



Future-Proofing Farming

Collaborating to manage risk and build resilience





11th December 2020

As one of the most financially volatile industries operating in a climatically volatile region, Australian farmers are aware that managing volatility and risk is the difference between long-term success or failure. While government and industry policy has espoused the need for farmers to take the primary role of managing risks, there is a role for government to ensure all available risk management tools are readily available to farmers to manage volatile conditions. This set of independently researched reports, prepared for the NSW Government, provides a way forward on actions and initiatives at a national level to ensure Australia's agricultural sector thrives under volatile conditions, contributing to the industry's ambitious target of a A\$100 billion industry by 2030.

A clear role for government identified by the reports is the need for a national data initiative to inform farmers on their decision-making; increase the availability, granularity and comparability of data to foster the adoption of financial risk management products, and improve the development and pricing of new risk products. Elevating the risk management advice provided to farmers through a national curriculum on farm financial risk management, and an accreditation programme for farm advisors was another key theme in the reports. Improving price discovery and transparency is another key role for governments, particularly in developing markets for futures contracts across all relevant commodities.

In charting a path for a national approach on farm-related risk management, reviewing the efficacy of existing initiatives, and ruling out actions not to take are equally important. To this end, the Aither report into insurance rules out the viability of government financial support to establish an ongoing market for farm income protection insurance, noting that the cost of government support would significantly outweigh the benefits to farmers. Similarly, the report prepared by the Australian Farm Institute focuses on the centrality of equipping farmers to be primarily responsible for risk, and as such questions the efficacy and efficiency of government programmes that do not progress and enhance the role of the farmer in managing risk.

This set of independently researched reports provide a starting point for a national approach to farm risk management, whether it is related to climate, market, price or supply risk. This includes furthering the debate within the agricultural industry on policies that will provide best outcomes for farmers, including the development and refinement of NFF policy on issues of drought and resilience.

The NFF wishes to thank the NSW Government for commissioning these reports to progress this vitally important policy issue.



**Tony Mahar, Chief Executive Officer
National Farmers' Federation**

The project embraces diversity in Australian farming



The agricultural sector is extremely diverse in its people, their businesses and operating environments



As a result, there are many different perspectives and priorities, making any analysis highly challenging



Naturally, numerous disagreements arise – exploring and understanding these is particularly helpful



To meet this challenge, the NFF assembled six teams with asymmetric mandates, budgets and resources



The six projects make over 50 recommendations to improve resilience. Naturally, not all of these are aligned



This report synthesises the thinking laid out in the six underlying reports and embraces differences of opinion



11th December 2020

Farm businesses in our country face many types of risk. This is nothing new.

Managing risk is part of the daily job of being a farmer. Irrespective of the size or location of a farm, or the commodity it produces or grows, farmers are called upon, every day, to make decisions about risk. There are many tools out there that can help with this process. Some include everyday farming practices, while others include more complex instruments that can be used to manage financial risk, in particular.

The use of financial risk management products in Australia has always been patchy. For some, these products are an essential part of the toolkit for managing risk. For others, they have been considered too complex, too costly, or just not relevant to their operations. Ultimately, we think it is important for all Australian farmers to understand what risk management tools are available, including those used overseas, as they could be valuable at home.

Looking ahead, the development of these tools should be driven by farmers' interests, not the people who manufacture and sell the underlying products and services. This implies collaboration and co-innovation across the entire agricultural value chain. Meanwhile, our approach reflects the fact that farmers will always have the final say as to what tools will make their farm business as resilient as possible.

The NFF has undertaken this far-reaching project to address these challenges in a manner that embraces the breadth and complexity of Australia's agricultural sector and embraces the numerous perspectives as to what is required to enhance risk management practices and increase resilience. It has been a complex undertaking, being both national in scale and multi-commodity in focus, and including direct, detailed discussions with over 100 farmers, a series of stakeholder forums and a highly detailed national survey.

Reflecting the diversity of the sector, the NFF assembled six sub-project teams, with each exploring different risk management products and measures in detail. Each of those project teams has prepared its own detailed analysis and recommendations and we provide links to their reports on [page 36](#). This report provides an overview of the findings of the project as a whole and a series of recommended initiatives.

Pottinger is extremely proud to have been involved in the project and we hope that the outputs from this programme help farmers and agricultural communities, as well as those in government and industry to make better choices about managing risk. We look forward to working with them to help shape effective national policy measures and to implement strategies to build a stronger, more resilient agricultural sector.

John Sheehy
CEO, Sydney

Nigel Lake
Executive Chair, New York

Agriculture is a critical part of Australia’s economy

The challenge: Improving resilience, increasing output, protecting communities



Resilience



Value



Communities

Australia’s agricultural sector plays a critical role in our daily lives, whilst providing over one million jobs and contributing around A\$50bn of our export earnings. Farmers also have responsibility for managing over half of the Australian continent by land area.

Though our farming sector is strong, it faces many challenges, including floods, droughts, bushfires and other weather-related events. It must also adapt to the effects of climate change with hotter days, bigger storm events and more year-on-year variability.

To help farmers address these challenges, and with support from the NSW Government, the NFF commissioned significant research into how the resilience of the Australian agricultural sector could be improved through the products and measures that are available to farmers to help them manage financial and other risks. The underlying objective is to protect and support ongoing growth in the volume and value of the agricultural value chain, whilst recognising the important role played by agriculture in society, especially in rural, regional and remote communities.

The initiative recognised the significant diversity of agricultural production in Australia, consulting with hundreds of stakeholders nationally across the value chain in many different segments of the industry, through a combination of one-on-one discussions, stakeholder forums and a national survey.

The project was delivered by a multi-disciplinary team drawn from eight organisations who have collaborated to leverage and share their respective knowledge, experience, networks and perspectives as they addressed the six inter-connected workstreams outlined below.

Insurance

Extending and enhancing the use of financial risk management insurance products

A I T H E R

Hedging

Increasing the use of financial products to help farmers manage price risk and uncertainty



Off-farm income

The role and importance of off-farm income in farm sustainability, including revenue diversification strategies



Mutuals and co-operatives

Mechanisms to support industry collaboration to reduce costs and share resources



Education and awareness

Improving knowledge and understanding of financial products and other measures that can be used to manage and/or mitigate risk



Policy

Fiscal and other measures that can encourage and support effective risk management in the agricultural sector through government intervention



Our production is substantial, diverse and volatile

Agriculture plays a critical role in our day to day lives, our economy and our landscape

Farmers and the food supply chain that they supply serve every Australian, every day of the year



93% of our food



321k direct jobs



174k businesses



3% of GDP



58% of our land

Farming spans the Australian continent, and our output is very diverse

Our nation's diversity means that almost all our agricultural needs can be grown onshore



Source: ABS, 2018-2019

Agriculture is one of Australia's largest export industries

The sector has long been a key export industry and a major contributor to regional communities



11% of all exports



70% of output



71% of wheat



90% of wool



76% of beef

Our agricultural sector is highly sophisticated, supported by extensive research and development

Australia has a long history of agricultural innovation and our expertise is recognised around the world



Stump jump plough invention



First mechanical sheering clippers



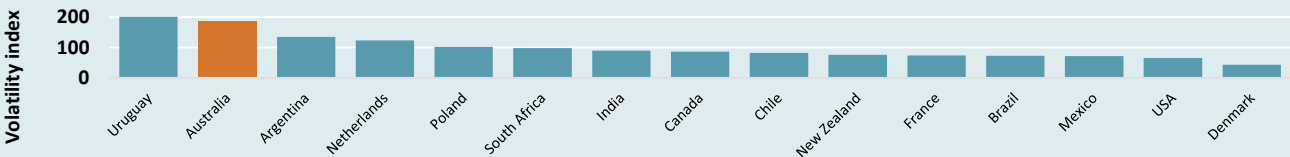
Precision agriculture



Infrared grain analysis

Our agricultural output is the most volatile of any major exporting nation

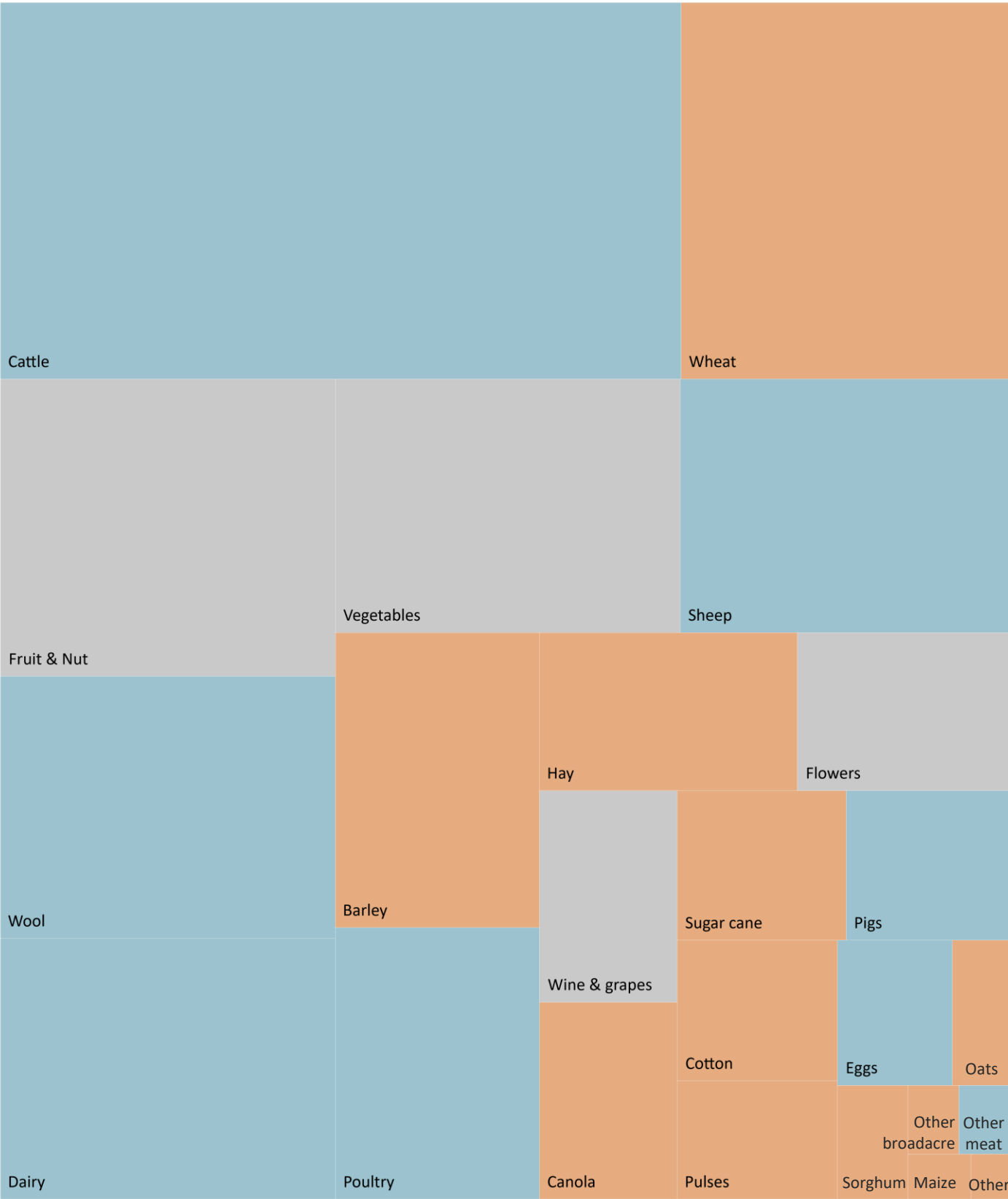
Business management skills are critical, as farmers navigate greater climatic variability every year



