

Collaborate to survive and thrive

A report for



by John Gladigau
2006 Nuffield Scholar

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Foreword

In 1956 when my grandparents purchased our family farm of 1650 hectares it certainly seemed quite large enough to support themselves and potentially four farmer sons. By the time my wife and I married in 1989 the property had expanded to 2000 hectares and supported two families. In 2007 the property size remains the same, but the business has taken on an additional 600 ha share farming and supports one family only, with some off farm income. With an eye to the future with the exponential growth continuing, it led me to ask myself the question “Where will I be in ten years time – will I own my neighbours farm ... or will he own mine?

The expansion of family farms has been a natural progression over the past fifty years, with rural communities declining as neighbours have bought out neighbours, with little opportunities for new entrants from outside the agricultural community. As economies of scale increase dramatically to combat declining terms of trade it leads to questions of where the next major business structure efficiencies will be found.

With the investment community fast becoming a significant player in farming, mainly through the large amount of funds being accumulated by superannuation companies and managed investment schemes, the future of agriculture and family farming becomes a little clouded. This has created a great deal of fear and scepticism by grass roots farmers of the corporate investor’s motives and potential influence. But is this something we really need fear, or are there opportunities which they offer, or systems and structures which they utilise which we can learn from in order to build our agricultural industry going forward. And can we do this and still retain the integrity and heritage of the family farm?

I have begun a journey of discovery, in which Nuffield Australia has allowed me the opportunity to study business models which can allow successful farming businesses to capitalise on the enormous opportunities which are currently available in world agriculture. It has been an adventure which has proved to me beyond doubt that by taking off the blinkers and seeking similarly motivated people, you can develop collaborative business ventures for mutual benefit during what is a very exciting period in agricultural history.



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Executive Summary

There is no doubt that collaboration in any form of business makes a great deal of sense, and especially in agriculture. At a time when our terms of trade are diminishing it is widely documented that farmers globally are overcapitalised beyond what a successful business can reasonably sustain into the future. They are also being stretched in their business and agronomic expertise, and are developing businesses which are being funded by capital growth due to high land prices, rather than return on investment.

The fact that so little collaboration occurs between grass roots farmers, especially in Australia, has more to do with our fierce independence, some lack of understanding of business fundamentals, scepticism of being “ripped off”, and the emotion attached with long term family farm ownership. Though collaborative ventures can be fraught with danger, mainly due to the emotions and personalities of the individuals involved, much of these can be mitigated by having a comprehensive business plan with well documented entry and exit clauses for all concerned.

Though there are not the government or industry incentives for collaborative ventures in Australia as there are in countries like the UK, I believe there are advantages available to farmers through the full utilisation of capital and resources, marketing and value adding opportunities, purchasing of inputs, sharing of labour resources and expertise, and the full business and financial accountability such a venture brings.

A study of collaborative models from around the world has led me to conclude the following:

- There is an enormous amount of investment money currently looking for a home in agricultural ventures, especially in Australia. Such ventures need to be structured in such a way that they can be scrutinised alongside other industry and investment sectors.
- Businesses need to be able to differentiate between real estate and agribusiness, and if necessary separate the two to maximise performance
- There are no set rules on how a business model can be set up, outside of the laws and regulation by which you are governed. There are many entrepreneurial structures which can be designed to share risk and reward between parties for the benefit of all, including flexi –leases and share farming options.

- All collaborative ventures need to be set up with the notion of win – win in mind
- Successful, large scale businesses create cells of optimum efficiency and profitability, and replicate them.
- The two greatest threats to the success of any collaborative venture are emotions and personalities of the parties involved.

I believe Corporate Family Farms, or the notion of running several family farms under a single business structure, has a huge amount of potential in Australia. We are not restricted by agricultural policies which create disincentive for cooperation and are in a time in history where, with the bio fuels revolution, and a volatile local grains industry, we are in a position to make a significant contribution to the agricultural development of our nation. We can do this through the creation of business models which not only make our properties more profitable and sustainable, but also preserve their integrity and heritage for generations to come. In this way, not only will it allow a lot of currently unviable businesses to survive, but with the opportunities available, the potential to thrive.

Acknowledgments

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- My wife Bronwyn, and children Jayden and Aimee, whose love, support and constant encouragement allowed me to gain the greatest benefit from the experience, and constantly kept my feet grounded and focussed on the important things in life. Bronny – you gave me the self belief that it was possible, which meant you having to step outside your own comfort zone in many ways during my absence. You are amazing.
- Nuffield Australia – for choosing me to take part in this life changing opportunity, the professional manner in which the organisation is operated, the way all applicants and scholars are treated with the highest of respect and regard, and the fantastic support throughout the entire scholarship process.
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View from the top of Pyramid of the Moon, Mexico City

Introduction

I was raised on an average sized family farm in the Northern Mallee region of South Australia, a third generation farmer in a marginal cereal / livestock area. As the only son in a family of five children, the expectation was always there that I would ultimately continue the line of heritage of our family property.

At the time I left school in 1982 and joined the family operation, consisting of my parents and me, our property was 1650 hectares. We cropped approximately 400 hectares to cereals, ran about 1200 merinos for wool and meat, had a 30 sow piggery, and milked three cows. It was very typical of an average family farm in our area. As the lean years, low commodity prices and high interest rates of the late 1980's bit hard, the catch cry of "get big or get out" rang out repeatedly. However, this was just an evolutionary process which had already begun in agriculture many years before, and still continues today, as farmers built economies of scale, integrated new technologies and developed ways to become more efficient as their global terms of trade diminished.

My personal business development began when I was fortunate enough to be part of an agricultural farm exchange to a cereal / beef property in Montana, USA in 1987. Travel expands the mind, and enables you to take off the blinkers which may have you believe that the world owes you a living, and everything should revolve around you. This experience led me to meeting my wife, and together we developed a travel business which led a number of tour groups to the USA, Canada and New Zealand over a ten year period. A lot of our passengers were also Australian farmers, who too were able to put aside their own agricultural prejudices and see the big picture for the first time.

Our own farming operation changed over time as we created our own economies of scale and I was able to start exerting influence over our business structure. One of the major decisions was to cease our piggery operation in 1996, despite being in the family for nearly 30 years. This was balanced by nearly doubling the area we had in crop, with my realization that I could never make money out of an enterprise (pork) that I had no passion for whatsoever. Our cropping area continued to grow as we began to adopt more minimum till and intensive cropping practices, and in 2002 we took on additional share farming to increase our cropping acres and give us the opportunity to purchase the equipment we needed to further our expansion into no till.

It has always been one of our business philosophies that to create efficiencies within our operation we needed to create economies of scale by working together with other farmers. We have been involved for many years with a registered farmer cooperative buying group, through which we purchase most of our inputs including fertiliser, chemical, fuel and crop insurance. In the past few years we have also shared an employee with another farm business, creating one full time position between the two properties. This has provided a substantial benefit for both operations and we believe has also been a very positive experience for the person involved.

But, where to from here? Farms keep getting bigger, margins keep getting tighter, underutilised capital items are becoming more expensive, and environmental, financial and regulatory compliance is becoming more stringent.

In the past 4-5 years I have spent a great deal of time studying and developing models which could create efficiencies within farm businesses through collaboration with other farmers. These initially included grain marketing groups, buying groups, share farming, and machinery syndication. Ultimately this led to looking at corporate family farming, or the idea of bringing together several individual farming businesses under a single corporate structure.

The idea was for the new entity to lease properties from the landholders, who would in turn sell their own machinery and use that money as share capital in the new enterprise. The new entity would then purchase the machinery and infrastructure required to efficiently farm the land under its control, with the benefits flowing back to the new shareholders. Those involved in the venture would be given roles in areas which would have the greatest benefit to the business (ie. Crop Manager, Livestock Manager, Business Manager).

While the concept seemed very sound in theory, and created a great deal of discussion wherever it was raised, there appeared to be very little research material available or working models known to be successful within Australia. This led to a great deal of frustration, especially as collaboration appeared to be a logical way forward for the agricultural industry. Ultimately this led me to applying for a Nuffield Scholarship, to give me the opportunity to study collaborative ventures within Australia and overseas, in order to find models and structures which could work in our industry. This also included looking at the opportunities which are available to such ventures in the current agricultural environment.

The objectives of the scholarship was to look at collaborative farming models around the world, with the purpose of building models which would potentially have an impact for farming in Australia into the future. My study has included spending time with many enterprising farm businesses, with questions involving business structures, farm cell sizes, enterprise mixes, value adding, sourcing of investment, human resources, personality traits and emotional attachment all being important to the final outcome.



