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FARMING AT THE EDGE

FARM BUSINESS REVIEW - "WOODRISING", CRESSY, TASMANIA

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Biographical details

Rob Henry grew up on the family property in northern Tasmania, and attended agricultural college for two years after obtaining a certificate in farm management and maintenance in 1971. In 1991 he was awarded a Nuffield Scholarship to study farming issues in the northern hemisphere.
Kathy Henry shares management responsibility in the business. She is a Trained Nurse and is on the administrative board of the local hospital.
Rob and Kathy are committed to the sustainable development and growth of the family business.
David Armstrong is an agricultural consultant in northern Tasmania, specialising in farm business and rural resource management.

Abstract

The Woodrising farming business has developed from a grazing operation based on a relatively small soldier settlement block in Northern Tasmania. The expansion and diversification has entailed:

- Purchase of additional land.
- Leasing land for cropping, for short (seasonal) and long (3-5 year) terms.
- Managing a nearby farm on behalf of a Board of Trustees.
- Developing and running smaller, opportunistic agricultural businesses.

This paper describes a business review based on the **Now, Where, How** model:
Where is the business **now**? Description of the current status of the business (enterprises, geographically and financially).

Where do the owners want the business to be? Business targets.
How? How to get there, and the associated constraints and risks.

Diversification based on the identification and use of resources and development of market opportunities has seen the business expand very significantly in the last 15 years. This development has taken place with limited capital, and as a result has been very exposed to the risks of interest rates, markets and weather fluctuations.

This business analysis reviews these issues and describes future directions.

A brief history

The "Woodrising" property is in the mid-northern region of Tasmania, an island State off the southeast coast of the Australian mainland. The region has a cool temperate climate.

Table 1. Climate statistics for Cressy Research Station (about 10 km from "Woodrising")

Average annual rainfall	633 mm
Average January total	39 mm
Average July total	69 mm
Average annual evaporation (Class A pan)	1170 mm
Average January daily	6.2 mm
Average July daily	1.4 mm
Temperatures	
January average maximum/minimum	23.4/9.7°C
July average max/min	11.0/0.8°C

Soil types vary from deep sandy loams adjacent to the Macquarie River, to shallow sandy loam commonly over clay, with restricted drainage at 20-30 cm depth.

Land in the district was subdivided into blocks for soldiers returning from World War 2, and settled by Rob's father in 1947. The farm was initially 247 hectares, but was expanded in 1986 with the purchase of 194 hectares of the neighboring property.

The farming enterprises were initially sheep for wool and lambs and some beef cattle, but it was apparent when Rob returned from Ag College that higher return enterprises would be needed to provide for two families living on the farm. The Macquarie River on the property's eastern boundary offered a supply of water for irrigation, and there was increasing interest in growing irrigated crops in the area, including peas and potatoes for McCains and Simplot, and poppies for alkaloid producers (Tasmanian Alkaloids, a subsidiary of Johnson & Johnson, and Glaxo Smith Kline). As a result, the business became diversified to be primarily involved in irrigated cropping, with livestock being run to utilise crop residues and land unsuitable for cropping.

In 1991 Rob was awarded a Nuffield scholarship, spending 6 months in UK and Europe learning about sustainable management of sandy soils under intensive irrigated agriculture, soil structure, sub-soil management, irrigation and drainage. This scholarship provided a great stimulus to management of the farm, to diversification, and the development of associated opportunities.

It was apparent that growing the business would require access to more land, and for a number of years land was leased to allow increased areas of irrigated cropping. While leasing in Tasmania is not uncommon, the opportunities are limited.

There has been a continuing involvement in landcare, initially with emphasis on planting shelter belts (radiata pines and Eucalypt species for shelter and timber). In more recent years, plantings have been more carefully designed and managed for the range of potential benefits (shelter, biodiversity and timber). Landcare activities have expanded to fencing of remnant native vegetation and riparian areas (habitat for a native crayfish), and gorse control in grazing areas.