Value of output of agricultural products. Food and Agriculture Organization of the United Nations, 2011

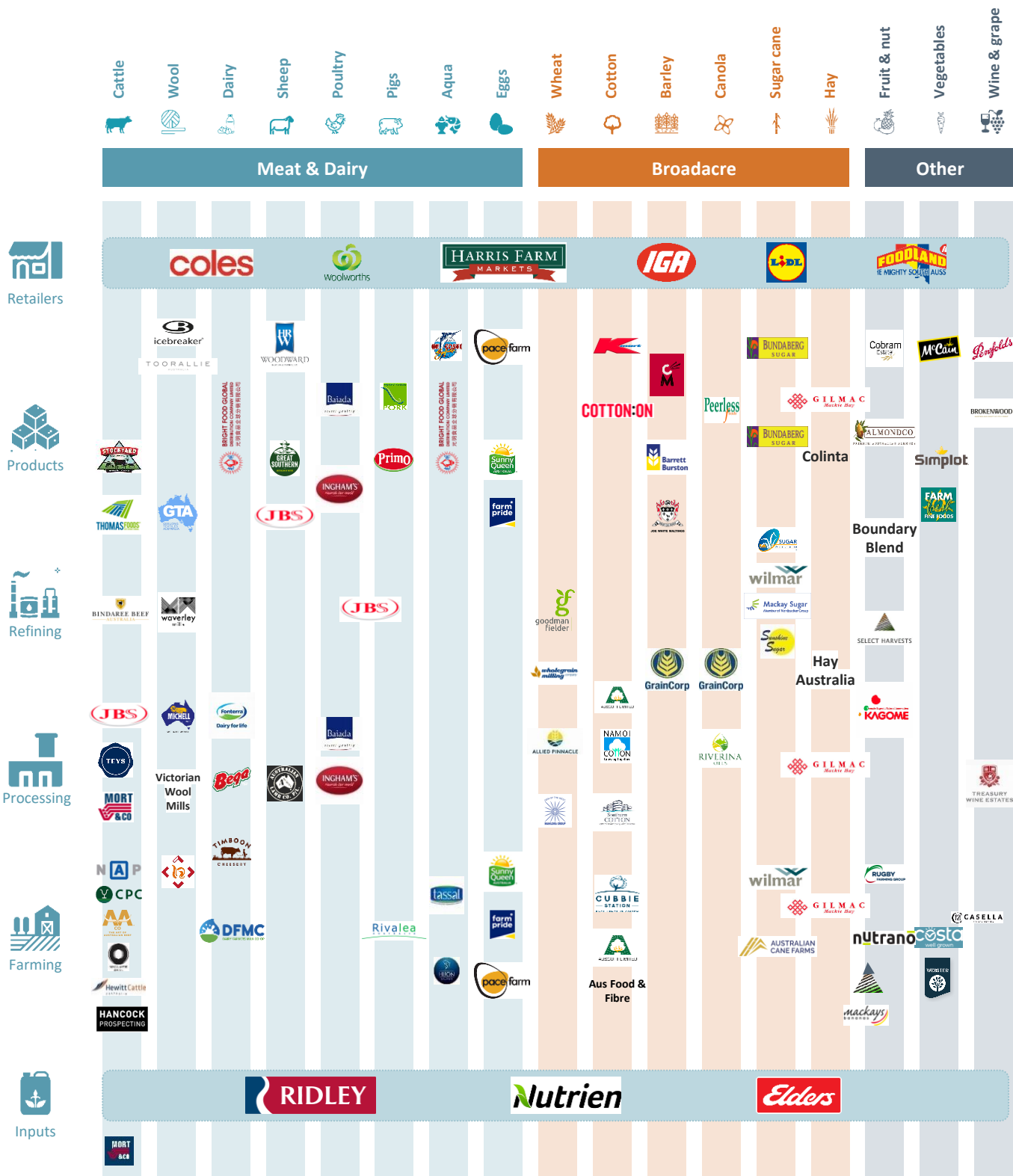
We have a broad and deep commodity mix ...

Visual representation of share of value of agricultural commodities produced, Australia, 2018/19



... which is supported by a complex value chain

Our agricultural value chain is made up of thousands of organisations that work together everyday to deliver essential food products to Australians and the global community. The diagram below showcases some illustrative examples of agricultural business across commodities and the value chain.

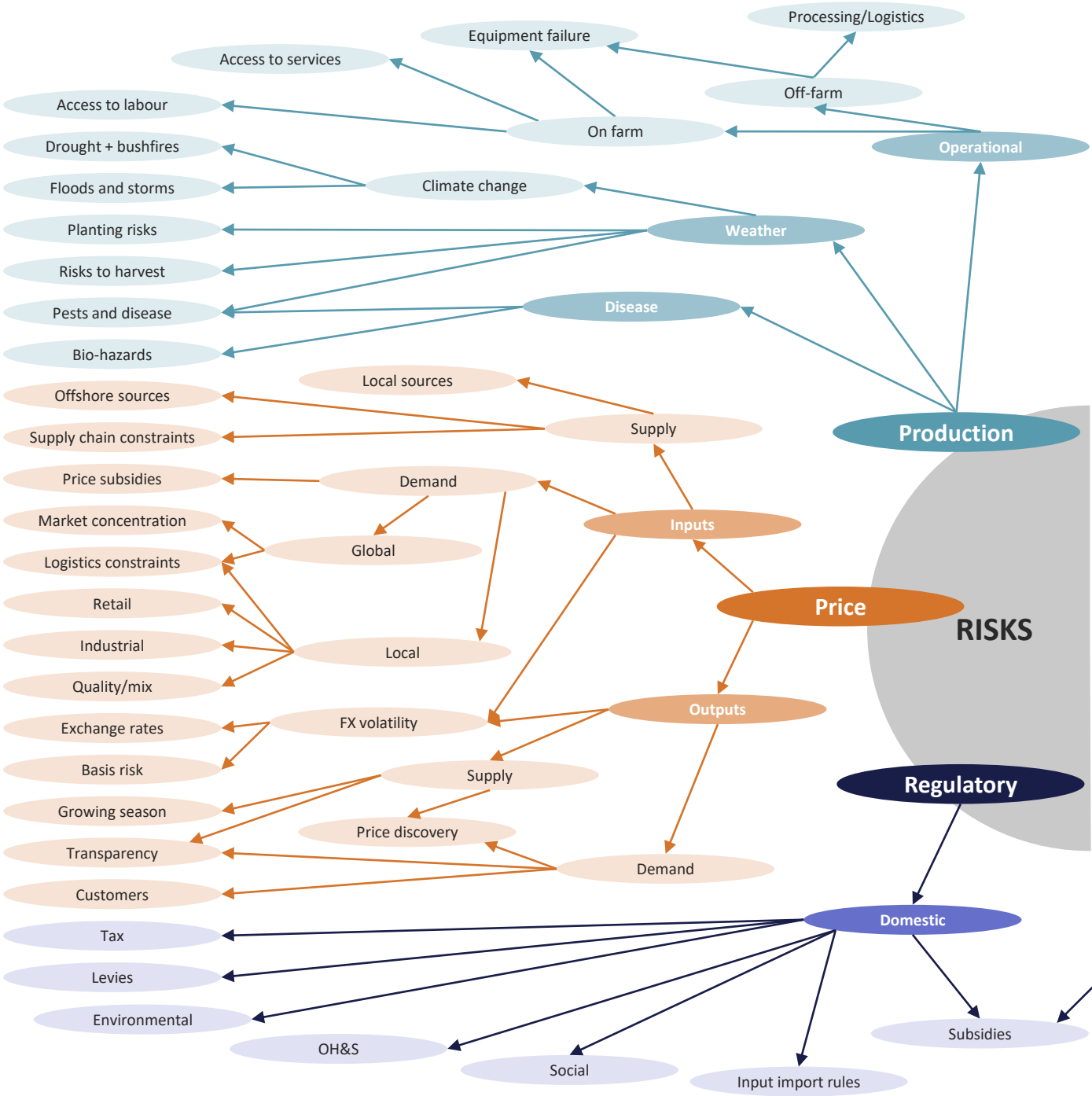


Farmers manage many different risks daily ...

Farms face many risks. Whilst some can be controlled by farmers, many cannot, emphasising the importance of business management skills. We illustrate these risks below

Production risk encompasses uncertainties arising from the agricultural cycle, including risks related to planting, crop development and harvest, and equivalents for livestock

Price risk refers to the uncertainty about prices that producers will receive for their commodities as well as the prices they might pay for production inputs

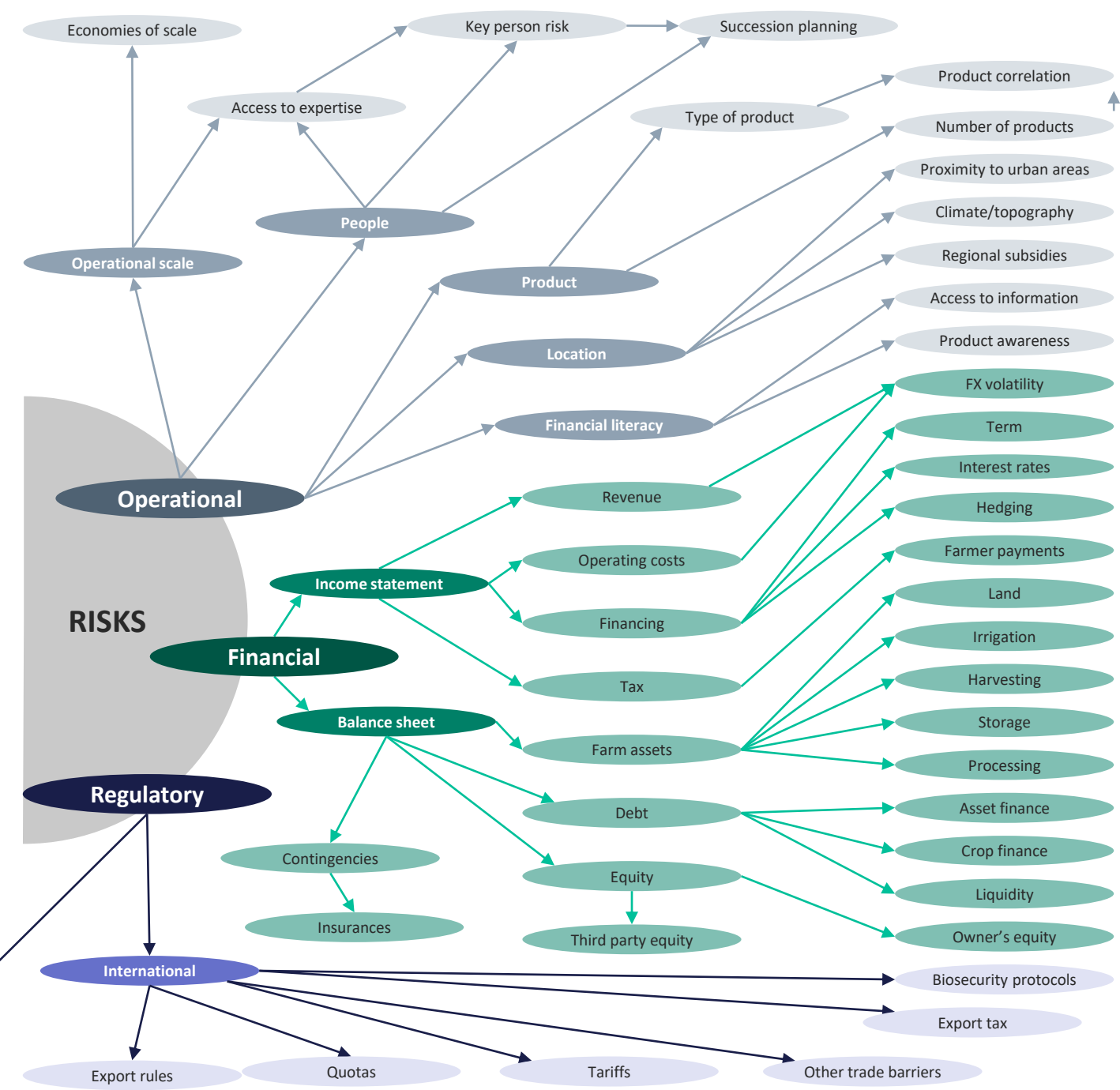


... making business management skills essential

Regulatory risk arises from both domestic and international laws and regulations that impact farm operations, import/export flows and associated supply chains

Operational risks impact profitability and risk, including location, product mix and diversification, position in the supply chain, people and other aspects of day to day operations

Financial risk reflects a farm's ability to generate sufficient profits and cash flow to remain sustainable over the medium to long term, including meeting its ongoing financial obligations



The project addressed six important themes

Insurance

Almost all farms insure agricultural property and equipment, and some insure various aspects of agricultural production. Key issues considered included:

- What financial risk management insurance products are available?
- How widely used are they?
- Can they be made more relevant and effective?
- What are the barriers to implementation and uptake of new insurance products and solutions?