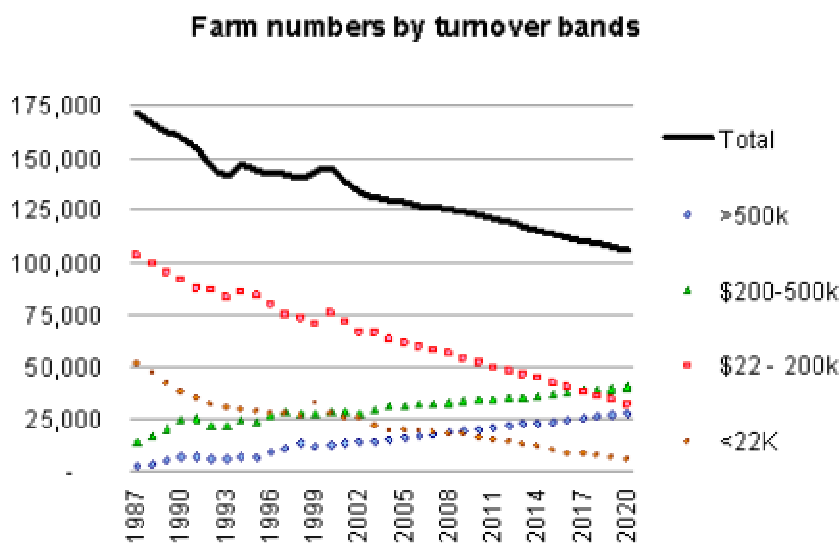
Harvesting wheat in Chester, Montana USA

Background statistical analysis

In order to make some rational judgements about the future business structures for Australian agriculture we need to have a look at some of the historical trends which have led us to where we are today. The following graphs, mainly using statistics from ABARE, have been sourced from a presentation by Mr Mike Carroll, who was until recently the General Manager Agribusiness for National Australia Bank.

The statistics show that over the past 15 years the number of farms in Australia has dropped by nearly 30 000, or three farmers leaving the industry every two days. Though most rural communities would certainly be testament to the lack of new entries, especially with most available land being purchased by neighbours in order to create economies of scale, it is concerning to many that by 2020 there could possibly be less than 100 000 farms in Australia.

Figure 1: Farm numbers 1987 - 2020

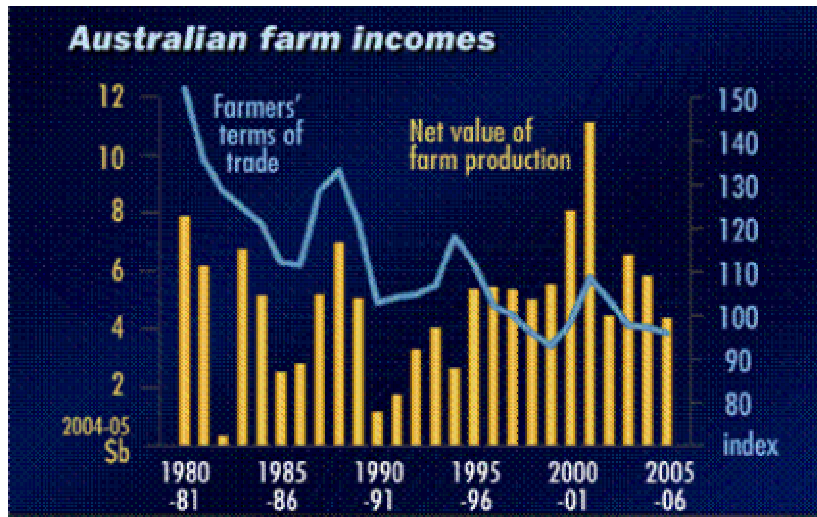


Source: Neil Clarke & Associates, ABS

However, though the figures show an alarming drop in overall farm numbers, the greatest drop is in the small farm category, with farms of over \$250 000 per annum increasing greatly during the same period. This is directly in line with the need for farm consolidation and expansion.

During the 25 year period leading up to 2006 we can see that while yearly incomes can be very volatile, farm production levels remained reasonably consistent while terms of trade have declined dramatically. This has been the catalyst for farm businesses to take on additional land, or indeed off farm income, in order to remain sustainable.

Figure 2: Value of farm production V Terms of trade 1980 - 2006

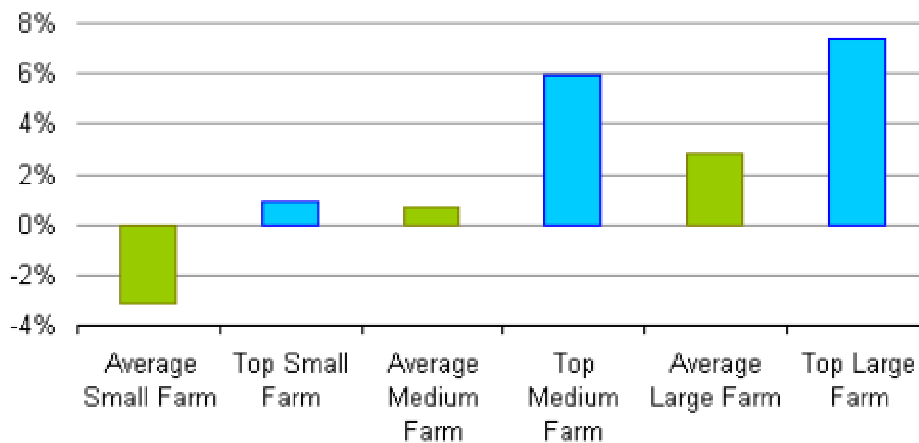


Source: ABARE

Despite these trends, larger farming operations continue to perform at a level higher than smaller, more traditional family farms, many which have been trading at negative profits. The ABARE graph below shows farming return on assets during the period 2002 – 2004. Despite the fact this period included some poor seasons across a lot of the agricultural regions; medium to larger farming businesses outperformed their smaller counterparts by a substantial margin.

Figure 3: Farm return on assets 2002 - 2004

Farm Return on Assets

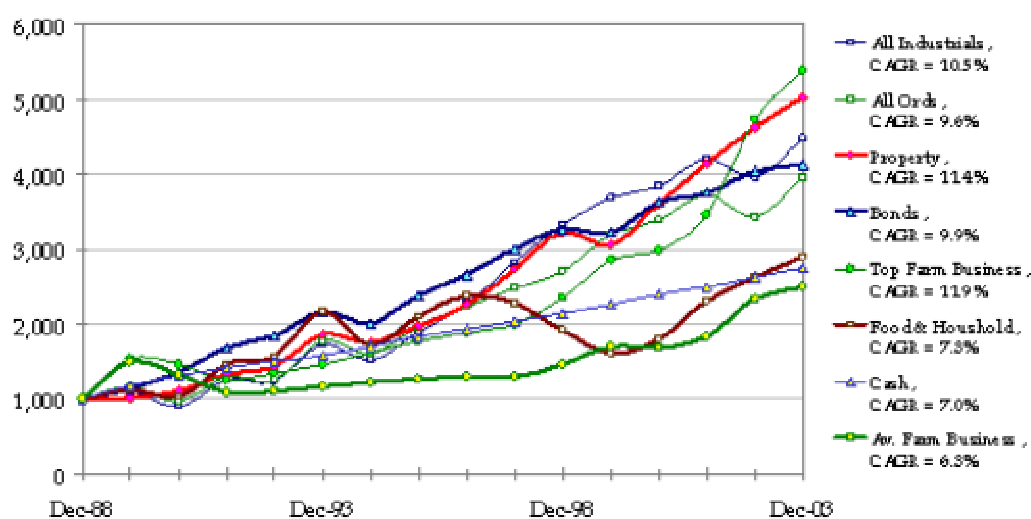


Source: ABARE Farm Surveys average of 2002 to 2004

Agriculture has been viewed negatively by the investment sector for many years, mainly due to the perceived climatic and associated business risks. It seems though, that when agriculture is analysed it is usually considered in terms of cash flow, and it does not consider capital gain from any land asset. However, when other assets classes are considered, such as property and shares, growth and dividends are considered concurrently for an overall return. The following graph shows the return from an initial investment of \$1000 if all profits are reinvested.

Figure 4: Return from \$1000 invested in different asset classes over 15 year period.

Farm Value Creation versus Other Asset Categories



Source: IRESS, ABARE Farm Surveys

The figures clearly show that the top 25% of farm businesses are performing at a level which rivals other more accepted assets classes in the investment arena. It is no surprise then that efficient, professionally run agricultural businesses in Australia are now being targeted by the investment community.