Now - where is the business now?

Current resources

Land: The business now farms 441 hectares owned since 1984, and until early in 2003 leased a further 324 hectares of land with very good alluvial soils and a secure water resource for irrigation. This property was purchased recently as at current low interest rates the purchase is viable, and good capital gain is anticipated for land with sound cropping soils

and water for irrigation. After 5 years leasing the managers have a very good idea of the capability of this land, and how it should be managed.

Water for irrigation: The original 441 hectares has licenses that allow water to be pumped directly from the Macquarie River at 2.2 megalitres (ML) per day during the summer, for a total take of 220 ML. Despite the licenses, however, water restrictions in January and February are not uncommon, as stream flows fall as the summer progresses.

To improve water security, five dams have been constructed to store winter runoff, and the current storage capacity is 255 ML. A site to store a further 100 ML is currently under construction. The land recently purchased has frontage to a river that is regulated by the Hydro Electric Commission, with water supplies for irrigation guaranteed under an Act of Parliament.

The water from all sources has very low salt content and is excellent for irrigation.

Irrigation equipment: Irrigation was initially applied with soft-hose travelling irrigators. In recent years, these have been progressively replaced with hard hose machines, and a 70 hectare Centre Pivot. Although most crops need only about 2 ML/hectare, peak demand is in December, and amounts to about 7 mm per day. The hard hose machines and Centre Pivot systems have greatly reduced labour requirements, and the Centre Pivot in particular has allowed much more precise control of irrigation applications.

Machinery: Shortage of capital for many years required that the business retain and use older equipment, particularly tractors and cultivation equipment. A consequence was that while depreciation costs were low, maintenance costs were high. The quality of machinery has been progressively upgraded, to improve reliability and reduce maintenance costs.

While the managers would like to use contractors, and avoid owning machinery, timing of operations for the mainly spring-sown crops is critical, so they have found it preferable to own most items of equipment.

Where possible the equipment has been used for contracting work for others in the district. This has allowed ownership of a potato harvester. In addition, the business has a syndicated cereal grain harvester.

Human resources. The business is managed by Rob and Kathy, utilising specialist advisers and consultants in business management and crop agronomy. In addition, Rob and Kathy participate in the "Executive Link" program operated by Resource Consulting Services. This program provides a "board" of farm managers who meet to discuss and review their businesses.

Permanent labour currently amounts to 3 employees, with up to 8 casual employees during the summer, particularly for potato harvesting.

Business enterprises

The management team has developed skills to manage a wide range or irrigated crops, including:

- Potatoes, for processing.
- Peas, for freezing.
- Poppies for alkaloid production.
- Onions, for export.
- Cereals (wheat and barley, generally dryland).
- Essential oils (peppermint, fennel, parsley and dill).
- Vegetable seeds, particularly cabbages.
- Grass seeds, particularly short-term hybrid ryegrasses.

A number of enterprises have been tried and discontinued, including pyrethrum, fresh market broccoli, Japanese squash and buckwheat.

The business also operates a number of livestock enterprises, including sheep for wool and prime lamb production, breeding cows for beef, back-grounding steers for a local feedlot and growing out dairy heifers. Some of the land is unsuitable for cropping, and is therefore used for the livestock enterprises. In addition, livestock mesh well with many crops, as they utilise crop residues.

The wide range of enterprises is common in Tasmania, compared with agricultural businesses elsewhere in Australia and probably overseas. The diversification could be seen as a weakness of the business; conventional wisdom in farming would encourage more specialisation. In our view, however, the diversification is appropriate, due to:

- Many crops have similar management, equipment and labour requirements; in a sense they are not "different" enterprises.
- Rotation of crops is necessary as part of pest and disease management, so the area of each crop that can be grown in any year is limited.
- Most crops are grown under contract to processing companies who manage their production risks by diversifying their production base.
- The diversification helps to reduce production and market risks.