Hedging

Many different price risk management products are available to farmers to help them to manage agricultural and other relevant risks. Key issues considered included:

- What financial products are available to help farmers manage price risk?
- How widely used are they?
- Can they be made more relevant and effective?
- What are the barriers to implementation and uptake of new price risk management products?

Off-farm income

Many farms generate some income from off-farm activities to supplement farming income and offset farm profit volatility. Key issues considered included:

- What types of off-farm income are used by Australian farmers?
- How important is it?
- Can off-farm income generation be improved?
- What are the barriers to farms developing new sources of off-farm income?

Mutuals and co-operatives

Mutual and co-operative structures provide an effective way for growers and other stakeholders to collaborate, share resources, secure lower cost inputs and market their production more effectively

Key issues considered included:

- How prevalent are these structures in Australia and offshore, and what services do they offer?
- What are their benefits, impact and limitations?
- What are the barriers to increasing their impact?

Education and awareness

Education and awareness ensure financial risk management products and measures are effectively understood by the agricultural community, and that product providers understand industry needs

Key issues considered included:

- What is the level of awareness, knowledge and understanding of farm risk management products?
- What are the barriers to increased awareness, knowledge and understanding of these products?

Public policy

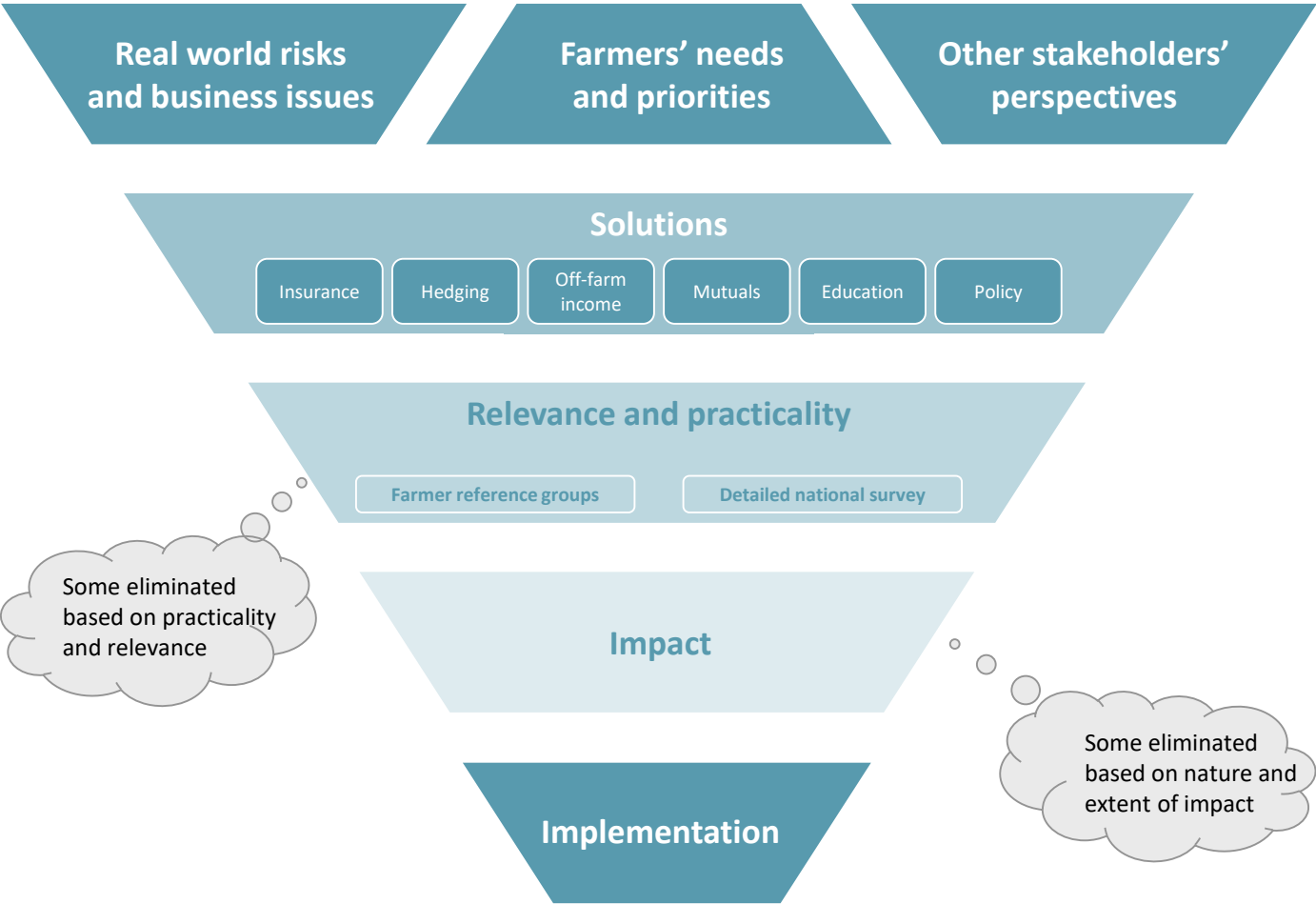
Public policy plays a critical role in the agricultural sector in most countries. Care is required to ensure the measures in place provide the right balance of incentives and support for the industry

Key issues considered included:

- What government financial risk management measures are currently in place in Australia and in other major developed countries?
- How can existing measures be improved, adapted or expanded so that they better meet farmers' needs?

Together, we have identified four priority initiatives

The framework used to determine the four recommended initiatives was driven by **impact and practical, real-life implementation**. The methodology commenced with an assessment of a broad set of **real-world risks**, explicit regard for the **needs and priorities of farmers** and the views of other interested **stakeholders**. A funneling process then drove the analysis via **potential solutions** anchored around the six themes of the project. This analysis was in turn framed by the **relevance and practicality** of the proposed solutions and finally screened for prospective **impact**. Critically, this results in initiatives which are **risk and farmer-led**, rather than product or intermediary-led.



- | | |
|---|---|
| 1 | National Data Initiative to support farmers' decision-making through better tools |
| 2 | Industry Collaboration Initiative to foster information sharing and collaboration |
| 3 | Industry Education Initiative to enhance farmers' awareness and understanding |
| 4 | Government policy & taxation to improve cost-effectiveness of financial support |

These are best addressed by national solutions ...

Industry-wide challenges

Our work identified a series of underlying challenges that are relevant to many segments across the agricultural value chain

Common themes

Meanwhile, despite the diversity of the agricultural sector, a number of important common themes were identified

National solutions

We have distilled the various recommended solutions into four broad national initiatives which would collectively have a significant impact

Information gaps

Reliable data is critical to effective management of risk – there are many areas where data is not available, is not readily accessible in a user-friendly format, or is not reliable

- Weather/commodity data granularity
- Low regional comparability
- Lack of transparent pricing
- Limited data analysis of government-programme impact



Industry fragmentation

Whilst some agricultural segments benefit from national or local co-ordination via co-operatives or mutual structures, others are much more fragmented

- No clear leader in risk management education
- Lack of commodity pricing consistency across regions
- No standard terminology in risk management products



Awareness gaps

There are some material knowledge gaps, both within and between different stakeholder groups in the Australian agricultural sector

- Few trusted sources of data and knowledge
- Understanding gaps between farmers and financial risk management product providers
- Little clarity about relative benefits vs alternatives



Extensive inherent risk

Australian agriculture is exposed to a wide variety of risks, which combine to make our production the most volatile of any major exporting nation

- Many farmers:
- Are aware of a variety of risk management products
 - Are sceptical regarding their cost-effectiveness
 - Elect to manage risk by different means



... which can have wide-ranging impact

National Data Initiative

Measures that make existing datasets accessible in a more user-friendly manner and deliver new, higher quality, more granular datasets to support the agricultural and insurance sectors. Also data to measure the value-for-money provided by government programmes to support ongoing policy development

Industry Collaboration Initiative

Measures that foster information sharing and collaboration on a national basis, drawing together resources from the private and public sectors, including from education providers, relevant government departments and agencies, industry associations, R&D corporations and commercial enterprises

Industry Education Initiative

Measures to enhance the awareness and understanding of financial literacy and financial risk management tools across the industry, and to improve agricultural and financial risk management product-specific knowledge and awareness of farm advisors, so that their advice adds greater value

Government Policy and Taxation Initiative

Measures that improve the overall impact and cost-effectiveness of financial support provided to the agricultural sector, whilst encouraging farmers and other participants in the agricultural value chain to invest in alternative pathways to manage inherent risks

Each initiative comprises a range of measures

Within each initiative, we have set out a series of measures that could be implemented. They address clear market gaps and extend beyond business-as-usual activities in government and industry. Each derives from the underlying recommendations of the sub-project teams, as indicated by the numbered boxes below, and a number relate to more than one sub-project. In some cases, we have identified several measures that are required to deliver an individual recommendation. Further detail on each of the recommendations is provided later in this document. Each is supported by significantly more detailed analysis in the individual sub-project reports.

