



Grain and Graze 3 invite you to attend a workshop on
@Risk

When: Tuesday 24th November 2015
9am – 4pm

Where: Esplanade River Suites: 112 Melville Parade, Como, 6152

Who should attend: Farm management consultants, economists, researchers and other industry members undertaking farm business analysis within WA

Presenters: Cam Nicholson, Nichon Consulting, Victoria.
Danielle England, AgInnovate, Narrogin

Cost: Your time only - provided by Grain and Graze 3

What is @Risk?

@RISK performs risk analysis using Monte Carlo simulation to show you many possible outcomes in your Microsoft Excel spreadsheet—and tells you how likely they are to occur. This means you can judge which risks to take and which ones to avoid, allowing for the best decision making under uncertainty. With @RISK (pronounced "at risk"), you can answer questions like, "What is the probability of profit exceeding \$10 million?" or "What are the chances of losing money on this venture?"

(<http://www.palisade.com/risk/>)

What you need to bring:

1. Your computer with the trial version of @Risk on it. This can be downloaded from <http://www.palisade.com/risk/>

RSVP is essential. Please register by **Thursday 20th November** via this link - <https://www.registernow.com.au/secure/Register.aspx?E=18637>

Numbers are strictly limited to 12 participants.

For more information please contact; Danielle England via danielle@aginnovate.com.au or 0429676077



What might @Risk mean to agriculture? (Adapted from a paper by Cam Nicholson)

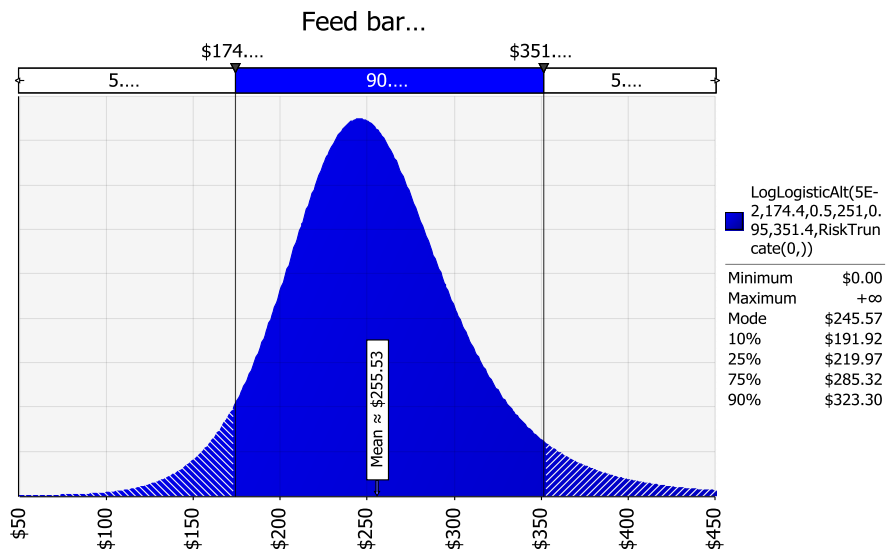
In the past the agricultural industry has used averages to analyse risk (eg profit = average crop yields x average crop prices – expected costs). This is OK if we always get an average crop, but we rarely do. The key drivers in agriculture (yield, prices and some costs) have a range of values over time, and these are often uncertain. If the average method is used, it usually over-estimates the profits and hides the range (volatility) in the profits. Risk is not about the middle or the expected, it is the opposite – it is what happens at the ‘extremes’ that’s important (especially the low extremes of yield and price, and the high extremes of costs).

Across Australia, Grain and Graze 2 has been using the @Risk tool to analyse farm businesses using a range for yields, prices and costs to calculate the range in profit. We have found that this analysis shows;

- How big or small the profit is when the extremes in yields, prices and costs occur
- How often it occurs
- Which of these variables is contributing the most to volatility

@Risk allows the industry to measure risk by calculating how often an event occurs, and how large the impact of that event will be. Risk is likelihood (probability) x consequence (impact). Knowing the impact and probability of business risk build’s context and helps farmers to understand their exposure. @Risk provides the opportunity to analyse risk in ranges. It provides bell-curves clearly demonstrating the chance of an event occurring.

@Risk is a ‘bolt-on’ that can be added to any Excel spreadsheet. You will use the Grain and Graze pro-forma on the day, and Cam and Glen will walk participants through its application.



An example @Risk analysis by ranges