Opportunities in agriculture

“The future will always belong to those who see the possibilities before they become obvious”

Danny Klinefelter

One of the great advantages of the Nuffield Global Focus Program (GFP) is the opportunity to gain a grass roots perspective on the current state of agriculture around the world, and a global perspective of where it may be heading in the future. My GFP in Feb / March 2007 opened my eyes beyond what I had envisioned, and left me very optimistic that we were entering a very exciting period in agricultural history, with many opportunities opening up for farmers in the future.

Bio Fuels

For some time bio fuels has been the buzz word in the agricultural community, and I could write an entire report, and others have, on the bio fuels revolution and what it potentially means for us going forward. To me the significant factors for Australian producers are as follows:

- Bio fuel production in most places in the world is being driven by factors other than economics
- We should not necessarily become caught up in the wave of emotion surrounding bio fuel production locally, but rather enjoy the economic ride which global demand is bringing
- A new floor price has been set globally for cereals
- Australian producers should concentrate on filling the expected shortfall in global wheat production caused by the demand for corn, canola and soy

I will expand my views on the bio fuel industry further in the report.

Volatility within grains industry

Though we may not necessarily think it has been the case, the Australian grains industry has been reasonably stable for some time, especially with the single desk for wheat in place, and in some states barley. There certainly is some debate now though, especially in light of recent developments, about the full value of our historical marketing arrangements and their relevance forwarding the future. Whatever the individual views people may have I think we can certainly say that we are moving into a new era of grain marketing, which could impact people in many ways.

There is no doubt that the bio fuels revolution has put a new floor in grain prices, but it will potentially cause a new level of volatility not seen in the industry. This volatility will only be fuelled locally if we move into a semi or fully deregulated marketplace in Australia. This has obviously already occurred in our barley industry, and is also happening in the Canadian grains industry with a vote occurring recently allowing the disbanding of their single desk for barley, with talk of wheat moving along a similar line in the near future.

Volatility brings opportunity, but only to those who can read the marketplace and are prepared to spend time and resources on the grain marketing side of their business operation. Instability can be scary, but with a well thought out and monitored marketing plan in place there are great opportunities available in a volatile environment.

I believe those farmers who have the philosophy “my job is to grow the grain, not market it” may struggle under a new freer grain marketing arrangement, especially if they are not prepared to spend time on that arm of their business.

Value adding

In my travels I saw many opportunities of horizontal and vertical integration of businesses, with many value adding opportunities. These included feedlotters who had joined forces to build slaughterhouses in Canada, citrus growers owning juice plants in Brazil and producers getting together to develop food courts in a large office complex in Calgary.

One of the best examples was of a dairy in Iowa which is currently milking 6000 cows three times a day, and is planning on expanding to 18 000 cows within 2-3 years. All of the dairy is, and will be fed from corn and silage grown on their farm and others in the local area. Once the expansion is in place a digester will be built to convert the effluent produced into methane, which in turn will power an ethanol plant, utilising their own and local corn.

This ethanol will in turn be used on their own operation and locally, with the corn mash used within the dairy, and the effluent solids used as fertiliser back on their own property. While some of these operations are not economic in isolation - within this totally integrated, closed system each is supportive of the other. Though I find the figures difficult to believe, I was told that this closed system would save the business US\$8 million per annum in transport costs alone!

Joint Ventures

There is much to be said for traditional family farms, as a way of life, and especially in being in control of your own destiny and not being accountable to other parties. Becoming involved with other parties can be very confronting and uncomfortable to many people in many different ways, but joint or collaborative ventures offer many opportunities not as readily available to smaller operations. These include more efficient use of machinery and infrastructure, additional purchasing and marketing power, and potential for better utilisation of the available labour force by placing people in positions within the business best suited to their personal areas of expertise. The issue of accountability, often seen as a negative, can actually be a powerful tool to help drive a business forward

I saw many examples of joint ventures in my Nuffield travels, some of which I will provide more detail on later in this report. However, in nearly all cases well structured collaborative ventures were placing themselves in strong positions to take full advantage of agricultural opportunities which will manifest themselves more fully in the future, and some of which are available now. Though a lot of these are very large operations, there is plenty of potential for smaller operations to align themselves with their peers in order to create more sustainable and profitable businesses.

Education

You cannot succeed in agriculture unless you are prepared to continue to learn, and most farmers actively participate in this education process through farmer agronomy groups, farm management discussion groups, research organisations and the media. I believe one of the great opportunities in agriculture currently is for more farmers to take control of their own destiny and create their own opportunities by becoming more business savvy.

There are certainly many marketing, environmental, agronomical and management discussion groups around the country which bring like minded producers together to draw on expertise not available on an individual basis, along with the learning from their peers.

Around the world we are seeing more and more producers with business diplomas or qualifications which are readily recognised in the business community. There are also programs like TEPAP, or The Executive Program for Agricultural Producers, which is based in Texas USA. This is an intensive business training program for farmers with a structured follow up and mentorship program. I don't believe it is any coincidence that a lot of the top 20% of producers in the USA are TEPAP members, and the camaraderie and friendship between its participants over time has created many opportunities in their own right.

I believe targeted and continual learning is an opportunity available to all farmers, especially in Australia where government support is available through such programs as Farmbis. This continual education process can be the catalyst to the creation or recognition of potential opportunities. The Nuffield Scholarship program is certainly testament to the value of targeted and continual education.

"In business, the only truly sustainable competitive advantage is the ability to learn and adapt faster than your competition"

Jack Welsh – former chairman General Electric



Rich farmland in the Goiania region of Brazil

Corporate family farms

Before applying for this scholarship I had spent a considerable amount of time discussing with fellow farmers, consultants, accountants and advisors potential collaborative models which could work in cereal / livestock enterprises in Australia. Ultimately, most discussion would come back to the concept which I call 'corporate family farming'. It was part of my Nuffield objective to look at similar models around the world to see if it was indeed robust, and the potential pitfalls which could bring about its failure. The initial concept, along with a SWOT analysis is detailed below.

The concept

Three or four landowners would form a corporate body, to which they would all lease their own properties, as well as leasing one or two additional properties. The corporate shareholders would then sell off their own machinery assets and use the funds as cash equity in the new business. The corporate body would then use this equity to purchase, or use as leverage to purchase, the machinery required to farm the corporate property.

All the farms would be operated under the one corporate structure, with each partner's share allocation according to their capital input. Each landowner would receive varying rates of lease payments according to the size and value of their respective properties.

It would be envisaged that each of the stakeholders would each have specific roles and areas of responsibility within the business depending on their skills and interest. This could include one person being responsible for the cropping program, another for livestock, another for business management etc. However, the overall direction and management of the business would be overseen by all the equity partners, or the board.

The aim of the corporate enterprise would be to produce a high return on capital with low overheads, while maintaining opportunities for the shareholders to specialise in their areas of interest and offering a lifestyle which is attractive and flexible for their respective families. Due to the economies of scale it would also offer opportunities in grain and stock marketing, and purchasing power for inputs. It would also provide the opportunity to explore off farm investment as a corporate, including replicating the structure in other agricultural districts in the country as a risk management tool.

Utilising large machinery and a wider labour pool, there is more security if a partner were to become ill or injured, or if one of the partners was away when work was required to be done (i.e. an early break).

For succession planning purposes there would be less pressure on children to make early decisions about whether they wanted a farming future, as it would be up to the new entity to employ or provide the labour / skill base required to operate the business. If, however, one or all of a partner's children wished pursue an agricultural career they could become involved in the business in the area of their interest or skill. This could also allow the entity the opportunity to expand in size or diversity.

As each business partner would still own their own land, though under lease arrangement to the corporate body, if they wished to withdraw from the business at any time they would be able to do so subject to lease contracts which had been made or predetermined exit strategies.