1 2 3 = recommendation number

National Data Initiative	13	Data accessibility: Create visualisation tools that enable farmers to inform decision-making and/or create user-friendly templates and data sources in eg PowerBI to make ABS/ABARES more accessible	5 13	Regional data comparability: Develop a database to increase comparability of data across regions to support understanding of price risk and foster adoption of price risk management products	5 13	Case studies: Develop case studies from anonymised data presenting information about the impact of using financial risk management tools on the profit and loss statements of farms to foster transparency
	15	A national coordinator: Appoint an organisation that would be responsible for the oversight and implementation of one or more of the measures summarised on pages 17 to 18	3 15	Central learning platform: Develop an information platform showcasing financial risk management tools and resources for advice and/or price comparison or purchasing of products	6	High value futures contracts: Identify high impact sectors and develop three futures contracts with industry stakeholders to improve uptake and efficiency of price risk management products
	14	A national curriculum: Develop a financial risk management curriculum for farmers and advisors that sets a base level of knowledge expected. Consider extending to include other stakeholders	14	Farmer engagement framework: Create a profile of the farming community by, eg appetite for risk, adoption of new technology and preferred learning channels to improve the efficiency of engagement	14	Knowledge reward framework: Reward farmers who pro-actively manage risk by allocating them a greater proportion of government support related to farm resilience and preparedness
Industry Collaboration Initiative	2	Remove tax frictions: Lower prices and increase uptake of insurance products by removing stamp duty and GST from all forms of production. Continue tax averaging and farm management deposits	11	Support for formation of mutuals: Provide government support for the formation of mutuals in the form of a contribution to initial capitalisation and/or provision of liquidity support	16	Improve and expand effective programmes: Continually monitor availability and admin of the FHA and RFCS to ensure they are optimised & consider expanding the programmes to maximise efficacy
Industry Education Initiative						
Government Policy and Taxation Initiative						

The report summaries provide further detail


Insurance123			Mutuals and co-operatives101112		
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413		113		18	
Segment data granularity: Improve price-data recording and dis-aggregate data into more commodity segments to improve farmers’ decision-making tools, eg dis-aggregate data on peanuts from legumes		Weather data: Develop and provide user-friendly access to farm-level weather data that can be used by farmers to effectively hedge using weather derivatives		Data on government programmes: Collect appropriate data for the purpose of evaluating the impact of risk management and drought support programmes	
				13	
				Data history: Review historical time series per commodity, acquire/develop more data, and improve price data recording and sharing that enables farmers to make better informed decisions	
				National Data Initiative	
15		15		15	
An Industry Code for farmers' advisors: Develop a standard to ensure that all financial advisors to farmers maintain suitable knowledge and expertise		“Executive programmes” for agriculture: Develop a financial risk management extension programme with universities, analogous to executive programmes run by business schools globally		Online risk management sandbox: Develop a risk-free environment for farmers to experiment with the use of financial risk management products to understand their impact on profitability and risk	
				1012	
				Level the playing field and develop better mutual products: Create an enabling fiscal and regulatory regime that fosters the establishment of mutuals and parametric insurance	
				Industry Collaboration	
14		14		14	
An accreditation programme: Build trust in advisors who meet certain base standards of knowledge and awareness and develop and deliver specialist training courses and continuing education		University and TAFE course improvements: Encourage or require all universities and TAFEs to include risk management components in their relevant courses to improve farmers’ skills		Impact-driven training: Develop a set of financial risk management tools that are most relevant, needed and impactful to develop a plan to “train the trainers” and farmers accordingly	
				14	
				In-person training programmes: Ensure all farmers have access to reasonably priced in-person training programmes on agricultural and financial risk management matters	
				Industry Education	
1118		9		78	
Re-target investment: Consider removing direct financial assistance under the National Drought Agreement, including concessional lending and grant programmes for drought relief and recovery		Incentivise casual work: Defer PAYG tax payments on non-farm casual wages earned by farm owners during downturns until tax returns are due (as these will result in PAYG tax being refunded)		Incentivise debt repayments: Allow farmers to pay down debt on terms that make it fiscally equivalent to on-farm investment, so that debt facilities can be redrawn during bad years	
				17	
				Provide clear policy direction: Provide more detail and clarity on what farmers’ responsibilities look like, including the principle of mutual obligation	
				Government Policy and	

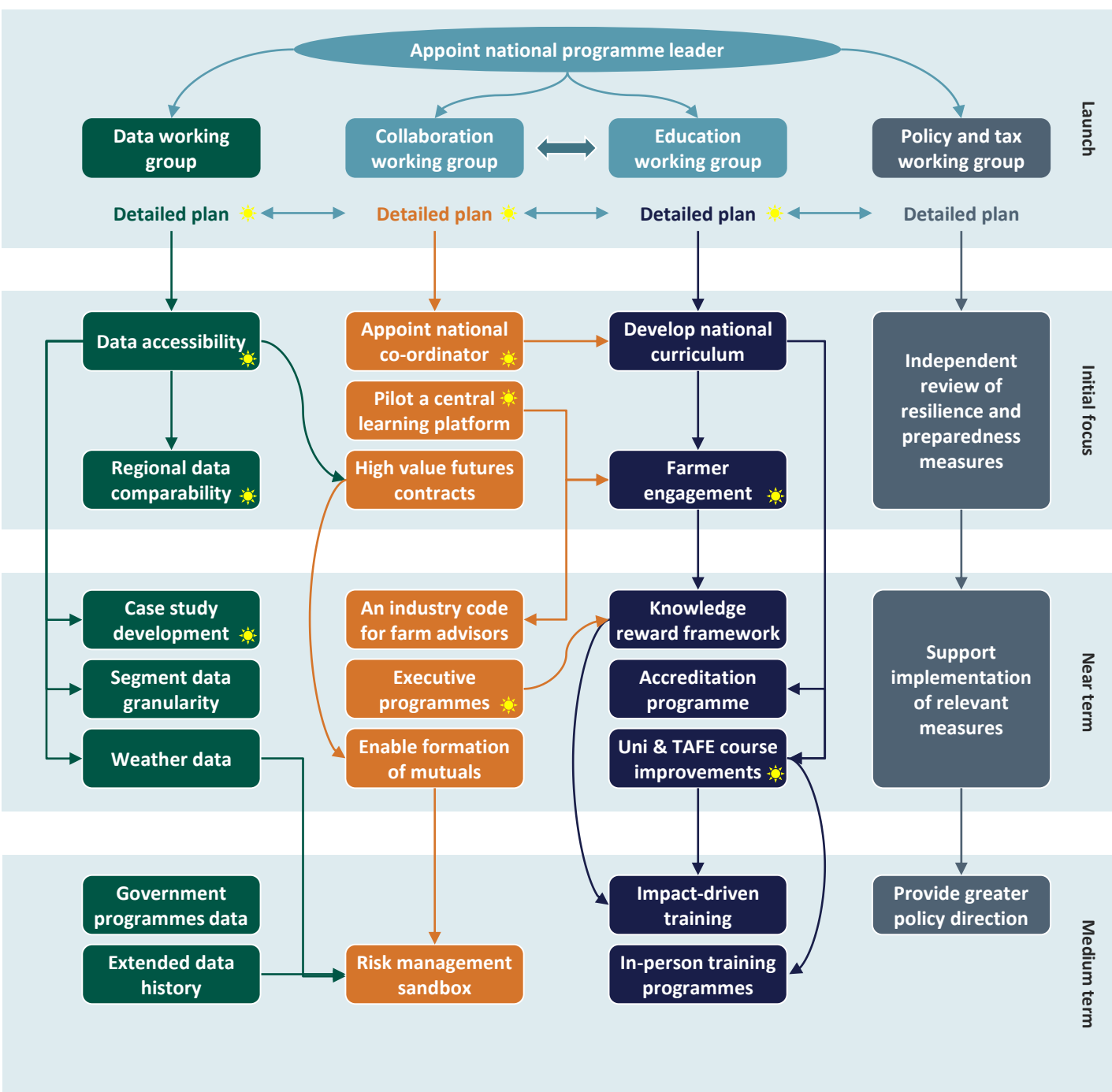
Near term priorities could be addressed rapidly

The immediate priority is to establish a national programme leader to take overall responsibility for implementation whilst maintaining engagement with stakeholders across the industry. Individual working groups should then be convened for each of the four initiatives, and detailed implementation plans developed. Meanwhile, we provide further information on potential timing and how the various measures interconnect on the following page.

Launch (3 months)	These steps can be completed rapidly and require relatively little investment	<ul style="list-style-type: none">■ The national programme leader would oversee and provide central co-ordination and secretariat services■ A multi-stakeholder working group would be formed for each initiative to support co-design of implementation plans■ A detailed initial implementation plan would then be developed to ensure efficient resource use
Initial focus (within first year)	High priority measures which could be launched in the near term, with only moderate investment required	<ul style="list-style-type: none">■ Initial activities related to data would focus on improving accessibility and usability of existing data sources■ The collaboration and education initiatives would commence by establishing a central platform and creating an initial framework for a national agricultural curriculum
Near term priorities	Measures that have longer lead-times for delivery and which will require greater investment to progress	<ul style="list-style-type: none">■ These measures all build on and are enabled by measures addressed during the initial roll-out of the programme■ Development and implementation of these measures should include significant stakeholder engagement to improve focus■ They will also entail collaboration with both commercial and non-profit service providers and other delivery partners
Medium term	Measures which will be informed by delivery of near-term priorities, and which should be self-financing	<ul style="list-style-type: none">■ Subject to the findings of the initial focus and near term workstreams, they could be led by industry■ The expectation is that these measures would be implemented on a commercial, self-sustaining basis■ As a result, although some financial support may be required at the outset, they should rapidly become self-funding

Several measures could be piloted in NSW

We have identified several measures that we recommend should be progressed rapidly. Meanwhile, most of the other measures require further planning to ensure that they are focused precisely on areas of most interest to farmers and are delivered cost-effectively. There are also various lower priority measures that can be rolled out as and when funding becomes available. Whilst the ambitions of these initiatives are national, various measures within the first three initiatives could be piloted in NSW to showcase the benefits of a national roll-out. These are marked with: 



Snapshot: Insurance

Objectives of this sub-project

Almost all farms insure agricultural property and equipment, and some insure various aspects of agricultural production. Key issues considered include:

- What financial risk management insurance products are available? How widely used are they?
- Can they be made more relevant and effective?
- What are the barriers to implementation and uptake of new insurance products and solutions?



Sub-project 1: Insurance in the agricultural sector
The Safe Financial Risk Management Project
A confidential draft report prepared for National Farmers' Federation
Sunday 10 October 2020

AITHR

Key findings: A sustainable weather insurance market must be beneficial to farmers and insurers

- Farm profitability is highly volatile, due in large part to weather-related production risks, such as rainfall deficiency
- Farmers use a range of production and financial strategies to manage weather-related production risk
- Agricultural weather insurance is one possible financial risk management strategy, but uptake is low in Australia



- There are major barriers to uptake and agricultural weather insurance is currently not worthwhile for most farmers
- We have identified several interventions that would help to increase uptake
- Government subsidies would likely be needed for there to be widespread uptake of agricultural weather insurance in Australia, however this would come at a substantial cost

Barriers: Major supply and demand barriers to uptake of agricultural insurance products in Australia

- Alternative risk management strategies: Many farmers already have cost-effective ways of managing weather risk such as building equity in good seasons and drawing on equity in bad seasons
- Asymmetric information: Indemnity products can be more attractive to farmers prepared to take more risk and also motivate farmers to take excessive risks. This increases the costs of providing insurance, leading to higher premiums
- Basis risk: Index products do not provide farmers with complete protection. For example, if a farmer experiences drought but there is sufficient rainfall at the nearest BoM weather station, the farmer may not receive a payout

