Strategic Planning

Prepared by Ross Wilson, AgFirst

With the harvest nearly over, May and June are great months in the orchard calendar to carry out your strategic planning. In recent times, the “Future Orchards” project has made a real effort to improve the resources available to growers within this subject. This article serves as a good reminder of all the issues you should consider to ensure your business is well-placed for the future.

Orcharding is a complex business with the owner/manager needing to manage climatic risk, market risk, the technologies required to grow high quality fruit and the labour needs that a horticultural business entails.

Climate Strategy

Managing climate in a fruitgrowing context is important all around the world, but the requirements of the Australian grower are some of the most demanding. The growing regions of Australia can have reasonably high risk of frost, hail, drought, and heat stress to name a few.

As the demand for consistency and fruit quality becomes higher and higher, the need to manage climate is becoming more and more demanding. When you sit down and do your strategic planning in May and June of this year, you will have to identify which climatic risks are currently too high for you to have confidence in being able to produce a high quality crop.

For example, are your water supplies adequate for the area you want to farm? Does the hail net need to cover a greater proportion of the orchard and if so, how much can your business afford to do next year?

Variety Mix

Variety mix in an orchard business is absolutely critical. Fashions change, consumers’ expectations continue to evolve, markets change. Continually we must be asking the question “is our variety mix profitable now and is it likely to be profitable in the medium to long term”?

Will standard Cripps Pink be able to deliver a viable return in the future with the big volumes of the high coloured Pink Lady strains becoming available? Will the standard strains...
of Fuji be able to compete with the greater and greater volume of the high colour strains?

What new variety options are available to me that, a) have a good chance of success in my microclimate, and b) are going to deliver premium returns in five to ten years time? The variety mix decision is critical.

New Planting Systems

One of “Future Orchards” main objectives over the past 7 years has been to introduce to the Australian industry, modern intensive planting systems. The orchard business must look forward and determine what planting system they are going to roll out in their new plantings. The right recipe for one business won’t necessarily be the same for another so don’t just copy your neighbour.

The pear growers in the Goulburn Valley must come up with a planting system that gives them precocity of that new pear variety, early production of high quality fruit, and avoids fruit surface marking. The ultra-advanced fruit grower may consider that a two-dimensional canopy is what they want to aim for, with an eye towards mechanization and robotics in the future. You also need to choose a system that you can standardize across many plantings, to try and maximize efficiency of labour and machinery.

Once the varieties and planting systems have been determined, orders need to be placed well in advance with the nursery supplier. This will ensure a good stream of new variety options are available to your business in the future.

Innovation

APAL in conjunction with other fruit industries, have a conference coming up which is titled “Innovate or Real Estate”. This shows you the importance that APAL places on innovation as being a critical part of the successful orchard business of the future. Innovations, as I am sure the conference will show, come in all sorts of forms, and if we look back over history we can see that
often it has been the uptake of a new innovation that has been the prime reason why in an industry a group of businesses have been successful, when others haven’t.

Innovation can be a new variety, a new planting system, the introduction of mechanical platforms. It could be as radical as marketing small apples in a tube.

When you are strategizing about innovation, look outside the square. Don’t put too many constraints on your thinking and surf and scour the globe for any innovation that is going to give your business a competitive advantage. Attending the APAL conference would be a great start.

![Figure 3: Harvesting machines eliminate ladders and can widen the available labour pool to include workers who cannot handle ladders.](image)

Labour

Orcharding is a very labour intensive process, not the growing of product in the field, but also the post harvest requirements of the product. With Australia’s labour costs being some of the highest in the world, strategies around labour, and how to make labour more efficient, are critical to the ability of the Australian fruitgrower to compete globally and locally.

Karen Lewis, a Washington State researcher recently presented some great information to the Future Orchards Northern Loop. During the November 2012 loop she explained the importance the American industry is placing on labour efficiency and supply. This is interesting when you consider the American cost of labour is significantly lower than Australia’s cost of labour.
The smaller grower on a standard orchard system must grapple with the very simplest of decisions such as piece rate versus hourly rate, and efficiency of permanent staff. Growers more advanced in their labour management need to consider whether mechanical platforms are necessary in the future, and if they are, they need to be working towards their canopies being suitable for those platforms.

