

Improving risk-reward outcomes through on-farm decisions: RiskWi\$e

Rick Llewellyn, Lindsay Bell and Brendan Brown
CSIRO

Key messages

- **RiskWi\$e is a national risk management initiative officially launched by GRDC in August 2023 and AIR EP is one of 6 lead grower and advisor-based organisations.**
- **It is aimed at developing practical ways to support grain growers to better manage risks associated with production and price volatility and the range of uncertain factors facing farm management decisions.**
- **While nitrogen management is seen by growers as the most challenging of the 'risky' crop agronomy decisions, other major farm-level decisions such as expansion, machinery & technology investment and grain marketing are often seen as particularly difficult.**

Why do the work?

With the level of volatility faced by Australian grain growers among the highest internationally, there have been longstanding calls about the potential benefits from greater representation of risk and incorporating greater consideration of the range of possible uncertain outcomes when making key farm management decisions (e.g. Keogh 2012). Part of this also involves recognising the range of biases that can influence decision-making. And there's no shortage of decision-makers happy to acknowledge that a

bias may have negatively affected some of their farm management decision-making behaviour (e.g. when a particular result in the most recent season's conditions may have overly influenced this season's decision-making). But it is also recognised that being too slow and complicated in making some regular common decisions can raise its own risks. RiskWi\$e is working with local growers and advisors led by AIR EP and similar groups nationally to take a farming systems approach to bridging the gap between the potential for more robust risk-return analysis and practical ways to better inform 'risky' decisions.

How is it being done?

RiskWi\$e is working with growers and advisors in partnership with researchers across Australia through a network of grower-based groups (see logo block below). AIR EP leads the activity on Eyre Peninsula and is one of six action research leads nationally. In the first season (2023) work began with a focus on nitrogen-related decision making including a set of trials of different N-decision approaches and risk levels, as well as other focus paddock activity.

Over 50 field sites have been established across the GRDC Western, Southern and Northern regions in the first season and this field-based activity will be brought together with climate, price and economic analysis through research partners (e.g.

Hayman & Mudge 2024), as well as important consideration of the human-elements of decision-making behaviour.

While nitrogen is recognised as being among the most challenging of the crop agronomy decisions (Figure 1), RiskWi\$e activity will soon expand to tackle other themes identified as being most relevant. These include other major sowing/crop choice decisions and whole-farm business level decisions such as farm expansion, machinery and technology investment decisions and marketing which have consistently ranked as the most challenging 'risky decisions' in consultations with growers (Figure 1).

What does this mean?

A major objective of RiskWi\$e is to enable more growers and advisors to better consider the probabilities of possible outcomes and assess the risk-reward payoffs for important management decisions – in a practical way. Often this may just mean more opportunities for an extra step of well-informed 'simple figurings'. The ultimate aim is to lead to better decisions more often in an increasingly risky farming environment. There will be many opportunities to be part of this collaborative grower group-based initiative at the local level.

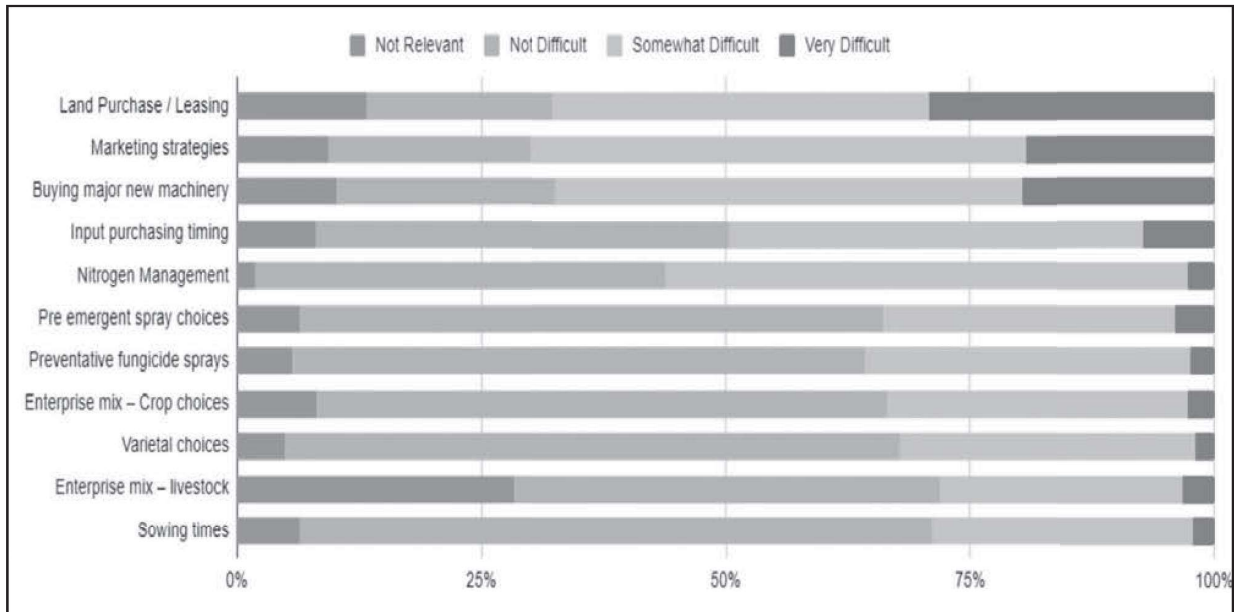


Figure 1. Rating of difficulty (% of growers) of different types of farm management decisions involving risk (based on preliminary 2023 data from 412 grain growers nationally).

References

RiskWi\$e: grdc.com.au/research/partnerships-and-initiatives/strategic-partnerships/riskwise

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RiskWi\$e

– the National Risk Management Initiative

GROWER | ADVISOR | EXTENSION GROUPS

RESEARCH PARTNERS

ACTION RESEARCH GROUP LEADS

PRINCIPAL PARTNER: GRDC (Grains Research & Development Corporation)

NATIONAL PROJECT LEAD: CSIRO