Recommendations: Primary measures and rationale

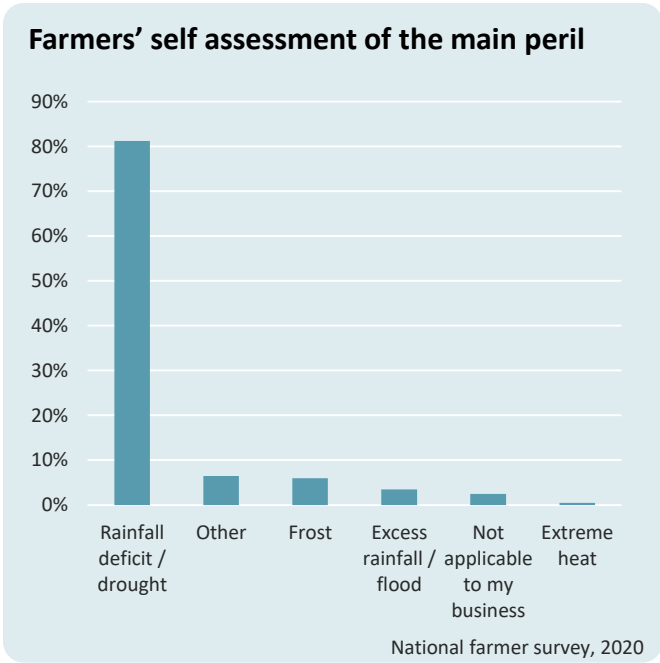
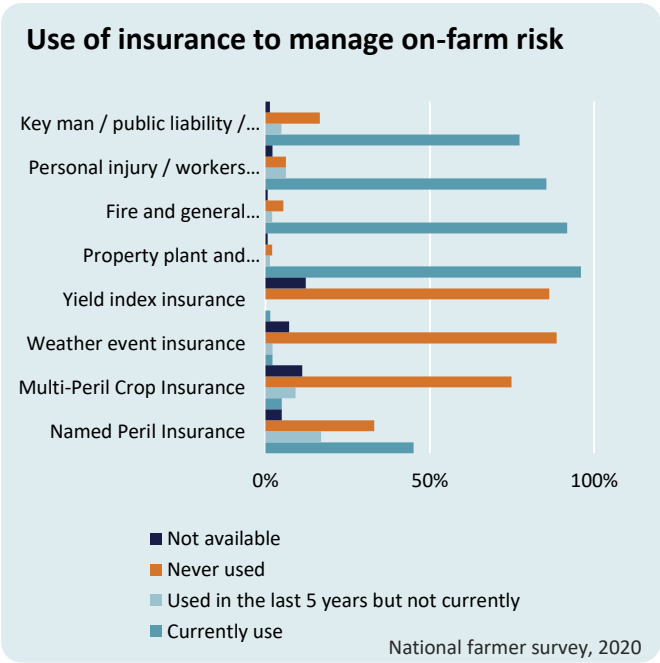
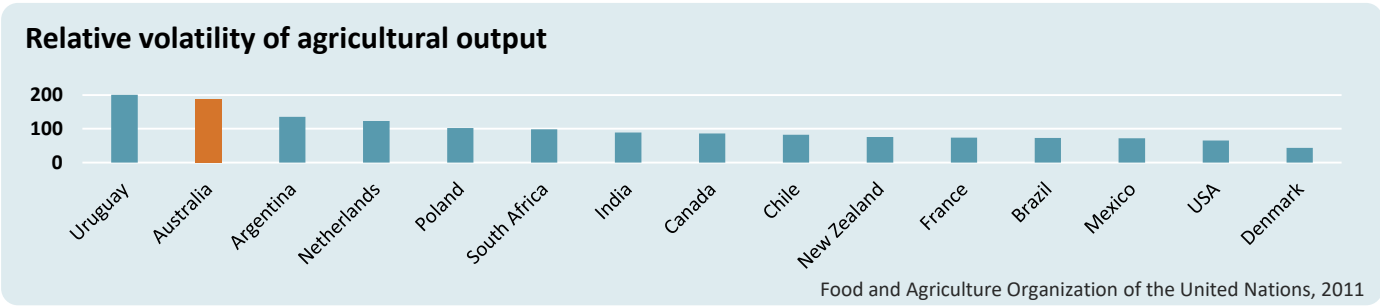
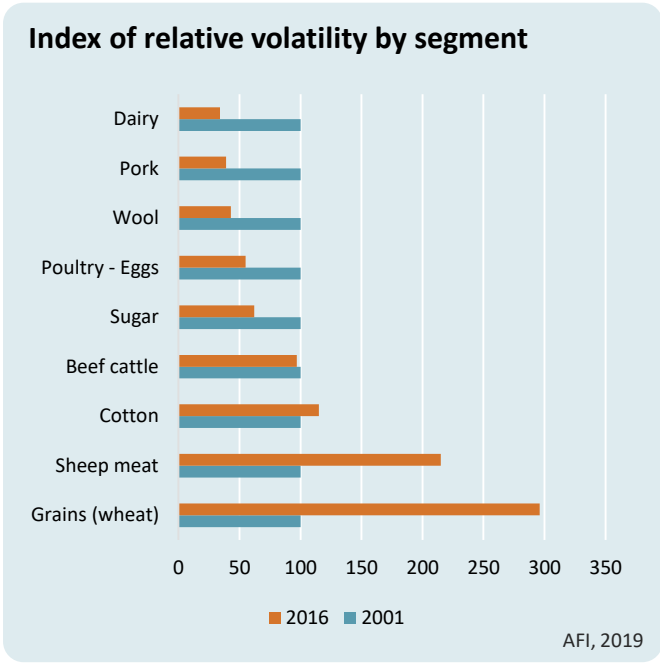
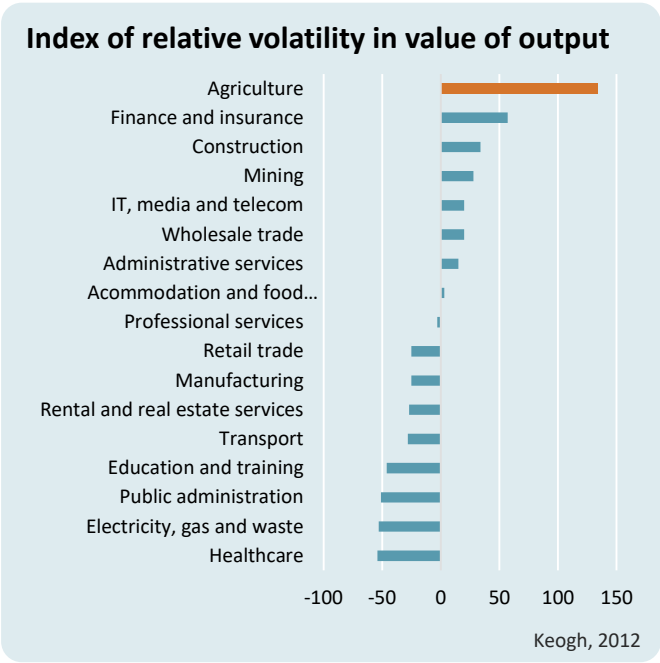
- 1 Invest in weather data and technology to reduce basis risk
- 2 Remove stamp duty on agricultural weather insurance to make products more affordable
- 3 Develop a digital insurance platform to reduce transactions costs for farmers

Other government interventions considered

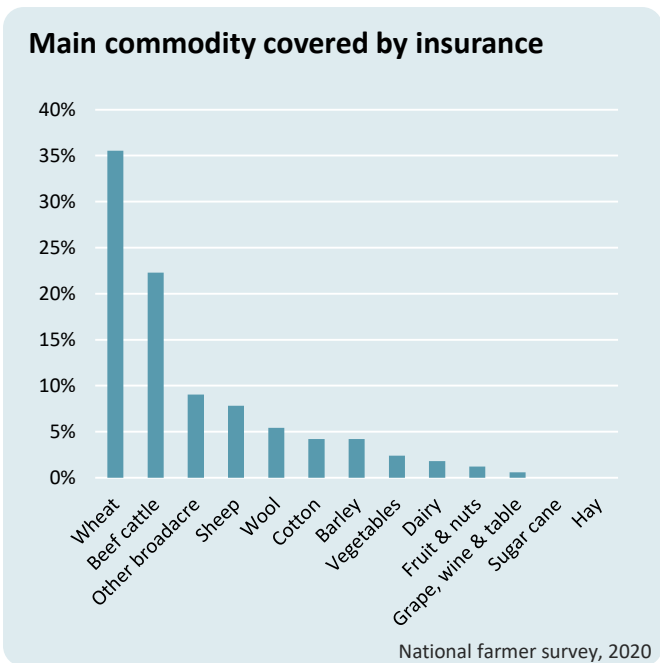
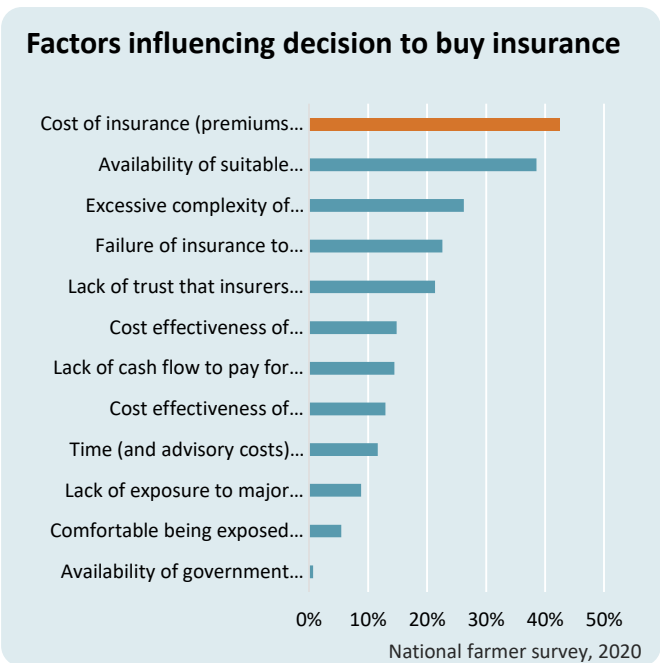
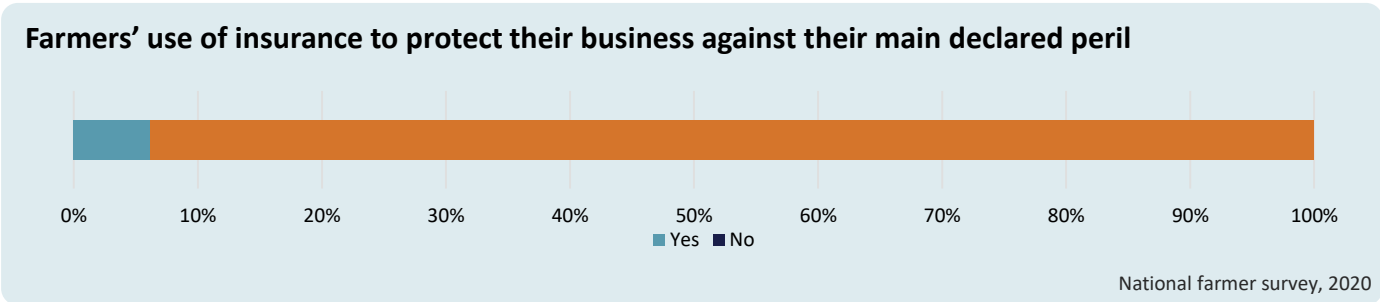
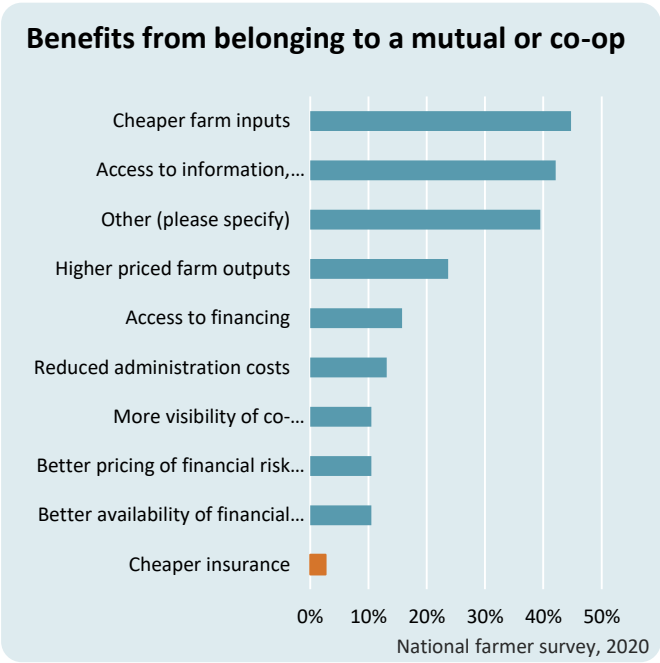
The project placed significant emphasis on identifying a wide range of potential government interventions that could be used to improve the relevance, cost-effectiveness and uptake of insurance products. We set out further information below on the other interventions canvassed and a summary of the findings of the relevant sub-project team.