SWOT analysis

Strengths

- Creation of economies of scale
- Utilisation of up to date machinery allowing access to new technology and lower maintenance costs
- Individual partners still own their land, and are well compensated according to value
- Business partners can specialise in their areas of interest / skill
- Security of income in event of illness / accident
- Ease of succession planning
- Higher return on capital with lower risk
- Lower overheads per property
- Flexibility – partners are not tied to their properties seven days a week
- Larger geographical spread of soil types / potential rainfall to spread risk
- Accountability to fellow partners
- Designated annual leave
- Lower break even point = lower risk
- Improved planning and reporting systems
- Improved decision making in a team environment

Weaknesses

- Not completely in control over own destiny
- Answerable to the board, not only to yourself (not necessarily a weakness!)
- High level of personal commitment, understanding of business structures and communication required from all partners
- Only have one voice in decision making process and can be outvoted. (May have to drive a red tractor when have a love affair with green!)
- Can't just 'do your own thing' all the time

Opportunities

- Marketing volumes of grain / livestock
- Pursue off farm investments as a larger business entity
- Improved access to new technologies
- Expansion to involve more properties / partners within the business
- Replication of the model in other districts as a risk management tool
- Partners could take an extended leave without their business deteriorating (i.e. overseas holiday)
- Business partner's children can go away to study or work and still have the opportunity to become part of the business, perhaps in a specialised area, when and if they decide they want to without any detriment to the business
- Utilise machinery efficiently by employing additional labour and contracting off farm
- Develop additional farm enterprises such as setting up a specialist feed lot to maximise livestock returns
- Form relationships with research / chemical / fertiliser / machinery companies with reciprocal benefits
- Sourcing outside investment in order to expand the operation
- Setting up a self managed superannuation fund for the entity, providing security for the future, and utilising it as a source from which the business can source capital funds

Threats

- Potential for friendships to be harmed or destroyed
- Emotions can get in the way of the business decision making process, especially when shareholders are utilising their own land
- Lack of communication resulting in uncoordinated business
- Business partners end up working harder than they did before, or the work responsibility not taken equally by each partner
- Animosity by the local community
- Drought in yr 1 after large asset purchases
- Government regulation put in place which discourages collaborative or corporate ventures



Organic Farm near Ludlow, Herefordshire, UK

Common Themes

My Nuffield study tour was spent visiting many businesses around the globe looking at how successful businesses operate, what structures they had in place, and where they saw agriculture in the future. I was especially looking at collaborative farming models, some of which I will detail later, assistance available for collaboration, sourcing of investment funds and diversification of risk. Throughout these discussions with a wide variety of farmers, business people and consultants, these common themes kept reoccurring.

1. It is a great time to be in agriculture

It didn't take too long into our Global Focus Program for this to become a common theme amongst most of the people we spoke to in agribusiness around the world, and it has only been reinforced during my individual travel. Led by the bio fuels revolution, but coupled with an increasing demand for feed grains from the livestock industry, there appears to be a new floor in cereal grain prices which hints at a very positive short to medium term future.

Despite the challenges this may prove for feedlotters, those involved in the livestock industry also appear positive due to higher disposable incomes and opportunities in the developing world.

Focussed agricultural businesses with an entrepreneurial focus are also attracting investment from the money markets looking at diversifying into new sectors. With the perceived potential in the agricultural industry, along with escalating land prices for production land, interest from the investment sector has increased substantially.

2. There is money available for agricultural investment

With superannuation companies accumulating funds at an ever increasing rate and a buoyant economy providing many with money to invest which may not have previously been available, the agricultural sector is now being looked at as an investment opportunity in a whole new light. And the size of the bucket is not insignificant, with several companies, linked to Superannuation Funds, Managed Investment Schemes and other investment sources, looking to invest upwards of AU\$100 million each into the agricultural sector.

However, the capital isn't available to all. Investors are looking for minimum investments of around AU\$5-10 million in any one enterprise, with a potential annual return of 10% in land based investments (5% growth, 5% yield), and between 12% and 25% on more risky ventures based on management and operations only. Most of these farm management investments involve joint ventures or leasing of land and utilising some or all contract machinery and services.

Historically cropping enterprises were seen as being one of the riskier agricultural areas for investment, but with the current blue sky outlook because of bio fuels the overall confidence in cereals has improved. This is the one area within agriculture which is creating the most interest at the moment.

But for professional investors to invest in agriculture there needs to be increased accountability and compliance which is mandatory amongst other investment sectors. For agriculture to be accepted as a solid and transparent investment there is a need to be able to directly compare the performance of agricultural investments with others, including publicly listed companies. One of the major criteria in determining the risk profile of a particular investment are the credentials of the management team and this has even greater prominence when the agriculture sector is analysed because of its perceived high risk.

In summary then, the investment community is looking to invest significant money into the agricultural industry in the near future, but such investments need to be on a large scale with potential high returns due to the risk profile. They also need to be run professionally by competent, highly qualified managers who have the ability to directly compare their performance with that of other sectors.

3. Farmers are their own worst enemy

Several people to whom I spoke involved in agricultural investment in Australia held the view that farmers have done a hatchet job on themselves and only have themselves to blame for their reputation. Farmers worldwide are all a similar breed, and have eagerly fuelled the perception of the hard working, underpaid, down trodden sector of the community. The media is always willing to jump on board and promote stories of hardship through droughts, floods, and low commodity prices, and farmers themselves have been quick to perpetuate the images they present as an accurate reflection of an industry which deserves sympathy and support.

But the reality is that farmers need to be highly competent business people in order to be successful in their own industry, and most are. But the public perception we have managed to create for ourselves has remained. In an era when farm businesses need to look closely at their systems and structures forwarding the future in order to capitalise on the opportunities which may become available, it is imperative we create a perception of a vibrant, professional industry in order to attract investment, skilled labour and public support.

4. Bio Fuels is not a fad – it is a revolution

“What bio fuels will do to the landscape of agriculture is equivalent to the changes made due to mechanisation”

Dr John Dunn – Director USDA

The statement above, made to us on our Nuffield visit to the USDA in Washington DC in March 2007, epitomises the views of people we spoke with during our six week global focus tour, and was reinforced during my private study. Historically agricultural production consisted of the three “F”s, - Food, Fodder and Fibre. Now we have added a whole new fourth “F” dimension with Fuel, and things may never be the same again.

But before we jump on the bio fuels bandwagon as the saviour of agriculture in Australia, we need to gain an understanding of what it can mean for us, and how Australia can fit into the whole international bio fuel picture. These are the facts as I see them.

a) Bio Fuels are not economic in their own right

Of all of the people I have spoken with globally over the past six months, this is a common theme, whether it be in Australia, Europe, or North America. Comparing apples with apples with production of other energy sources, and not including any levels of government support and subsidies, I was repeatedly told that the economics of ethanol, and in particular bio diesel, do not stack up.

Flexi-fuel cars which run on either gasoline or ethanol are commonplace in Brazil



b) The industry is politically driven

The reasons for the explosion of the bio fuels revolution has more to do with politics than it does with economics. Brazil, who are the world leaders in ethanol production and technology, developed their industry during the military regime of the 1970's and 80s. Without the energy resources domestically, and in an environment in which they found it difficult to trade, Brazil took the decision to create an ethanol industry to utilise its fantastic ability to produce sugar cane at a low production cost. At the time the decision was made it was deemed that ethanol was economic if the price of crude oil was more than US\$40 / barrel, which was certainly much higher than the price at the time. Today, with the efficiencies they have created within their industry and production facilities the cost of production is closer to US\$25 / barrel. The growth of the ethanol industry has seen the development of flex-fuel cars, which can use both gasoline or 85% ethanol or any mixture of both. The numbers of these cars produced in Brazil has risen from 48 000 in 2003 to 1 400 000 in 2006.

Brazil is also developing its bio diesel industry, and currently have authorised a 2% blend in their diesel, which is mandated to increase to 5% by 2012. Though they currently admit it is not economic to produce even under their conditions unless the price of crude oil is over US\$80 / barrel, they believe their history with ethanol will dictate that they will be the world leaders when the world reaches this economic environment.

In the USA, the industry is being driven by homeland security. Basically, the USA would like to become self sufficient in energy resources and is prepared to pay the price it takes to achieve this goal. This includes price subsidies, blending subsidies and tax incentives to build both ethanol and bio diesel plants, along with research for cellulose and new technologies. Between the USA and Brazil, they produce 90% of the world's ethanol.

Ethanol in Europe is being produced on a small scale, and is quite expensive using wheat and sugar beet. However, Europe produces 88% of the world's bio diesel, driven by high prices, a very strong environmental lobby, and a population which appears prepared to pay the price for clean, green fuel.

In Canada a bio diesel plant being opened in late 2007 will require an additional one million acres of canola to be produced per year, with plants in the pipeline by 2009 requiring an additional six million acres canola production a year.

With the environmental lobby gaining strength, and the green vote becoming more powerful, governments around the world are obtaining mandates for renewable fuel levels which will create a demand beyond levels previously experienced. For example, the EU has a current renewable content in fuel of 1% which is mandated to increase to 5.75% by 2010. Ethanol in the USA currently accounts for 2.6% of the total fuel market with a target of 6% by 2012.



Hand stacked sugar in a Sugar Mill / Ethanol plant in Brazil

c) Australia is in a unique position

While Australia also has incentives in place for renewable fuels, they are certainly not at the same levels, nor do they have the same political motivations as our overseas counterparts. The current incentives include excise concessions which are due to be phased out from 2011-15 and a renewable fuels target of 1% by 2010.