ISO 9002 quality assurance accreditation was gained in 1999. This was pursued with the aims of ensuring that management systems are appropriate, effective and efficient, and with the desire to differentiate the business in the marketplace.

In addition to enterprise diversification within the farm, a deliberate policy of business diversification has been pursued with the development of the following subsidiary businesses:

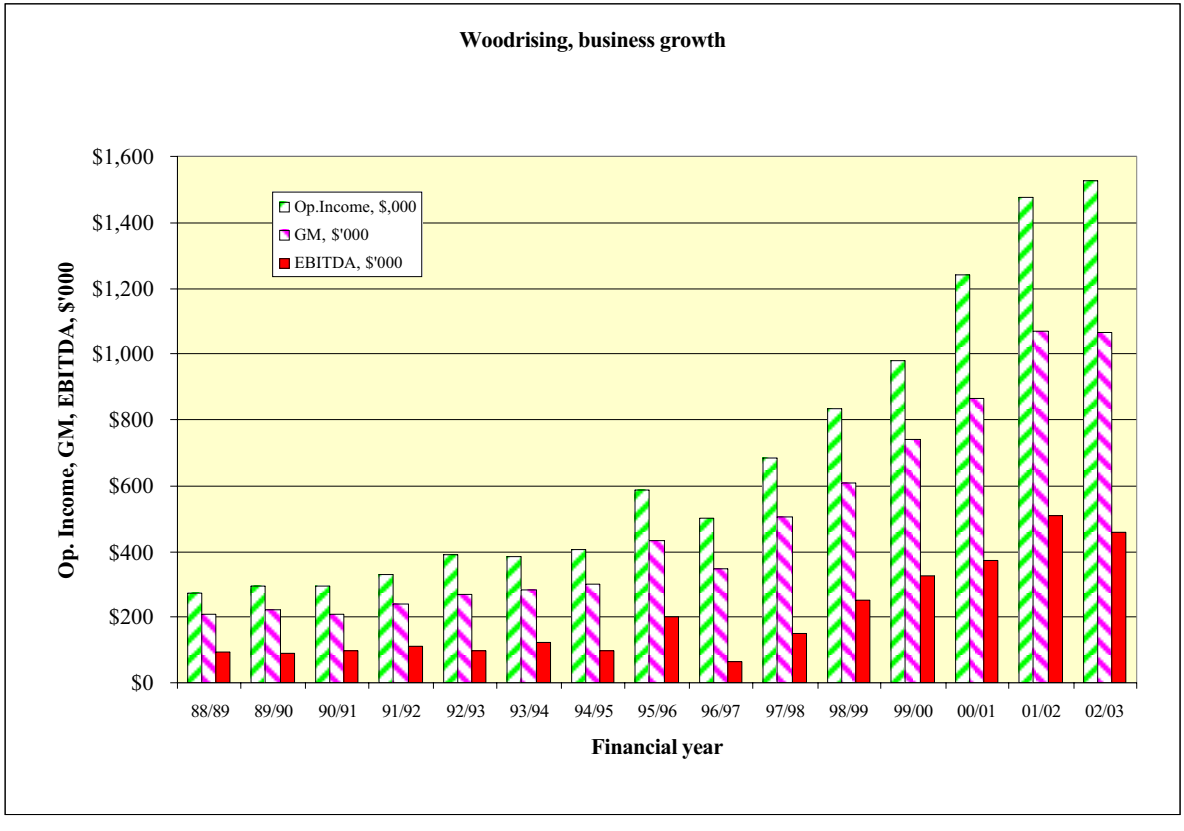
- Purchase and operation of a distillation plant for the essential oils.
- Mobile seed cleaner (for cereal grains and grass seeds).
- Development of a crop spraying business based on controlled droplet size equipment, and the sale of such equipment; business discontinued after three years.
- External property management; Rob is currently engaged as a Management Consultant for the governing board of large farm nearby; this is an expertise-based consultancy requiring hands-off management.
- Agricultural contracting, based primarily on contract harvesting of potatoes.