Intervention	Government intervention considered	Findings
Subsidise insurance premiums	Direct 25% subsidy by government of insurance premiums	Estimated fiscal cost of c.A\$1.2bn per year with estimated farmer benefits of c.A\$340m per year. A subsidy targeted to a particular cohort of farmers is also possible and could have a higher benefit cost ratio, although costs are still likely to exceed benefits in aggregate. This could be investigated on a standalone basis
Government provision	Provision of either insurance or reinsurance, either jointly or directly	Could provide benefits to farmers if the government is able to provide insurance or reinsurance at lower cost than private providers – would need to be established
Development of products	Research and development of new products (including indices)	Insurers generally have adequate incentives to develop products themselves, where worthwhile, without government intervention
Compulsory insurance programme	Government enforces use of agricultural weather insurance across all Australian farmers, or a large subset	Insurance is not worthwhile for many farmers – compelling these farmers to buy insurance would leave them worse off
Regulatory reform	Altering licensing arrangements for the provision of derivatives that are used for the purposes of insurance-like transactions. Providers of weather derivatives require an Australian Financial Services Licence	While potential benefits of regulatory reform are not expected to be as large as other government interventions, further research could be warranted if the market grows
Insurer aggregation	Form a risk pool comprised of private insurers. The risk pool may be reinsured by a private reinsurer or self-sustained and may or may not have government involvement in its administration	Beyond addressing unwarranted regulatory barriers, there is no clear role for government – if aggregation helps to reduce the cost of risk, insurers can develop and administer the risk pool themselves

Significant data: Insurance



Significant data: Insurance



Snapshot: Hedging

Objectives of this sub-project

Price risk management products are available to farmers to manage agricultural and other relevant risks. Key issues considered include:

- What price risk management products are available to help farmers manage risk?
- How widely used are they? Can they be made more relevant and effective?
- What are the barriers to implementation and uptake of new and relevant products?



Key findings: Availability of products across commodities is variable, uptake is low across the board

- The range of price risk management products available across Australian agricultural sectors varies materially
- Sectors with certainty of production and price risk alternatives are best placed to manage income stream volatility
- Products remain underutilised despite a majority of farmers acknowledging importance of financial risk management



- Survey data suggests risk transfer solutions for horticulture, livestock and viticulture are virtually non-existent
- Wheat, cotton and sugar (historically regulated/deregulated) have vastly superior risk transfer alternatives
- It is critical to have some degree of certainty of production before committing to any forward contract

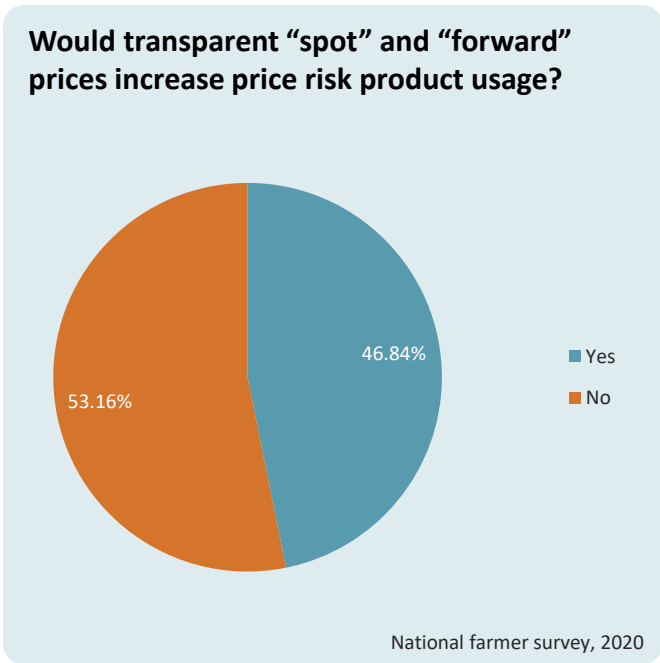
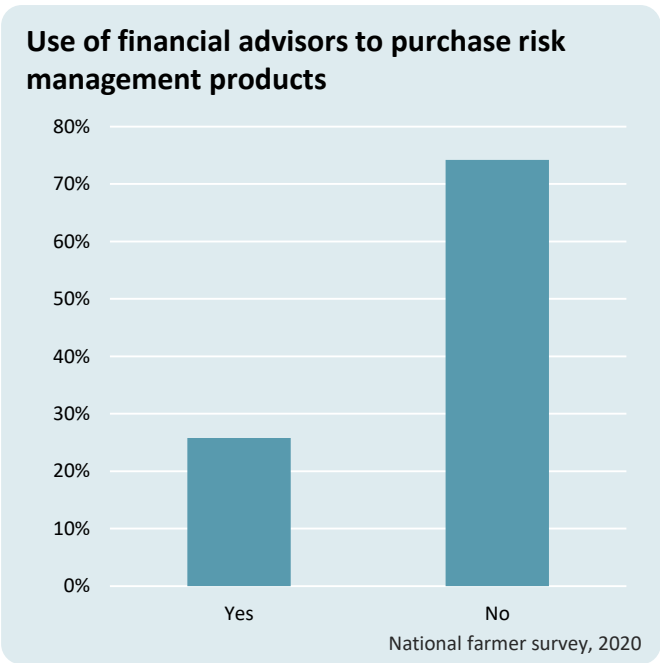
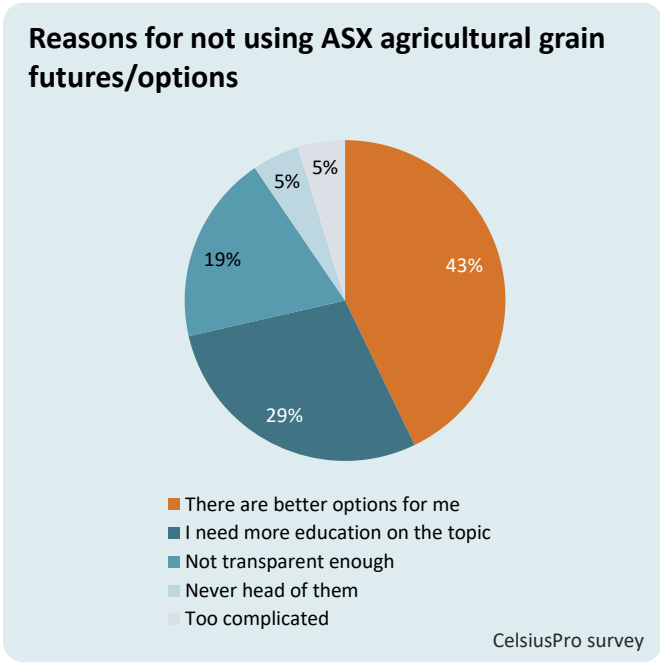
Barriers: Major barriers to development and uptake of agricultural price risk management products

- Price opacity, ie pricing data recording is limited
- Limited education/understanding of products
- Low liquidity for exchange-traded products
- Margin/deposits required to set up positions
- Affordability/competitiveness of product prices
- Limited benchmarking information

Recommendations: Primary measures and rationale

- 4 Improve price data recording and sharing to enable more informed decision-making by farmers
- 5 Increase the transparency of the agricultural supply chain to build trust and bring producers and consumers closer
- 6 Identify high impact sectors and develop three futures contracts in conjunction with industry stakeholders

Significant data: Hedging



Snapshot: Off-farm income

Objectives of this sub-project

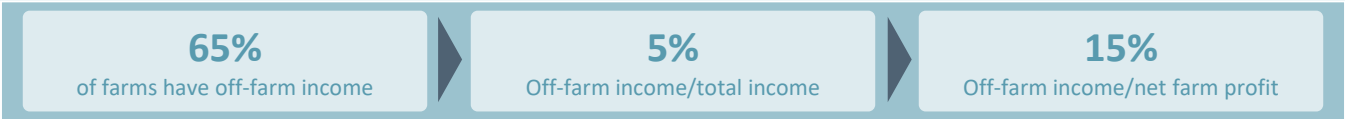
Many farms generate some income from off-farm activities to supplement farming income and offset farm profit volatility. Key issues considered include:

- What types of off-farm income are used by Australian farmers? How important is it from a risk management perspective?
- Can off-farm income generation improve risk management outcomes? What are the barriers to farms developing new sources of off-farm income?



Key findings: In its current form, off-farm income does not have a material risk management impact

- Smaller scale and/or less profitable farms have a higher dependence on off-farm income
- Off-farm income as a mechanism to manage risk is more relevant to less profitable, more indebted farm businesses
- Farmers’ main mechanism to deal with losses is through debt draw-downs



- A large proportion of farmers have off-farm income, but contribution to overall income is low
- The main source of off-farm income is income from investments, followed by salaries
- Compared to other countries, Australia’s off-farm income as a percentage of revenue is lower while farm size is larger

Barriers: Major barriers to off-farm income in Australia

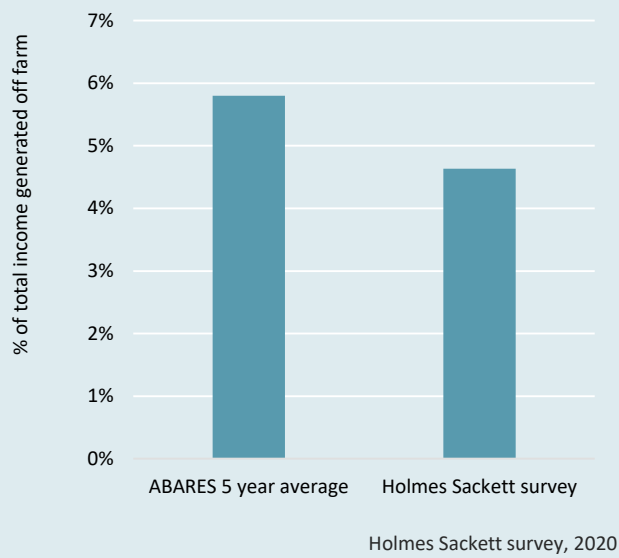
- Returns from on-farm investment activity are higher
- Access to debt for off-farm investment is difficult
- Investment in growth of the business has a higher priority
- Self-assessment of expertise to invest off-farm
- High capital requirements linked to passive off-farm income
- Lack of surplus capital when farm profitability is low

Recommendations: Primary measures and rationale

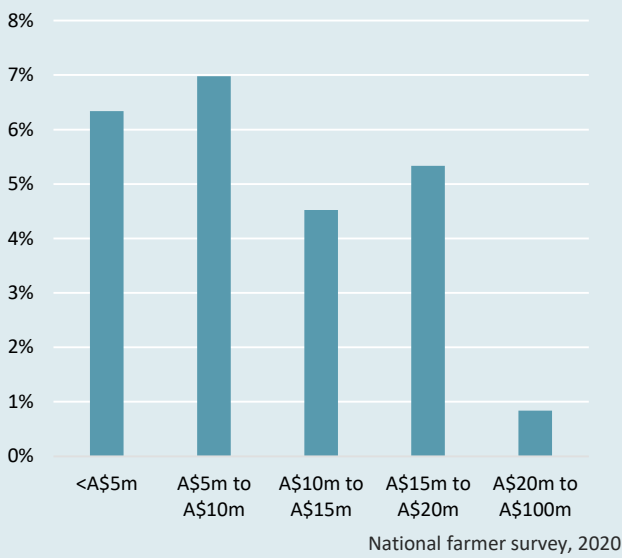
- 7 Temporary tax-deductible debt reduction to compete with tax effective reinvestment of profits on farm
- 8 Homogenise the rules for access to debt between on farm investment and off-farm investment
- 9 Defer PAYG tax payments on non-farm casual wages earned by farm owners during significant agricultural downturns until tax returns are due (as these will typically result in PAYG tax being refunded)