So, while becoming involved directly in the production of bio fuels in Australia could well be seen as economically risky, there are fantastic opportunities which are being created. We have the opportunity to fill the void in cereal production being caused by the huge increase in areas being planted to sugar cane, corn, soy beans and canola overseas. There is already a substantial corn premium being built into the world wheat price which we are in prime position to capitalise on without being exposed to the risks of being involved in actual bio fuel production.

Even if world oil prices fall, the huge investments in ethanol and bio diesel plants globally will dictate that they will need to continue to operate. One ethanol plant I visited in Nebraska needed 200 semi trailer loads of corn per day, 365 days a year, to remain at capacity. It was one of thirteen such plants in Nebraska, with another eight ethanol plants under construction to come on line within two years in Nebraska alone.

A new floor price in grain production has been set.

5. Volatility within the grains industry will create opportunity

Earlier in this report I wrote about the opportunities which can be created by volatility within the grains industry, and this certainly was a common theme amongst leading farmers, traders and consultants to whom I spoke around the world. This volatility is certainly being fuelled by bio fuels, but also by a growing intensive livestock industry globally, deregulation of the Canadian grains industry, instability in the Australian grains industry and the formation of a new US Farm Bill. While we might feel that we are a small player in a large field globally, I have personally experienced first hand the impact production problems in Australia can have on the world market. In the early part of September 2007 I had the opportunity to stand on the floor of the Chicago Board of Trade, on the top step of the wheat pit amongst jostling traders, as the bell rang to begin the day's trade. In the ensuing throng which followed (which felt like being at a footy match), the market fell US\$0.20 / bushel on the strength of a positive ten day weather report from Australia. Forty five minutes later, with the market slightly settled at US\$0.25 /bu down, there was suddenly a roar which emanated through the room and traders rushed towards the wheat pit screaming. As I watched, the futures rose about US\$0.20 in about 2-3 minutes, while corn remained unmoved. The reason? – an updated weather forecast from Australia just filtered through which was not quite as positive as the one two hours earlier, causing an astonishing market reaction.

Capturing opportunities caused by the volatility is not easy, but there is opportunity there. Historically, farmers in Australia and around the world have relied on others to market their crops, but in the new environment in which we find ourselves this needs to change. Grain Marketing consultants and marketing groups are springing up both in Australia and overseas, and it is through these new relationships that opportunities can be realised. However, it is very important that individual farmers become familiar with the fundamentals of grain marketing and the factors involved in grain market forces, even if utilising consultants or brokers, in order to fully understand all the facets which may affect their business.

Understanding how to calculate the break even price for their grain and hedging a portion of their crop at profitable levels will be important for future cereal farmers. But there is also opportunity to form vertically integrated alliances with end users to reduce some of the volatility risk to the farm business.

6. You need to differentiate between agribusiness and real estate

One of the unique aspects of Australian agriculture is that because of the history and culture of family farm ownership, most Australian farmers farm their own land. This is in contrast to many overseas countries where the level of leased or rented land is much higher. For example, in USA and UK up to 80% of all land is farmed by people who do not own the property. As a result, when we consider profitability of farming operations in Australia, the land and business operations are generally considered as a whole. This can in many ways mask underlying weaknesses in the business operation, or the sustainability of the business as a whole. For example, if land values are growing at 10% pa, and the farm business is returning a loss of 5% on asset, the overall business is still growing at 5%.

By treating the real estate on which you farm and the business you operate on that farm as two separate enterprises it is much easier to make sound financial and business decisions based on the performance of those enterprises. For example, you may determine that it would be more profitable and sustainable to rent, lease or share farm land rather than tie up capital in land purchases for future development. Or it may be a good business decision to lease or share farm your property to a neighbour, allowing you to continue to reap the benefits of increase in land values along with a guaranteed income which may be higher than is currently being achieved on that farm, without the stress and workload involved.

Just as a mixed farmer needs to be able to calculate the true costs of his inputs and the true profitability of each enterprise, despite different aspects of his operation being integrated to create efficiencies, a farmer who runs his business on his or her own land needs to be able to calculate the true profitability and sustainability of both enterprises.

Farm land in Germany is worth over €15 000 per hectare.



7. Never, ever own machinery

A pretty big statement I know – but one which I heard many times, especially from larger agricultural investment companies in Australia, many of which follow this rule. The issue isn't really the *actual* ownership of the machinery, but rather the *efficient* ownership and usage of machinery.

While in the UK I was told that figures from Claas Challenger stated that there were 14 000 combine harvesters in the United Kingdom for an area which could be comfortably harvested by 4000 Claas Challenger 480 combines within an acceptable time frame. In the USA a similar story from John Deere stated there was six times the capacity of combine harvesters needed in their country.

One of the great limiting factors in growth in the agricultural sector is the over capitalisation in machinery. There are many factors involved in this very touchy subject. Timeliness of operation, utilisation of developing technologies and being in total control of the operation and maintenance during critical periods in the cropping cycle are very valid arguments for machinery ownership, and cannot be disputed.

However, businesses need to fully understand the true cost of owning their own machinery, compared with investing that capital in other income producing investments and utilising machinery from other sources. This could include conventional contracting, a joint venture with a machinery contractor or neighbour, or involvement with a machinery ring.

Within each business there is a tip point at which machinery ownership becomes economic and profitable. For businesses below this point decisions should be made to either utilise outside machinery, or use their machinery more efficiently by increasing scale. This could include purchasing land, leasing, share farming or providing contracting services to other farmers to better utilise the asset.

8. Create cells and replicate them

Most of the larger investment schemes work on this principle, and it is one which is imperative to create the maximum efficiencies within a collaborative business. If a decision has been made by an entity to own its own machinery, then it must fully understand the costs to the business in owning that machinery and utilise it to maximum effectiveness. The best way to do this is by creating operating cells of optimum efficiency and profitability, and replicating them as a means of growing the business.

Cell sizes would alter depending on area and soil types, but an example could be as follows:

- 4000 hectares of cropping land
- 1 x 60ft airseeder
- 1 x 400HP tractor
- 1 x 120ft spray rig
- 1 x 42ft Combine Harvester
- 1 x 25t Chaser Bin
- 1 x 110t Mother Bin
- 2 x labour units

This “cell” would be developed to farm a determined area of land as efficiently and effectively as possible. In considering expansion in the example, the business would attempt to source an additional 4000 ha and replicate the cell. If smaller blocks of land were accumulated over time, it may be considered more economically viable to use contract machinery for the additional land until enough property was brought together to create another efficiency cell.

This principle is used by several large investment companies and farming operations in NSW, Victoria and WA. It was also central to the philosophies of the large corporate and cooperative farms in the UK as well as several very efficient large scale farming operations in the USA.

Cell replication and its application to agricultural businesses are basically using a lot of the principles of franchising applied to farming.



PX Farms near Cambridge in UK contract farm additional area to maximise machinery use

9. Employ people who are cleverer than you are

I write and produce a Christmas production called “Little Town” in my home town of Loxton. It involves over 120 people and has become a very successful tourist draw card for our region at Christmas each year attracting thousands of people. One of the reasons I believe it has become so successful is I realised early I have very few skills in many of the required areas. Therefore I set out to bring in people who are far more talented than I in making such a production happen. This is not always an easy thing to identify and do.

In most of the successful farming businesses I met worldwide a similar philosophy came through repeatedly. You do not have to know everything about every intricate aspect of your business. But, if you have the ability to source or collaborate with people who have expertise in areas you are lacking, have the ability to manage those people, inspire them with a vision, keep them focussed on a common goal, and generously reward them both financially and mentally, then your business will grow and prosper. Though this may sound simple and logical, most would admit that it can be very difficult to recognise areas in which your business may be lacking, and acknowledge your own personal weaknesses which could be built up by more highly skilled outside sources.

10. Create an environment of win – win

Unfortunately in a lot of business relationships one party seems to come out in front at the expense of others, and negotiations occur with the intent of how far the other party can be pushed before they crack. One of the common themes in the successful collaborative business partnerships I witnessed was the need to develop strong relationships between all parties, and for all parties to feel they were benefiting from the arrangement. In many of the joint ventures I studied in Australia, UK and North America, a great deal of emphasis was placed on building long term relationships between all parties, and the creation of an atmosphere that if one is winning, everyone is winning. This can come about in the form of flexi-leases, whereby landowners receive a base rent, and share some of the rewards of a high production year. This means they also take on some of the risk of a drought, which assists the lessee with their risk level. Similar arrangements can be put in place with machinery contracting. There were many and varied examples where business partners shared the risk / reward. I also met owners who had leased out their land and were still able to live on their own properties, have input into the management of their land, and feel a part of the business through many and varied benefits, not all of which had a financial aspect. Happy business partners who talk positively about their relationship create successful businesses.