Business performance

Financial records for fifteen financial years since 1987/88 have been analysed to chart the growth of the business, and changes in selected benchmarks.

Figure 1. Financial performance of the business.

Growth over the last 15 years in indicated in Figure 1.



Gross Income has increased from $3-400,000 in the late 1980s to approximately $1.5m. by 2001/02. The average Gross Income on farms in Broadacre Industries in Tasmania was $146,020[23] in 1999/00 (the most recent published figures), indicating that "Woodrising" is operating at a much larger scale than most properties.

Gross Income has steadily increased; the drop in 1996/97 resulted from a flood in the summer of that year, with substantial losses to crops on the floodplain of the River. Levees have been constructed to reduce this risk.

The total Gross Margin has increased accordingly, representing 69-77% of Gross Income.

EBITDA (Earnings before Interest, Taxation, Depreciation and Abnormals) has similarly increased from less than $100,000 per year, to $3-400,000 in the last three years.

Growth has developed from three directions:

- Increased scale, by leasing and more recently purchasing land.
- Higher return cropping, particularly irrigated crops.
- Diversifying to include off-farm activities, including contracting and property management.

[23] Australian Bureau of Agricultural and Resource Economics; Australian Farm Surveys Report, 2001.

Benchmarks

Key benchmarks of business performance are indicated in Figure 2.

