowings. Applies for 1986. ** A 50¢ variation in profit per carton of fruit can alter returns \pm \$10 000.

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expertise, especially in the first year of a new venture, often leads to costly mistakes, which quickly absorb precious capital into operating expenses when corrective action is required.

External Forces

Market Forces

External market forces and the cost price squeeze have had, and will continue to have, a marked effect on the agricultural use of the peninsula. Whereas orcharding, dairying, grazing livestock and poultry production had proved to be substantial enterprises, few farmers have been able to continue the development of a strong production base, meeting the particular requirements of changing markets and thereby sustaining themselves on fully viable farms.

The most noticeable change has been in orcharding. Those able to read the market and finance the adoption of technology — in new cultural, packing and storage techniques — were able to withstand the "low profit years" and survive. Those unable to meet the changing markets in supplying the premium varieties and quality demanded invariably found themselves on uneconomic units.

It is interesting to observe that elsewhere in Tasmania and other parts of Australia, as some orchards were failing, and indeed being pulled out under tree pull schemes, others were being planted out by those wishing to achieve specific goals. Those remaining/entering the industry invariably planted Red Delicious, placing these in high density blocks, used the optimum cultural techniques and opted for controlled atmosphere storage.

Dairy farmers had significant forces outside the farm gate with which to contend; the structure of this industry has changed greatly over the past 20 years.

In the early sixties, dairy farmers were either seasonal cream suppliers, with piggery sideline enterprises, or contract whole milk producers, supplying a set volume of milk by time of year. The right to supply the "fresh market" with whole milk was governed by a Board. As the demand for cream lessened and proved not as profitable as whole milk production, those dairies that could not afford and/or were unable to purchase a whole milk contract turned to pigs, vealers and in some instances chicken meat production.

In changing from orcharding and dairying, few found the new scale of operation adequate, since lower incomes were generated. Hence, the entry of chicken meat production to the region was to prove a valuable enterprise for a number of farmers needing to improve their net returns.

Those remaining in whole milk production were later to be affected by the operations of Tasmanian Dairy Industry Authority. The Authority, in buying back quota entitlements with the objective of freeing up the market, indirectly prompted a number of producers throughout southern Tasmania to leave the industry. Only two dairies now remain on the peninsula, and there is the prospect that if one ceases to operate there may be insufficient milk to be collected, every second day, by Hobart processors.

Innovators

In any community there are innovators that introduce new ideas such as the chicken meat enterprise — an activity which proved valuable for a declining agricultural region. Innovators and investors between them hold the key to future agricultural development.

Government Programmes

Agricultural Development Plan

Administered by the Tasmanian Development Authority, the Agricultural Development Plan provides favourable loan terms to facilitate the establishment of new agricultural enterprises, carrying them through the development phase until they become viable. This has enabled individuals throughout Tasmania to get started in deer farming, essential oils, floriculture, stone-fruit orchards, vineyards/wineries and speciality flocks such as carpet-wool sheep.

Agricultural Marketing Programme

A recently established initiative, the Agricultural Marketing Programme offers opportunities to rural producers, processors and marketers. It presents a further aid for innovators.

Taxation Programmes

The Federal Government has altered many of the avenues that made investment in primary industry attractive, especially for the "Collins Street farmer". Particular deductions, enabling capital to be "written off" in one year, no longer apply.

While changes are being made to the marginal rate of tax there are still other disincentives such as capital gains tax and the fringe benefits tax influencing the prospective investor.

Investment Opportunities

There are numerous markets now competing to attract investment capital. Baseline investments such as Government guaranteed bonds have been used by investments advisers as the minimum income levels that small to medium investors should accept. Those with \$100 000 and more to invest can, at present (1986), attract first mortgage interest at 25% above the Bond rates, obtaining a return on their capital *without* having to meet the difficulties of unfavourable seasons and variable markets.

POSSIBLE TRENDS IN AGRICULTURAL USE

The indications are that for the next few years there will not be any marked change in the agricultural use of Tasman Peninsula. Any change in the short term will come as a result of the development activities of innovators who manage to identify new enterprises, such as the chicken meat industry established some years ago. New activities will most likely come in the field of horticulture, especially as export markets are identified for a range of produce.

The innovator and entrepreneur will invariably seek out a market for a particular product and set about the task to supply the goods. Such operators hold the key to the future enterprises and agricultural use of Tasman Peninsula.

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