11. Think strategically

Danny Klinefelter, a professor of agricultural economics at Texas A&M University, tells the story of hockey star Wayne Gretsky, who was once asked what he thought accounted for his success. Wayne said that he knew he wasn't bigger, stronger or faster than most of the people he played against. What made the difference for him was that most players went to where the puck was, while he always tried to go where it was going to be. This is a classic example of strategic thinking.

Most farmers are very good at what they do, and this is mainly the physical operations in running a successful farm. However, when looking forward an operational manager will ask "how can I develop my business with the skills and resources at my disposal?" while a strategic thinker will say "this is what I want to build" and set out to source the skills and resources he needs to build it.

"The main difference between the top 10% of farmers and the rest in the top 25% is almost entirely a result of timing"

Danny Klinefelter

12. Emotion and personality can destroy any business relationship

In all the interviews I had with business people on my study tour, when I asked the question about the greatest challenges involved in putting together and sustaining a successful collaborative venture, the answer was always the same.

Emotion, emotion, emotion.

There are two levels on the emotional scale which can make or break any business relationship, and especially one which involves bringing together a number of businesses under a new structure. The first is the differing personalities of the individuals involved and how they can be managed in an effective relationship, utilising the strengths of those personalities for the benefit of the new business.

The second is the emotional attachment to their own business or land which an individual or family may bring into a new business structure. While the personalities and emotions of the main business partners are certainly important, one area which is sometimes forgotten but is equally as important is the feelings of the partner's partners, which can indirectly tear apart the most robust arrangement on paper.

There are many differing opinions on how to handle the subject of emotion and personality, but the fact remains that they are probably the greatest threat to the success of any collaborative venture. Most successful ventures have stated that it is imperative to have a comprehensive business plan, with clear entry, exit and conflict resolution clauses which can be drawn on in case of a dispute. Involving all business partners, and where possible partners', partners in preliminary discussions, as well as personality profiling, are all seen as positive steps to negating problems which may occur.

John Latham, who is a director of a farming joint venture in the Cambridgeshire area of UK, actually sold his family farm and bought another in a neighbouring area which became part of what is now AWT Ltd. While many would find this very difficult, especially when a property had been in the family for generations, this allowed John and his family to remove the emotion from his involvement in what is now a very successful farming joint venture.

While most agree emotion and personality can cause difficulties in any collaborative arrangement, all agree that if a professional, business approach to the business is put in place, any potential problems can be allayed and are outweighed by the other advantages such a venture brings.

Differences in personality should be embraced within any business as they encourage diversity and scrutiny from different perspectives. If differing opinions mean ideas are challenged, this brings a higher level of accountability to the business in general. If this can be managed effectively, a range of personality traits can only strengthen the development of a company.

"If two people in business agree on everything, then one of them is superfluous"
Henry Ford

13. Don't let people tell you it can't be done

Nearly all the people I have spoken with involved in successful collaborative ventures told me stories of people who said it couldn't be done. Many people are scared of the unknown, and are not able to comprehend structures and arrangements outside what is considered the norm, and so do not believe they are possible. In many cases these beliefs are based on the fact that some consider any arrangement which is a bit outside of the square must be designed to take unfair advantage of one of the parties, which in most cases is certainly not true.

In reality the fact is that in creating entrepreneurial businesses there are no rules outside the laws and regulations by which you are governed. In countries like the USA there are some disincentives for collaboration within the farm bill and also as the result of some individual state legislation, all of which need to be taken into consideration. Conversely, in the UK there is government and industry support, including incentives and grants, for collaborative ventures. In Australia we are fairly conservative by nature, but there are big opportunities there for those who are prepared to look at structures which may be a little outside of the square. The reality is, if you are able to create collaborative business structures which benefit all parties, are within the laws of the land, and also create positive social outcomes for local communities then everyone is the winner.

“There are no secrets to success. It is the result of preparation, hard work and learning from failure”

Colin Powell – “The Black Collegian”



Planting sugar cane by hand in Brazil

Worldwide Models

One of the common misconceptions that was soon dispelled in my travels was how disadvantaged Australian farmers are compared with our overseas counterparts due to government support programs in places like the European Union (EU) and North America. While this could be a topic in its own right, I will comment that the standard of living amongst all the farmers I met in western countries was very similar despite being subsidised at substantially different levels.

It is my view that these levels of income support, designed to maintain the viability, profitability and lifestyle of farmers, are ultimately capitalised in land values. Because of this, creating economies of scale and production efficiencies was just as important wherever I travelled, despite the differing structures under which they operated.

While I visited many collaborative businesses, operating under a multitude of differing structures, these are the models which had the greatest impact on shaping my own views.

Australia

Most of the development of collaborative and corporate models in Australia appears to being driven by the investment sector, utilising funds sourced through Managed Investment Schemes, Superannuation Funds and private investors. Currently there is a great deal of interest in investing in secure cropping regions due to the huge potential that food, fodder and fuel production offers for the future. A lot of this collaborative development is being driven from the top down, with institutionalised investors targeting high investment returns without having large amounts of capital tied up in real estate and machinery.

Aurora Agriculture – Moree, NSW

Aurora Agriculture is an agricultural management company, managing farm investment operations for a Managed Investment Scheme. It is based in Moree, NSW and has contracted properties across NSW and Victoria. It strategically targets intensive cereal production and is agronomically based, with little consideration for livestock within their operation. Aurora enters into joint ventures with local farmers to lease land under flexi-leases, and then contracts either the landowner or another local farmer to provide the contracting services to that business arrangement under its guidance and control. It is interesting that it appears to be a policy of Aurora and the investors they represent not to own any property or machinery.

While leases may vary, an example of a flexi-lease with a landowner may be as follows: An optimum lease figure is negotiated, based on an average production year. Half of this lease payment is paid as a minimum up to a predetermined base yield, with incremental increases up to the agreed average production level. If the yields are above average, the profits for the business (after all expenses) are split on a predetermined level between Aurora (on behalf of their investors) and the landowner.

The operations of the property may be determined as follows: Aurora may contract one property in an area from a landowner who does not wish to have an active interest in the property. They may then lease a property from another local farmer, and contract him to farm both properties, allowing him the opportunity to upscale his machinery and utilise it to maximum efficiency, at a low risk to his own business. Alternatively, the contractor may retain his own property, and be contracted to farm the Aurora property under strict timeliness and operation guidelines. This gives the farmer all the benefits of having his own property along with the security of the contracting to maximise his machinery efficiency.

Aurora provides all the management of the business, including agronomy decisions, marketing, purchasing of inputs and full financial control on behalf of their investors.

In a unique venture, Aurora also offers flexi-leases on a share of a business. As an example, a farm business could lease half of their farm to Aurora on flexi terms, have them provide the inputs and make the business decisions for that portion of their property and be paid contract rates for farming it. This means divesting a portion of their risk (and reward) to an outside source, with some security of income (through the flexi-lease and contracting) on a part of their property.

With the view to create an environment of win-win in mind, Aurora also encourage the lessees to have an active interest in the management of their properties, and in some cases have created agreements between the landholders and carbon trading companies to lease out unproductive portions of their land.

Grass Farms – Tumberumba, NSW

Grass Farms is also an agricultural management company, but specifically targeting livestock production in high rainfall areas, with some recent diversification into cropping due to increased interest from investors. It is based in Southern NSW, with properties and business interest throughout NSW and Victoria, with most of its money sourced from private investors.

Grass Farms also enters into joint ventures with local farmers using a unique lease type arrangement and utilising local contractors. As with Aurora, its business is based on agribusiness and not the ownership of land or machinery. Landowners are offered a minimum rent, along with a predetermined share of profit after all expenses, including all inputs and machinery contracting. This does not include management fees which are paid from the investors' return. The profit share for the investor and landowner are determined on an individual farm basis, depending on soil type, climate, and past performance of the property, targeting a return on investment of 20% for the investor in an average production year.

Contracting services for the business are generally offered to the landowner, or another local farmer, under the strict guidance of the agronomists and management team of Grass Farms.

DIRT Management – Horsham, Vic

DIRT Management operates a number of properties throughout Eastern Australia for Warikei Trust, which is funded primarily through Rest Superannuation. The 35 000 hectares under DIRT Management's control was once 52 farms, each with a turnover of between \$250 -350 000, which are now consolidated into nine farms with an average turnover of between \$2-3.5 million per annum.