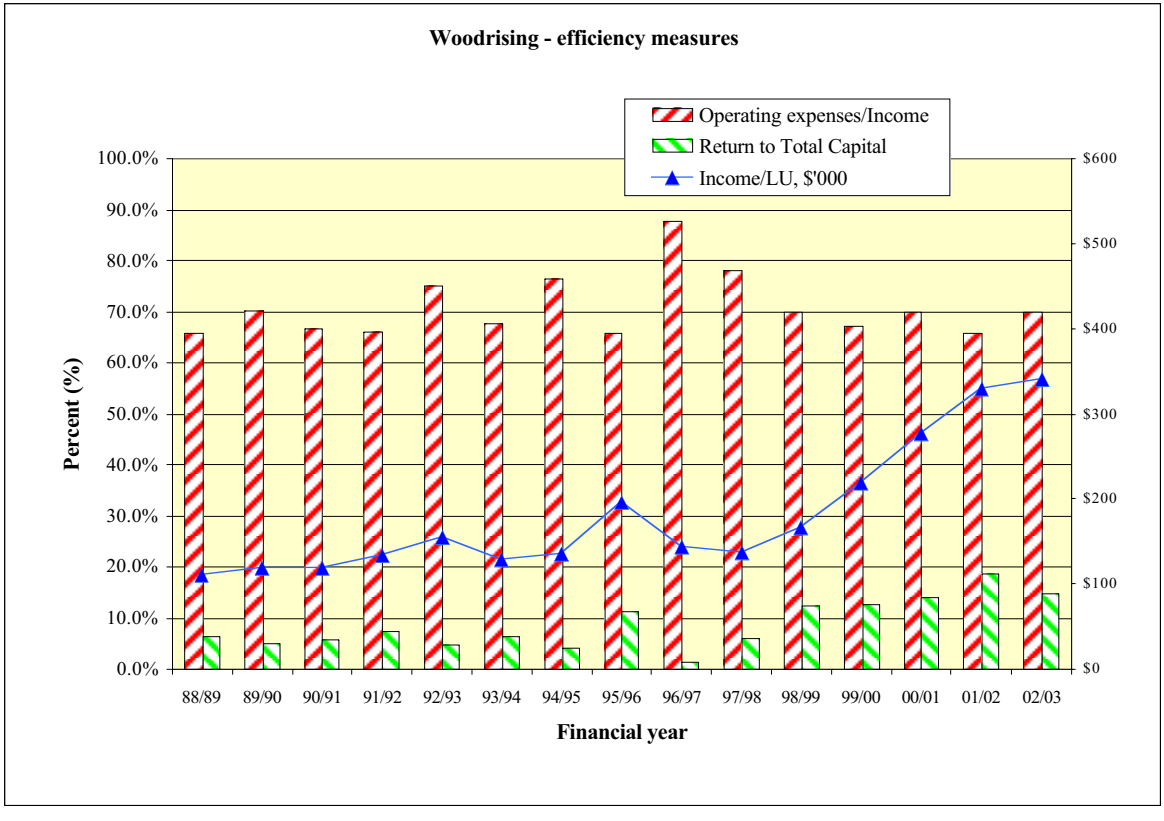


Figure 2. Business efficiency benchmarks.

Equity percentage has remained in the 55-75% range, and has been increasing over the last four years. Net equity has increased from about $1.0m in 1988/89 to currently in the region of $1.7m.

Operating Expenses (includes Variable and Overhead Costs) have represented 65-75% of Gross Income. This is a little above average for farming businesses in the region. The very high percentage in 1996/97 resulted from the effects of the floods on Gross Income.

Prior to 1997/98 return to total capital was generally less than 10%; since then it has been in the range 12-18%. This has been significantly aided by the increase in the area of leased land.

A very useful indicator of efficiency is the Gross Income per labour unit. This has increased from about $100,000 until 1998/99, with substantial increases from then to the current level around $300,000. This increase has resulted from an increasing emphasis on high-value irrigated cropping enterprises and improved labour efficiency from the use of larger and more reliable equipment, and lower labour irrigation facilities, including increasing use of Centre Pivot irrigation facilities.

SWOT analysis - a subjective assessment

Strengths. Skills in the management of high-value enterprises.
Diversity of similar enterprises.
Good scale of operation.
High labour efficiency.

Weaknesses. Operating costs above average.
Equity level a little low for personal comfort.
Reliance on the skills of the key managers.

Opportunities. Consolidation and debt reduction, rather than growth in the future.
Further expansion of high return enterprises with related value adding (eg., expansion of essential oils production).
Purchase of leased land with potential for good capital gain (land with good soils for cropping and reliable water supply for irrigation); this opportunity recently taken up.

Threats. Increasing interest rates.
Crop failures resulting from seasonal conditions or human error.
Loss of key employees.
Soil degradation - is the current intensity of land use sustainable?

Where - objectives for the future

In the past the managers of the business have been aiming for growth, expecting profitability to increase with increasing scale. The business is now at a scale that has the potential to produce sound profits.

The key objectives are currently:

- Developing and using current land and water resources as fully as possible, to generate profits and reduce debt. In particular, Return to Capital is to be above 15%. Equity is to be increased to 85% by 2006/07, and 90% by 2009/10.

- Intensification limited to sustainable use of the current resources.

- Maintaining or reducing labour costs through technology; for example, increased use of centre pivot irrigation facilities. Gross Income per labour unit to increase to $350,000.

These key objectives form the basis of a succession plan that is designed to allow the present managers to reduce their involvement from 2112, with capacity for complete withdrawal (retirement?) from the business by 2017.

How - how to achieve these objectives.

The business now has the components of scale, efficiency, equity, resources and balance of high return enterprises as a basis for profitable operation. Capitalising on these components will be based on:

- Expanding high value cropping and integration of crops with centre pivot irrigation, including sowing fodder and seed crops immediately after harvesting cash crops (such as peas and poppies).

- Further integration of livestock fattening with cash cropping, based on trading rather than breeding.

- Expansion of value adding opportunities; including off-farm activities such as distillation of essential oil crops grown by others.

- Soil sustainability is recognised as a threat. Soil condition is monitored, and practices such as stubble incorporation and green manure cropping are practised, particularly on the sandy-textured soils.

- Training of employees is an essential requirement for profitability; loss of employees moving elsewhere is a threat. The managers have developed a generic approach to training that ensures that any new employees quickly receive the necessary training for them to work efficiently.

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