Significant data: Off-farm income

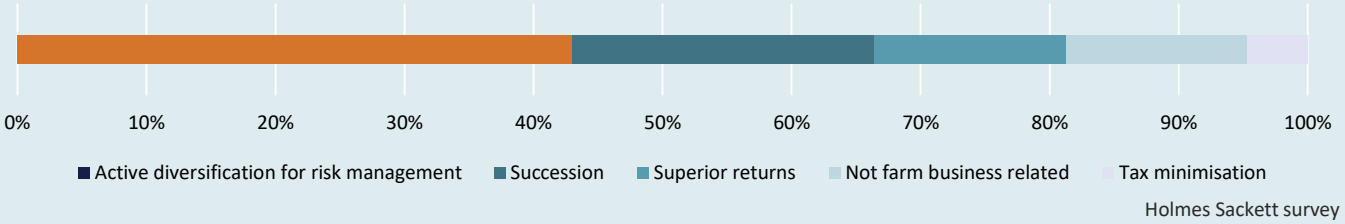
The contribution of off-farm income



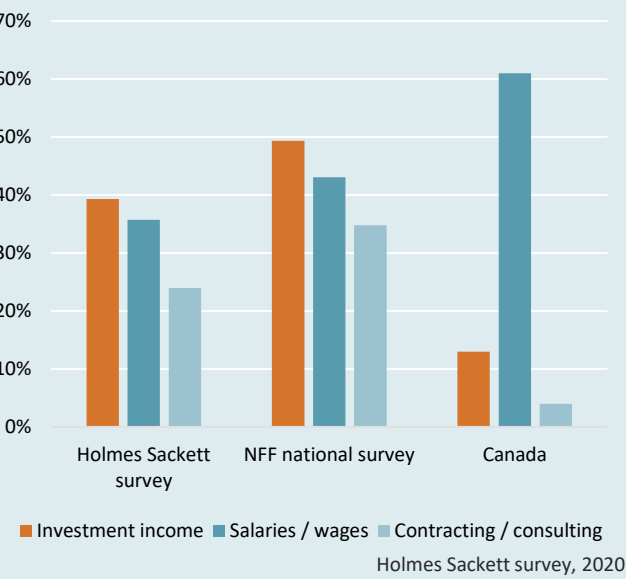
Off-farm income and farm size



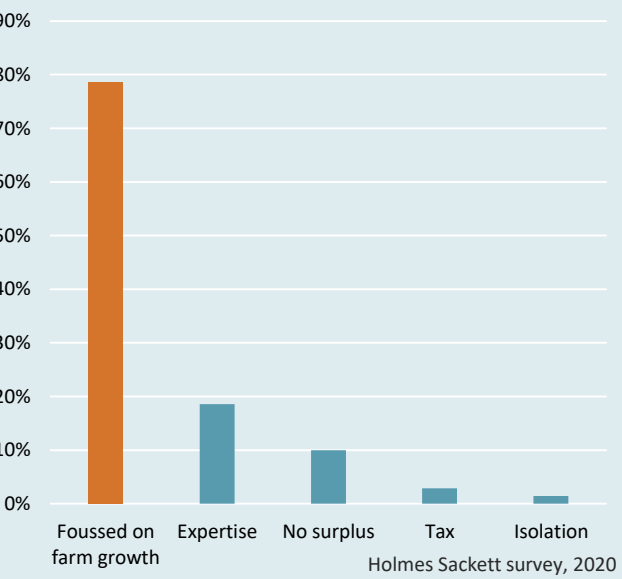
Reasons for off-farm investment



Sources of off-farm income



Barriers to off-farm income investment

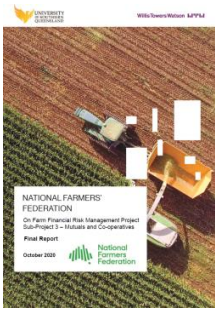


Snapshot: Mutuals and co-operatives

Objectives of this sub-project

Mutuals and co-operatives enable producers to collaborate to share risk and resources, secure lower cost inputs and market their production more effectively. Key issues considered include:

- How prevalent are these structures in Australia and overseas, and what services do they offer?
- What are their benefits, impact and limitations?
- What are the barriers to increasing their impact and conditions needed to reduce these barriers?



Key findings: Mutuals and co-operatives play a significant role in agriculture globally

- Mutuals have played a key role in most agricultural segments to help farmers manage risk globally
- Other than a few high-profile examples, use of these has been relatively low in Australia in recent times
- The key perils to farmers in Australia are systemic, making diversification in a mutual portfolio challenging to achieve



- Mutuals can support financial risk management regardless of the existence of insurance subsidies
- Mutuals can provide cost-effective risk management products where insurance companies do not offer these
- Government support may be required to stimulate formation and/or to support the early stages of growth

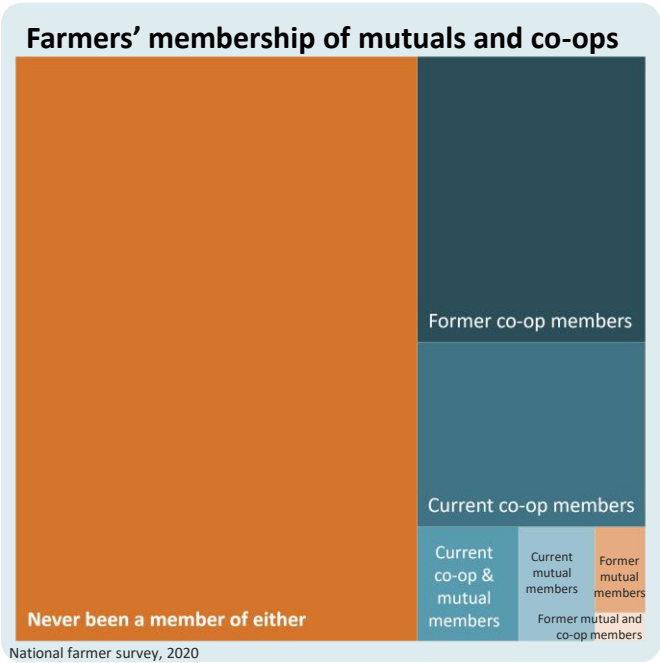
Barriers: Major barriers to the formation of mutuals and co-operatives in Australia

- Lack of awareness of the benefits of membership
- Production insurance products are perceived to be expensive and ineffective
- Financial investment (capital) required at formation
- Concern about financial security and claims paying ability
- Limited diversification of risk leading to a reliance on reinsurance which adds to the premium cost
- Lack of management expertise

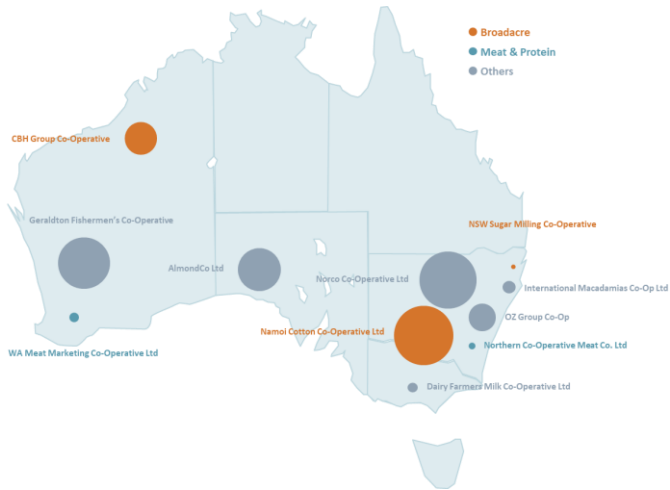
Recommendations: Primary measures and rationale

- 10 Implement fiscal and regulatory measures to foster the establishment of mutuals
- 11 Enable access to capital from other programmes to support the formation and development of mutual structures
- 12 Offer parametric solutions which provide rapid payments on the occurrence of a catastrophic event

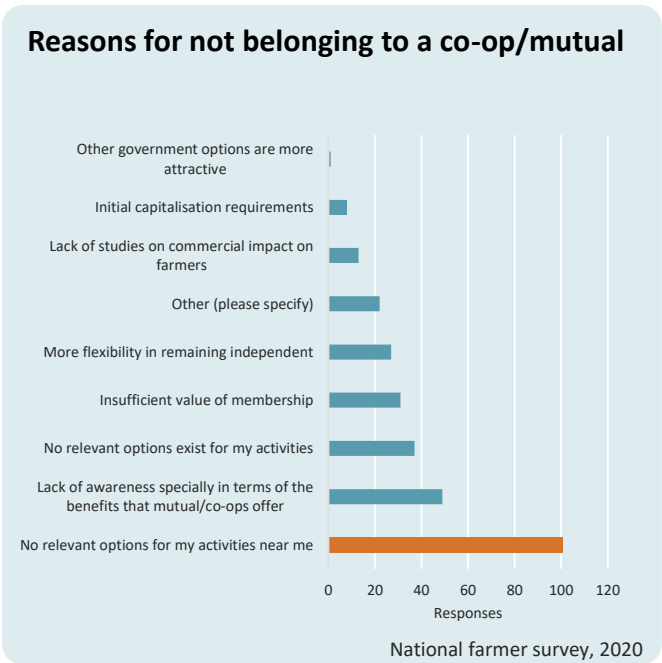
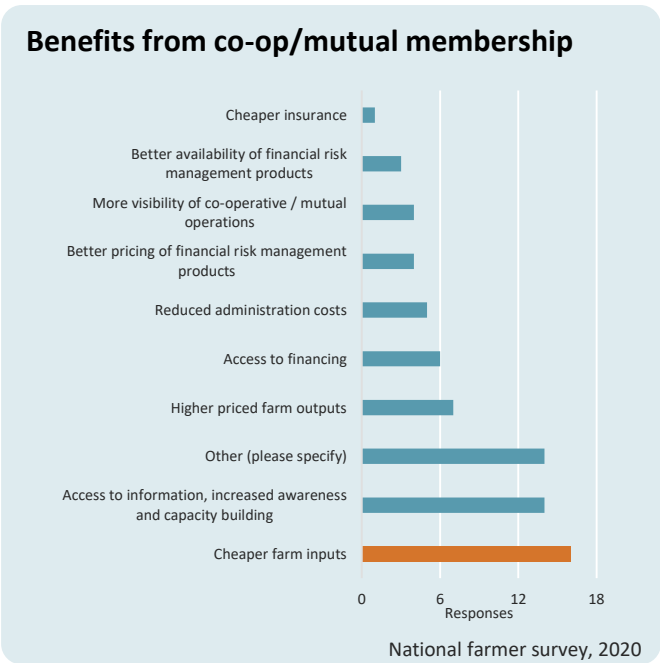
Significant data: Mutuals and co-operatives