While all of the land is owned by the trust, nearly all of the operations are contracted out under the management of DIRT. It is 100% cropping focussed and operated using the concept of "recipe" farming and a systems based approach. This includes beginning seeding on a specific date for each farm each year, despite seasonal conditions, and not planting beyond a determined finish date. There are also systems based benchmarks put in place to assist with all of the farm management decisions which need to be made. This "recipe" approach, tied to the use of contract machinery, means farm expenses are a known quantity in any given year taking out some of the volatility for investors on the input side. With properties spread across a large geographic area, reducing production risk, a large portion of the crop is forward sold targeting a final price 25% above the projected AWB wheat pool.

The Superannuation companies aligned with DIRT are looking for long term, consistent results; hence the combination of land ownership and the "recipe" farming approach, targeting 4% growth and 6% yield over a sustained period.

The founder of DIRT Management, Frank Delahunty, is currently involved in the formation of a new Australian Farms Fund, which is looking at using the DIRT Management approach across a more diverse range of investment opportunities, including horticulture, livestock and forestry.

Other Models

As the terms of trade tighten in Australia, more and more collaborative models are appearing, and will continue to appear on the agricultural landscape and help shape our industry as we move forward. These include companies such as Australian Agricultural Contracts Ltd (AACL) which will enter into an arrangement whereby they finance the growing of the cereal crop (using MIS Funds) through a grain co-production contract, thereby taking on much of the downside risk on behalf of the farmer. The crop is then delivered to AACL who market it on behalf of their investors, with a percentage of the crop paid back to the grower dependant on production. While not for everyone, it certainly provides additional options through collaboration for farmers to continue to farm, and as such is a valuable addition to the agricultural industry.

There are other collaborative models in Australia which also have much to offer including buying groups, marketing coops and machinery syndicates.



United Kingdom

British agriculture is built on a base of historical land ownership, which has so escalated in value in the past decades that agriculture can certainly not deliver a true investment return. In fact land is only considered an investment because of secondary opportunities available through land development, renting out of resources (i.e. barns for office space), non agricultural businesses (tourism, pheasant shooting, fox hunting) and environmental schemes.

As the average farm size in the UK is 57 hectares (and the average field size 3 hectares) the UK farmer is being forced into collaborative ventures in order to survive. This is due to the historic ownership of small parcels of land, the inability for expansion due to unrealistic and uneconomic (in agricultural terms) prices of farm land, and inefficiencies created through a subsidised system. The Single Farm Payment, available under the EU's Common Agricultural Policy, provides the basis for the income stream for landholders. In most joint ventures the base level receipt for the land owner is the Single Farm Payment.

Whilst it appears there is a lot of collaboration in the UK, I believe this is partly because of government pressure and incentive (up to 30% grants available for collaborative businesses to build infrastructure – i.e. cooperative grain storage) which we don't see in Australia

Farmers in the UK seem happy to move partially towards collaborative ventures (i.e. machinery rings, grain co-ops, limited JV's) but seem to draw the line at full and integrated collaborative ventures. They seem prepared to dip their toes in the water, but not commit fully.

I believe there is potential for even more efficiencies through collaboration in UK, but this is being stifled by the Single Farm Payment, Country Stewardship Program (an environmental support program) and the fact that total farm incomes are not determined by production from the available land, but also from other sources (i.e. renting out barns, pheasant shoots, tourism etc). There also appears to be no motivation to bring in outside investment into agriculture, partly because of the level of equity landowners have in high value land.

English Farming and Food Partnerships (EFFP)

The English Farming and Food Partnerships (EFFP) was set up in the UK in 2004 post Foot and Mouth and BSE, and is designed to assist farmers in collaborative activity. It is partly government funded, and partly through voluntary subscription (mainly industry). It is anticipated that the government contribution will decrease as the private subscriptions increase and the industry takes more control over its own destiny. The EFFP provides workshops and initial consultations with farmers in an innovative program called “Share to Farm”, to plant the seed and be the catalyst for collaborative ventures.

7Y Machinery Ring, Leominster, UK

Based in an area between the Severn and Wye rivers in the Herefordshire region, 7Y has become a very successful and important service company in the region, and is one of several machinery rings in the UK. Based on collaboration between farmers, and totally service oriented, 7Y act as a link between the providers and users of machinery. After becoming a paid up member of the machinery ring, farmers can offer their accredited machinery for hire at a determined price. 7Y matches the machinery offerer to the machinery demander, and charges a 2% fee to each side of the transaction. As all hire charges are paid through 7Y as an intermediary, there is guarantee of payment to the machinery owner.

Unfortunately the machinery ring has some shortcomings as it is easy to bypass 7Y once farmers know where they can source the machinery without paying the fee. To combat this 7Y has developed a whole range of niche collaborative services, including sourcing best available fuel prices, grain marketing, OH&S and compliance training. They also provide a labour supply service across a range of local industries. 7Y began as a farmer cooperative, is now a limited company, and is designed to encourage collaboration at as many levels as possible.

AWT Ltd / Camgrain – Cambridgeshire, UK

John Latham, mentioned earlier in the report, is the Chairman of a farmer grain cooperative called Camgrain, and a partner in a joint venture (JV) called AWT Ltd.

Camgrain is a grower cooperative for the storage, cleaning and drying of grain. It is currently building a 25 000 tonnes facility near Cambridge, which they plan to expand to 175 000 tonnes in the near future. To become a member and purchase storage space in Cambridge currently costs £60 tonne. Camgrain also offers pooling and pricing options through a marketing group to sell the grain if required. With the incentive grants for collaborative ventures, purchasing storage space in a company like Camgrain offers the grain growers many opportunities, and is seen as being more economic than building storage individually.

AWT is a limited liability partnership, which has all the benefits of a partnership with some liability protection, and is indicative of the joint ventures currently being set up in the UK. Each of the four partners had approximately 400 hectares, which they brought together under the new structure, along with an additional 400 hectares leased to give a total of 2000 ha.

The four individual farmers sold their own machinery and contributed capital towards the new venture on a percentage share. All of the partners are individually billed and receive income according to their percentages, which allows them to market their own portion of grain, and handle their own finances on an individual basis.

The farms are block cropped, which could mean one whole farm is sown to wheat, another to oilseed rape (canola), another to barley etc. which creates efficiencies across the scale.

Farm managers are appointed (usually from within the partnership, but not always) who are paid £5 acre for management services plus a percentage of profit above a determined level. All labour is contracted into the partnership (either by partners or others) at a determined level. The partnership may also take on other contract farming agreements, with costs paid and income received according to share percentage.

The Single Farm Payment remains with the landholder, and is deemed as the lease fee by AWT, and all the environmental schemes (i.e. the Country Stewardship Program) remain the responsibility of the landowner, many in turn who just use contractors to do the work.

As the four partners are also members (actually directors!) of Camgrain, with the storage facility being built in the midst of their properties, there are many efficiencies and opportunity for vertical integration between the two businesses, creating additional economies of scale and opportunity.

AWT Ltd is a very good example of a successful joint venture, but there are many variations on the theme in the UK, but all with these common threads:

- Joint ventures are designed around maximising the Single Farm Payment, which is only available to bona fide farmers.
- In order to be deemed a bona fide farmer, the individual needs to be seen to be contributing towards the costs of, and reaping the rewards of the farming operation. As a bona fide farmer, there are tax concessions available on private houses, as well as relief on death duty / inheritance taxes. No individual will become involved in a JV if it puts their “farmer” status at risk, even if they are not actually physically contributing to the business operation.
- The Single Farm Payment generally becomes the payment for land use to the landowner.
- There is a great deal of use of consultants, due to the very complicated nature of the agreements, mainly in order to optimise the support payments.



Camgrain are building 175 000 tonnes of grain storage as a collaborative venture in the Cambridgeshire area of UK.

Contract Farming / Simple Joint Ventures

About 80% of all land in the UK is farmed by people who do not actually own the land. This has led to a natural form of collaboration as machinery and landowners come together to form simple joint ventures, an example of which is as follows:

- Landowner supplies land
- Landowner supplies finance and pays the accounts and manages the books. All accounts come to contractor, who checks, and passes to landowner
- Contractor manages all operations
- There are agreed total contracting costs which are paid to the contractor, preparation to harvest (maybe £200/ha). This is usually called a “stubble to stubble” contract
- Landowner takes first share of profit after all expenses at a set rate / ha (i.e.£5/ha)
- Balance is shared 50/50
- Landowner also receives Single Farm Payment which could be another £200 /ha.
- Both parties in a normal year would receive about the same. However, the landowner is carrying more of the risk, but the contractor needs incentive to grow the best crop.
- If there is an extreme shortfall (price, production problem) then the contractor is guaranteed his payment, at the expense of the landowner (ie: the CAP funding would go into the account to fund the shortfall.
- There is agreement on rotation, input costs and marketing plans.
- Most JV's are 3 + 3 yrs.
- In order to be a bona fide farmer there cannot be a straight lease payment as the landowner would not be a trading entity in the eyes of the law. The JV arrangement and first share are allowable as a landowner trading identity.

