



IRRIGATION RESEARCH & EXTENSION COMMITTEE

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FOR IRRIGATION CROPPERS

**Reducing exposure to
risk...A whole farm view**

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Introduction

Where do we start? The risks of farming seem to be increasing by the day and the challenges are enormous.

The focus of this paper is on how to assess business strength, identify where your risks are and how you can then manage/reduce these risks from a whole farm perspective or indeed change direction all together.

This presentation will cover the following:

- √ Firstly "What is Risk"
- √ Your Risk Capacity
- √ Farm Business Risks
- √ Steps to assess Whole Farm Risk
 - Review mindset
 - Review Balance Sheet(Statement of Position)
 - Assess past farm profitability (Profit & Loss Statements)
 - Assess past Farm performance (Farm Surplus)
 - Determine where your risks are
 - Establish Actions
- √ Conclusion

What is Risk?

Risk is "the possibility of suffering harm or loss; a danger." It is about the likelihood of an event occurring versus the consequences.

On this basis you need to consider what the likelihood of an event occurring versus the potential consequences if the event does occur. You are then able to establish two things one is, can you reduce the likelihood of it occurring and the other is, to identify if you have the capacity to offset the consequences if it does occur. You can then decide whether you should take on the risk or not.

Having considered the risks you are exposed to, you can then put them into some sort of priority and establish various means for dealing with the consequences if they arise.

You need to understand the likelihood versus the consequence as this will allow you to determine how to deal with particular risks.

Your Risk Capacity

Let me pause for a moment to allow you to think about what the greatest risk is you and your business currently face and what you are doing to reduce the risk.

The answers you come up with will vary significantly, as the variety of answers will reflect the divergence of businesses and views of risk. The variety of answers will range from production risks to market/price risks, from lack of access to irrigation water to financial and debt management risks and/or a combination of these and more.

The reality is you all have different tolerances to risk and risks are relative to you and to your situation, i.e. one person is happy to take on a risk while another is not. Therefore to have knowledge and understanding of risk you need to know and understand the following:

- √ what your capacity is to take on risks
- √ what risks you are exposed to
- √ what your highest risk is
- √ "Risk versus Reward"

Farm Business Risks

As farmers you are only too familiar with the range of risks you face and these include financial, production, market, supply, occupational, political, climatic, and emotional.

In dealing with these you can choose to do one of two things, either ignore or deny them and face the consequences or confront them and consider the likelihood vs consequence and then determine how to manage (where possible) the risks your business is exposed too.

The biggest risks currently confronting family farm businesses (big and small) in the Murray Darling Basin as I see them are:

- √ mindset –
 - positive/negative
 - going with or resisting change
- √ the emotional status of farmers
 - positive outlook/negative outlook
- √ level of debt in relation to size of farm business- can the farm business continue to service the debt
- √ diminishing access to water- increased variability in rainfall/government policy
- √ scale and inability to increase production...in good or bad times to offset risk
- √ government policy
- √ production risk/rising costs

To make it easier to assess your capacity to deal with the risks you are exposed to and identify what risks have a higher priority to manage, the following is a set of steps you can follow.

Steps to follow

1. Review your current state of mind. Is it positive or negative?

- √ If positive about the future, things will be seen in a positive frame of mind and this will assist in managing other risks.
- √ If you have a negative mindset this may well be the highest risk to deal with, as it maybe more difficult to deal with other risks.

2. Balance Sheet Assessment

- √ List value of all your assets; farm(including money owed to you-debtors) and off farm, at current market value.
- √ List current payout of all your liabilities (including money you owe- creditors).
- √ Determine net worth (assets minus liabilities) – money you own.
- √ Determine equity (both in land and water and total) – percent of asset value you own.

Summary of Assets, Liabilities and Equity Business Analysis Balance Sheet (Statement of Position)						
Date	31/07/2008					
ASSETS	Value	LIABILITIES	Value	EQUITY		Percent
Land/Water	\$0	Bank Core	\$0	Total Core	Bank Security	0%
		Family Core	\$0	\$0	Net equity	0%
Plant/equipment	\$0	Overdraft/Credit	\$0		OD Limit	\$0
Stock	\$0	Plant/equip	\$0			
Equities	\$0	Stock	\$0			
Pools	\$0					
Inventories	\$0	Line of Credit	\$0			
Off farm Investments net	\$0	Total non core	\$0			
Total other assets	\$0					
Total Assets	\$0	Total Liabilities	\$0		Total equity	0%
Net worth	\$0					

- √ If equity is strong, 75% and higher, you have capacity to capitalize future operational losses.
- √ If your current debt has unused facility, you have access to working capital and capacity to continue to fund cost of running business.....but for how long? Need to do 12 month cashflow.