Packhouses need to look at the labour saving equipment that is being employed by the global leaders in packhouse design. European packhouses with massive pre-sorting facilities are able to grade, size, and colour sort fruit, in large volumes with two to three staff.

Robots and defect graders are widely used in packhouses around the world. The American and even the New Zealand fruit industries are looking way into the future and saying there is no reason why we can’t get robots to pick apples. If a robot can manufacture a car, why can’t a robot pick fruit. There is no reason why a robot can’t pick fruit, but there is obviously a lot of development required. There are canopy configurations that need to be considered, not to mention the need to pick by colour without bruising. But is it possible that the successful modern fruit businesses of the future will be robotically harvested, with robots working 24 hours a day and with the bins being presented at the end of the row. What a fantastic thought.

Again, no matter where you are in the timeline of these potential developments, your strategy needs to include how you are going to manage the labour requirements of the crop.
**Pest and Disease**

As we finish up yet another harvest season, the pest and disease issues that we have just faced will be top of mind, and if you have had any problems you need to sit down with your pest and disease advisors and come up with a strategy for the new season, that aims to maximize fruit quality and minimise any pest and disease issues.

If you have had a Woolly Apple Aphid outbreak, what has tripped that? If you have had mite explosions, are your predators out of balance? Are you using products that are antagonistic to the predators? If you have black spot problems, make sure your autumn clean up programmes set you up for the new season as well as can be expected, and identify why and when that black spot infection became established.

On russet prone varieties, have you managed to produce a clean crop? If you haven’t, ask the question of whether Gibberellin sprays, over bloom and early fruit set, need to be incorporated. Was your frost protection inadequate? Did you not have enough spray rigs and operators so that you were spraying russet prone varieties in optimum conditions?

Questions, questions and more questions. The difficulty will be in coming up with the very best answers.

**Productivity**

Through the use of the OrchardNet database, or through your own contacts, ask the question whether your productivity is average, lower quartile or upper quartile? OrchardNet is great at being able to compare like with like, tree age with tree age.

If you have blocks that are average, or worst case, below average, why is that? Average will not be enough to provide a good sustainable business in the future.

Productivity is influenced by so many factors. But any horticulturist worth his weight must be able to identify how productivity can be improved, and if it can’t be improved, then to be able to make the decision to remove that block before it continues to eat away at the equity position of that business.

Again, there is a wealth of information on productivity within the Future Orchards website. If you are looking for inspiration, jump on there and look up the paper that is the most relevant to your current challenges.

**Scale**

As with most businesses, the orchard business has overhead costs that it must carry, no matter what yield that business is able to harvest. Scale gives you the ability to spread those overhead costs across a larger production base. The evolution of the New Zealand fruit industry sees operators with scale continuing to expand, and the smaller operators exiting.
Take care that if you plan to upscale, you don’t just grow more ha. With more area you also may need to lift management inputs. When management inputs don’t match the new increased scale, production problems start to arise. The odd black spot spray gets missed, or is too late. The irrigation water doesn’t quite go on at the right time. It doesn’t take too many mistakes in the orcharding game to cost a lot of money. Scale does have merits, but it also carries risk if not well managed.

**Finance**

There is no point coming up with a strategy that does not make financial sense to you, your investors, or your lenders. Any improvements that are considered, need to have the rigour of good financial analysis to determine whether they make good economic sense.

Often in the fruitgrowing business, one mistake we make is that we do our budgets based on a reasonably good year, and assume the good years are repeatable year in, year out. We all know with the climatic and market risks that we face, that this does not always happen. It is important that our budgets are done based on realistic numbers, not numbers that we might expect in one year out of five.

Keep an eye on the balance sheet. Keep it going forward. If a large investment is required and the balance sheet is going to take a hit, have confidence that the investment is going to have a good medium to long-term gain.

**Case Studies**

To make this whole process of strategy (business planning) seem sensible and appropriate to all orchard businesses, three fictitious case studies were presented to Future Orchards in June 2010.

We have since updated them for the current orchard scenario. They case study three growers, all at different stages in their business career. It gives a good insight into how a successful strategy can lead to the right outcome for each of those individuals, families or businesses.