USA

In a country where “big is best”, capitalism rules and large multinational corporations dominate, it is surprising that in many ways there are actually disincentives in place in the United States for collaborative ventures. In fact, in some states there are anti corporation laws in place to “protect” the family farm from the possibility of large multinationals moving in and taking over large areas, potentially decimating local communities.

In the USA there are approximately two million “official” farms, however 35 000 farms produce 50% of total income and 12% of all farmers produce 75% of gross farm income. Many of the smaller farms are owned by “old money” and exist as lifestyle farms. If it can be proved that you “farm for profit”, which means the property needs to show a profit two years out of seven, then losses from that property can be written off against other income. To be officially deemed a farmer in the USA from a census standpoint, the property needs to have the “potential” to produce US\$1000 income per year.

Most of the support programs within the US Farm Bill have maximum payments which will be allocated to each “entity”, usually in the realm of about US\$40 000 depending on the program. This creates difficulties for collaborative ventures because as they create efficiencies and economies of scale they are potentially capping their income support potential. As a result, many very elaborate business structures have been created in order to maximise the payments from the farm program. These may involve the creation of limited liability “C” corporations within a larger business structure, each attributed to an individual person. These “C” corporations are considered bona fide farmers according to the law (if anti corporation laws are not in place) which allow the collaborative business to maximise its Direct Farm Payment. Because of the predominance of absentee landlords, there is a high level of renting / leasing of land with some farmers renting land off dozens of individual city based landowners.

When writing about opportunities available through agriculture earlier in this report, I mentioned the TEPAP program which involves top level producers coming together for intensive training in business development, strategic management and financial performance. This program, developed by Professor Danny Klinefelter at Texas A&M University is in its 17th year, and appears to be the benchmark in agricultural managerial education and mentorship. Several of the top producers I met on my travels through the mid west were graduates of the TEPAP program, and all spoke in glowing terms of its benefits and the need for continual education in these key areas in order to identify, pursue and successfully exploit the many opportunities available to enterprising agricultural businesses in the future.

“If you know what you don’t know, you need training. But, if you don’t know what you don’t know, you need counselling.

Dick Wittman, TEPAP graduate and Ag Consultant

Farm Partners Supply – Harlan, Iowa

Farm Partners Supply (FPS) consists of three farms in Iowa and Indiana totalling 5000 hectares growing corn and soybeans. There are approximately twelve landowners in each of the three “cells” which rent their properties on a six year lease to a locally formed partnership consisting of several “C” corporations. Some of these “C” corporations are landowners who have rented their land to the partnership.

Farm Partners Supply owns all machinery, operates crop insurance agency, procures all inputs, loans operating capital, provides services, marketing advice and value added processing (through other businesses – i.e. hay processing, dairy etc). The partnerships (cells) lease the machinery and services from FPS at commercial rates. Their aim is to maximise machinery and labour across all farms, with the objective of keeping machinery investment at less than US\$80 / hectare. Their targeted return on investment is around 30%, which they have come close to achieving over the past twelve months.

Their aim is to grow by recruiting partners, not by chasing land, and by identifying and utilising every individual’s strengths within the business. Business decisions are based on being a “meritocracy”, which means the opinions of people who have expertise in a specific field carries the greatest weight in the decision process.

The overarching investment company under which Farm Partners Supply operates, Weih’s Partners, is a fully integrated business including FPS (corn, soy), a pig farm in Belgium, cotton farm in Brazil, a 6000 head dairy, and a new business venture involving an intensive undercover sheep feedlot.

With an emphasis on value adding and vertical integration, WEIH’s Partners and Farm Partners Supply are looking at further developing their 6000 cow dairy into a fully integrated closed system. Currently all of the fodder for the dairy is supplied by Farm Partner Supplies and other local farmers. With plans to expand the dairy to 12 000 cows in 2008, and potentially 18 000 within a few years, a digester will be built to convert the effluent from the dairies into methane. This gas will be used to power a 75 million litre a year ethanol plant, which in turn will utilise corn from their own farms and others in the local area. The solids from the effluent will then be spread back on the corn fields, the corn mash used as a fodder source for the dairy, and the ethanol utilised on the farms and sold to the fuel industry. This totally integrated closed system is expected to provide savings to the company in the vicinity of US\$8 million in transport costs alone!

“All organisations are perfectly designed to get the results they get”

Tony Smith, Farm Partners Supply, Iowa



Farm Partners Supply's 6 000 cow dairy in Harlan, Iowa, soon to be expanded to 12 000 head.

Future Vision – Kathryn, North Dakota

Vaughn and Dorinda Zacharias had a family farm of 1000 hectares in 15" rainfall country near Fargo in North Dakota. They joined together with two neighbours in 1999 in a general partnership; placing their total of 2400 hectares under one simple business structure (North Dakota has anti-corporation laws which do not allow a formal corporate structure). They then sold off their individual machinery and infrastructure, and purchased what they needed to efficiently farm their new enterprise.

Eight years later, they crop 6400 hectares, leasing land off 20 individual landlords using flexi-leases which allow both parties to share risk /reward

They have built 25 000t of grain storage to effectively manage their grain marketing, and purchase their inputs in bulk, including 300 000 litres of diesel storage. When they initially doubled in size in 1999, they had immediate input savings of 22%.

They own all of their own machinery, but utilise it all to optimum efficiency. They own eleven pieces of John Deere machinery, all of which are traded within 12 months of new, with huge dealer incentives. In fact the three combine harvesters were only on the farm for 6 -8 weeks from purchase to resale.

Their business plan involves building the business by creating production, machinery and labour cells of 5500 acres, which are replicated to make the most efficient use of infrastructure.

Vaughn and Dorinda also collaborate on an intellectual level, and are actively involved in the TEPAP program detailed earlier. Building relationships with all members of their team, as well as treating their supply network as fellow team members is seen as integral in order to create an atmosphere of win-win for all involved.

In the words of Vaughn Zacharias: “If you aren’t growing you are dying”.



Future Vision's machinery is all traded within twelve months of new.

Conclusions / Recommendations

It is a great time to be in agriculture, and there are many opportunities which are opening up for enterprising farmers around the world. Several farmers during my travels insisted “This is our time”.

At the same time it is a very difficult time to be in agriculture, with declining terms of trade and the tough climatic conditions our own country has been experiencing.

But we are not the only ones doing it tough. Many times our opportunities come as a result of the misfortune of others, just as the worldwide markets have capitalised on our own misfortune over the past few years.

But I believe collaboration will allow many more farms to survive, and with strong business structures and principles put in place – to thrive in the future. The huge advantages which can be created through economies of scale, efficient utilisation of machinery and labour resources, value adding and marketing, also place such businesses in the best position to capitalise on the potential for outside investment which IS available to businesses which can demonstrate a high level of profitability and sustainability.

There are no rules, just opportunities.

I believe the Corporate Family Farming model I outlined earlier in the report does have a huge amount of potential in Australia. We are not restricted by agricultural policies which create disincentive for cooperation and are in a time in history where, with the bio fuels revolution, and a volatile local grains industry, we are in a position to make a significant contribution to the agricultural development of our nation. We can do this through the creation of business models which not only make our properties more profitable and sustainable, but also preserve their integrity and heritage for generations to come.

I think that there should be far greater support for collaborative ventures from government and industry, as the economic and social benefits from having thriving businesses in a community can be far reaching. In the UK I was impressed by how supportive and encouraging govt and industry were towards collaborative ventures, which included substantial grants for the development of, and contributing to the costs of joint ventures. The UK model of the English Food and Farming Partnerships (EFFP) is certainly an example worth considering in Australia.

I also believe we need to continue to develop business leaders in this country who can be entrepreneurial and think outside the square, and Nuffield Australia certainly leads the way in this respect, but alliances with groups like TEPAP in the USA would only help to develop networks which could further build our industry.

We as an industry also need to put a more positive face to agriculture. If we are to capitalise on the opportunities which may become available, it is imperative we create a perception of a vibrant, professional industry in order to attract investment and public support.

Once again I would like to thank Nuffield Australia, my sponsor ABB Ltd and my family and friends for their encouragement and support.

It was also fantastic to travel with such a diverse and stimulating group of fellow Nuffield's who I am now proud to call my lifelong friends. I am now looking forward to the next phase of my life, with this experience behind me, to help build a healthier, stronger and more economically viable agricultural industry.