- ✓ Has your debt been growing? If it has need to assess why.
- ✓ What is your net worth? Need to consider if it is sufficient to offset future risks and still leave sufficient funds to retire etc.

3. Farm Profitability

- ✓ Assess previous profit and loss statements to determine level of profitability.
- ✓ In simple terms if showing more years of profit then you are exposed to less business risk and are in better position to deal with future risks.
- ✓ If showing more years of losses need to do further assessment to determine why and then consider if the risks are too high to continue losing money or can you change something to improve profitability.

4. Farm Performance

- ✓ By analyzing your profit & loss statements you can determine your level of productivity and therefore farm performance.
- ✓ Include farm income only and then subtract farm expenses (variable & fixed) only, excluding any finance costs, capital/depreciation costs, wages, family expenses, the answer is your farm surplus.
- ✓ It is your farm surplus that then funds the costs that were excluded above, hence the higher the debt, the wages, the cost of living, the demand for capital, the larger the farm surplus needs to be.
- ✓ If farm surplus is less than the addition of the costs excluded above then the business is exposed to capital and debt servicing risks along with funding living.
- ✓ But is there a flow of off farm income to assist in funding these costs- the higher the off farm income the less pressure is placed on farm business.
- ✓ If the interest is equivalent to 50% or more of the farm surplus the business has too much debt in relation to farm turnover.
- ✓ Simply by dividing the farm surplus into the farm revenue you can determine your level of productivity and therefore your capacity to offset and manage production and marketing risk.
- ✓ The higher the percentage the less risk your business is exposed to in terms of production/marketing cost control issues.
- ✓ The lower the percentage, your primary risks are in regard to problems with productivity.

Farm Income – Farm Expenses = Farm Surplus (\$)
Farm Surplus/Farm Income = Farm Performance/Productivity (%)

5. Determine Risks

The following is an indication only of a risk profile as there are many factors that influence such a profile but it assists in indicating where to start to work on prioritizing and reducing risk.

Risk Profile	Low Risk	Medium Risk	High Risk
Mindset	Positive		Very negative
Balance Sheet- equity (%)	High equity		Low equity
Balance Sheet- net worth (\$)	High net worth		Low net worth
Balance Sheet- off farm assets (\$)	Large amount	Low amount	
Farm Profit (\$)	Consistently profitable		Consistently unprofitable
Farm Surplus (\$)	High dollars		Low dollars
Farm Surplus used to service debt (%)	Low percentage		High percentage
Off Farm Income (\$)	High dollars	Low dollars	

6. Reducing Risks

Risk Profile	Options to reduce Medium to High Risk
Mindset	<ul style="list-style-type: none"> • determine why you have negative mindset, • can you change it? • seek assistance, • consider selling
Balance Sheet- equity (%)	<ul style="list-style-type: none"> • restructure debt, • sell asset(s) and reduce debt, • seek advice, speak to bank manager, accountant, farm adviser
Balance Sheet- net worth (\$)	As above
Balance Sheet- off farm assets (\$)	
Farm Profit (\$)	<ul style="list-style-type: none"> • combination of things; • look at productivity, • amount of debt, • farm size,
Farm Surplus (\$)	<p>Productivity, is it drought related or management related?</p> <ul style="list-style-type: none"> • look at production issues • crop rotation to: <ul style="list-style-type: none"> ○ reduce pest and disease risks; ○ improve WUE

Risk Profile	Options to reduce Medium to High Risk
	<ul style="list-style-type: none"> ○ improve Gross Margin returns • look at buying temp. water \$ vs gross margin return • understand break even points • diversification to reduce market risks; • adoption of practices such as minimum tillage to reduce moisture loss and soil damage risks; • use of integrated pest management (IPM) to reduce risks associated with pesticide use; • creating and maintaining stocks of feed (hay, grain, etc); • reorganise farm layout to improve WUE • consider loans such as RAA Special Conservation Loan • seek advice
Farm Surplus used to service debt (%)	As above
Off Farm Income (\$)	<ul style="list-style-type: none"> • seek off farm income • Look at eligibility for Centrelink benefits

7. Conclusion

In concluding, the challenges are significant, the stakes are high. In managing the risks that you and your farm business are exposed to firstly requires the need to identify them and confront them in a positive and business like way.

During this period of low water allocation it is important to understand what it is you are trying to achieve and that the key issue is to reduce the risk of not being able to generate a farm surplus (along with any off farm income) that allows you to fund the servicing and reduction of debt, living, capital improvement and purchase and other priorities. Because if you can't reduce this risk or you are not prepared to take on the risk then the options are about restructuring and a possible change of direction.

Now is arguably the most critical time to start planning or indeed review your plans and think about seeking advice and assistance.

A useful resource is the GRDC publication "GRDC 2006 Planning Guide for Low Risk Farming"