**Grower 1**

Grower 1 is 50 years old and one of his sons is showing interest in the orchard business. He is an upper quartile (UQ) grower, income per ha and per kg are very high even though production per ha is below UQ. Variety mix is extremely good. Expenditure per kg is OK. Post harvest costs are high per gross kg, but this is probably due to the high packouts. Debt servicing costs are very low.

**Grower 1 Strategy**

He could just keep doing the same, however if returns per kg drop below their current levels, to maintain profitability, he needs to try and lift productivity closer to 50 t/ha average across the whole farm. With his skill, and low debt levels, he will also consider growth, perhaps through purchase or lease of a neighbouring block. Any growth must ensure climate risks are manageable and debt levels are kept at a sensible level.
Grower 2

Grower 2 has poor risk mitigation, with only 20% net, no frost protection, and poor water storage. His middle son is very keen to continue farming the business and the family have an agreed succession plan. Although a small scale grower, Grower 2 is a member of a successful packing and marketing co-op with good marketing channels in place.

Yield and packout are poor due to some hail losses and drought in 2 of the last 5 years. Variety mix is good. Income per ha is low, however so are costs, delivering an average cash orchard surplus per ha. Income per kg is low due to poor packout. Expenditure per kg is average with wages per kg very low due to the owner being able to carry out a lot of the work himself.

Grower 2 Strategy

He plans to address risk mitigation over the next 3-5 years. A lack of water storage, and hail, are the two largest risks to manage. Retractable net will be installed over the high value young blocks to avoid leader bending and Drape Net™ will be used on the higher value older plantings.

Scale of the property is limited, particularly when the son wants to become involved. Leasing additional land is probably the sensible option when this happens. He plans to keep an eye on opportunities in the mean-time. Any leased land needs to have good water storage and hail net in place.

Risk mitigation and good orchard management must jointly aim to achieve sustainable yields of 45 t/ha and packout average of 70%. Variety mix needs attention with the poorer blocks gradually removed and new intensive block’s planted in their place. New plantings will only be made with good risk management in place.

Grower 3

Grower 3 has some challenges. Yield is poor, variety mix is relatively poor, and cost structure is very high. There is no succession opportunity and grower 3 is five years away from retirement (and is looking forward to that). Grower 3 plans to exit orcharding in 3 years time in the best equity position he can manage.

For Grower 3 to be confident about orcharding in the next 3 years he needs to have confidence that the limiting factors can be changed. If they can’t, then grower 3 should consider bringing the exit forward.

Some of the things Grower 3 is planning:

- Talk to local real estate agents about possible sale and 2-3 targeted neighbours regarding the possibility of lease or sale.
- Each block of trees performance and profitability has been calculated. Those blocks not, at the very least contributing to overheads, are being pulled this winter and will either be left fallow or planted in an annual crop. The crops he’s considering are fresh beans and melons as he can grow these with existing gear and he has the markets already sorted.
Every other pipfruit block has clear objectives set to ensure he and his permanent worker optimise yield and PO. He’s employed a good consultant to help with this. He’s very aware that the most important line is the income line (production, packout and price).

He’s benchmarked his costs and identified that wages are out of control. He’s had to make the second permanent position redundant and is moving away from hourly work to more piece rate work using a trustworthy, cost effective contractor. Even permanents are being paid per tree to prune, a real shock to the system, but necessary to break him into the real world.

He’s changed post harvest/marketing service provider.

All costs (on orchard and personal) will be closely scrutinised.

Summary

In summary, all three growers demonstrate the power of a strategy or plan and also show that your plan will be quite different from your neighbour. With the fruit market being a dynamic beast, the magnitude of change can be fast. As with any rural business, some businesses will grow and prosper, and others will exit. Life will go on, no matter what the outcome, but good decision making and planning along the way will help proactively manage the best outcome.

Some tips to help with your strategic plan:

1. Write it down
2. Objectives need to be defined and time bound
3. Get good advice and get it early
4. Make sure you monitor the key drivers of your orchard business
5. Implement good market feedback systems
6. Back your decisions and make sure you follow them through
7. A business plan is a living document, refine it annually, the growing and marketing environment will change, that is a certainty.