Agricultural mutuals and co-ops in Australia



Pottinger analysis. Circle size represents number of members

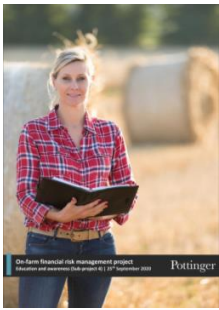


Snapshot: Education and awareness

Objectives of this sub-project

Education and awareness ensures that financial risk management products and measures are effectively used by the agricultural community, and that product providers understand industry needs. Key issues considered include:

- Assessing the level of awareness, knowledge and understanding of financial risk management products amongst farmers
- Identifying barriers to increased awareness, knowledge and understanding of these products



Key findings: Farmers' awareness is high, but that's only one piece of the puzzle

- Farmers surveyed were mainly concerned with production risk and they recognise the importance of business skills
- Awareness does not translate into uptake – many farmers actively choose not to manage risks with financial products
- Farmers perceive that general awareness of financial risk management products is not an industry-wide issue



- Survey results show that larger farms, both by revenue and surface area, have higher levels of awareness
- The local education system caters well for the sector. However, in comparison with other countries, financial subjects in Australia tend to be elective
- Information provision is highly fragmented – there is no independent source of expertise on financial and risk matters

Barriers: Major barriers to awareness of financial risk management products in Australia

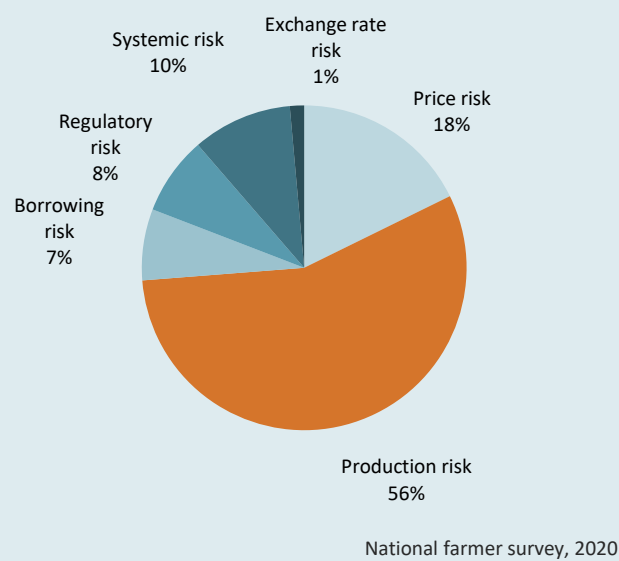
- Awareness of and/or accessibility of data
- Industry-wide and systemic factors
- Factors linked to farmers' interests and behaviour
- Factors related to farmers' advisors

Recommendations: Primary measures and rationale

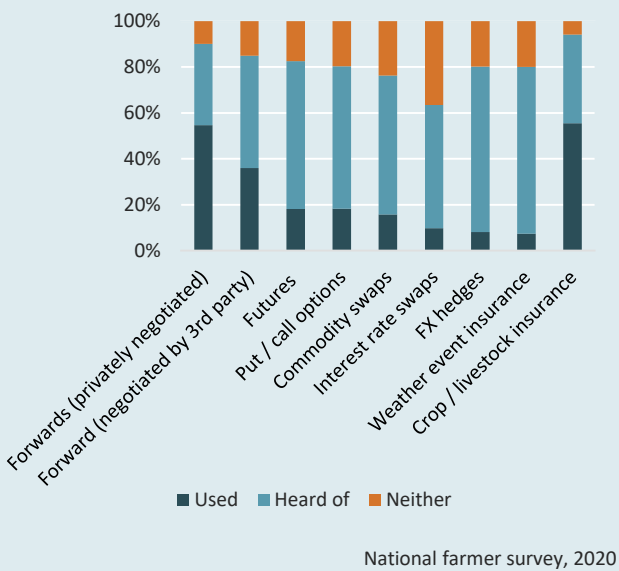
- 13 A national data initiative to improve weather and commodity data granularity and increase comparability across regions
- 14 Farmer education and advisor training initiatives
- 15 Industry collaboration initiative

Significant data: Education and awareness

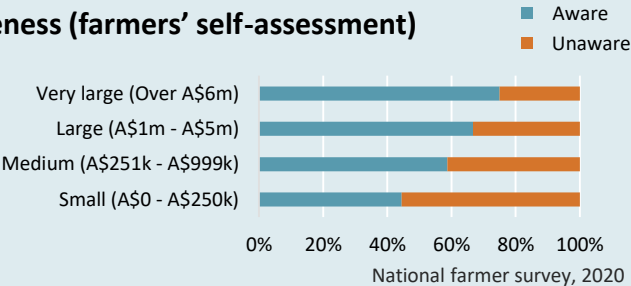
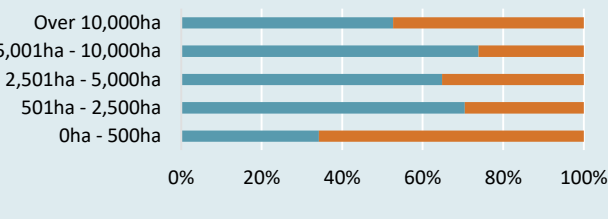
Farmers' perception of most important risks



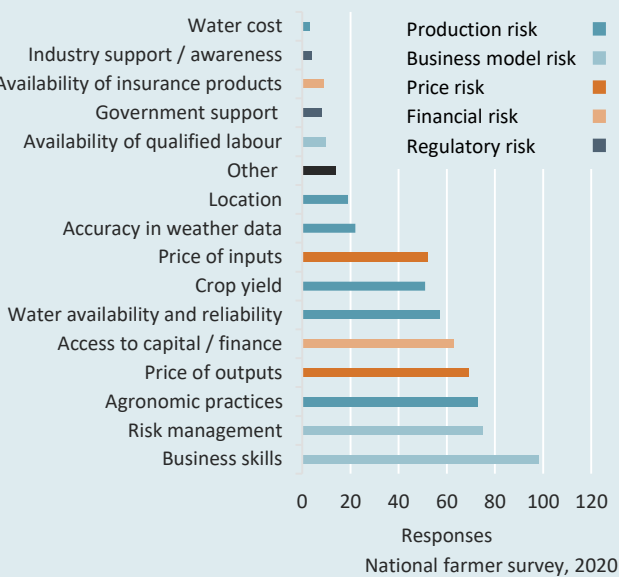
Farmers' product awareness self-assessment



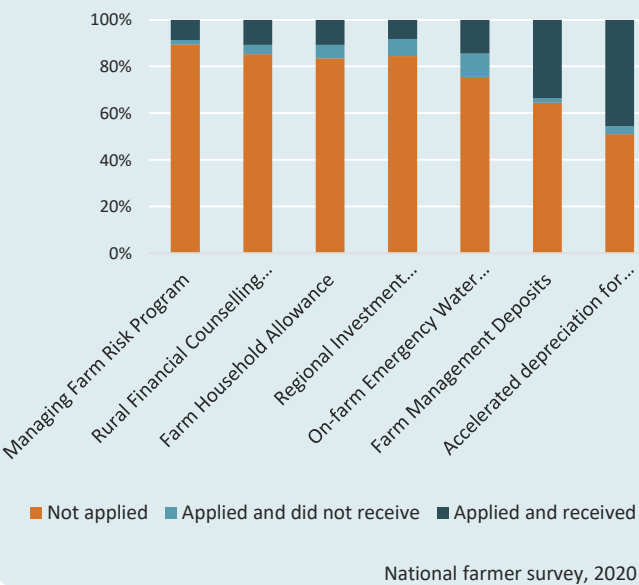
Farm size vs financial risk management product awareness (farmers' self-assessment)



Farmers consider business skills to be critical



Farmers' awareness of government measures



Snapshot: Government policy

Objectives of this sub-project

Policy plays a critical role in the agricultural sector in most countries. Government policies aimed at addressing risk in Australian agriculture have a long and chequered history. Issues include:

- Which government programmes and schemes improve management of financial risks for Australian farmers?
- What are the barriers to policy success in this area?



Key findings: Government programmes need to be evaluated to assess their effectiveness

- There is little evidence that certain government programmes have been effective at smoothing volatility in the sector
- Government policy in the agricultural sector has been characterised by ad-hoc responses
- The heavily subsidised ag sectors of the EU, US and Canada, have little applicability to Australian markets

1%
of farms accessed drought loans (2016)

>91% awareness
of accelerated depreciation & FMDs

c.16,000 farmers
receive Farm Household Allowance

- Examination of the farm business risk environment for Australia found intervention is generally not warranted on the basis of alleviating market failure
- Grain producers, mixed farming and livestock producers are the farmers most exposed to weather and markets risk - accounting for the largest share of Farm Management Deposit accounts and the value of deposits
- Assistance provided for drought in 2018/19 did not have a demonstrably material commercial benefit for the Australian agricultural sector

Barriers: Major barriers to the development and uptake of effective government programmes

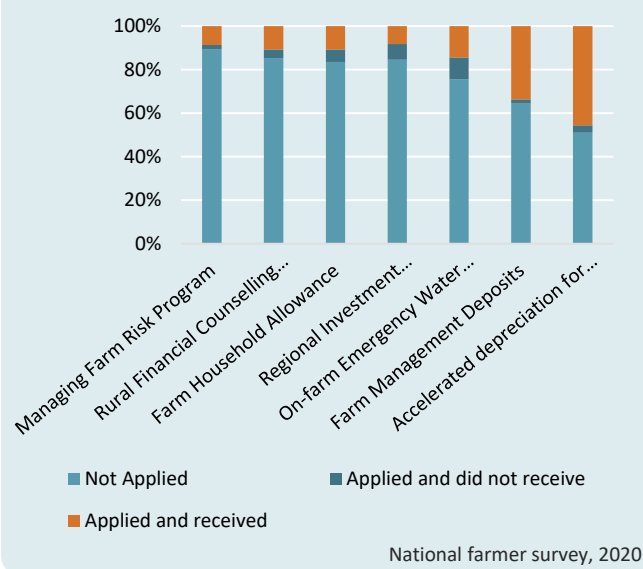
- Political appetite to re-evaluate/remove programmes
- Insufficient information to drive decision-making
- Public perception of priorities (eg media on drought)
- Lack of holistic cost-benefit analysis

Recommendations: Primary measures and rationale

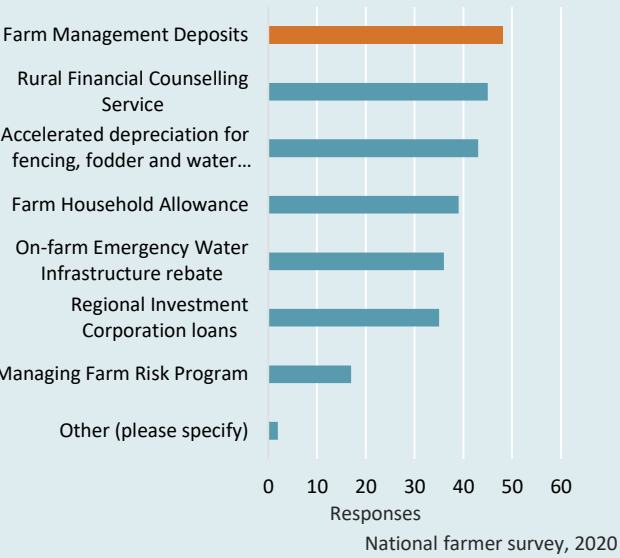
- 16 Focus on assisting individuals and families who are engaged in farm businesses
- 17 Incentivise preparation, risk mitigation innovation and help smooth income variability
- 18 Remove measures that create perverse outcomes and prioritise data-driven analysis of government risk policies, measures and schemes

Significant data: Government policy

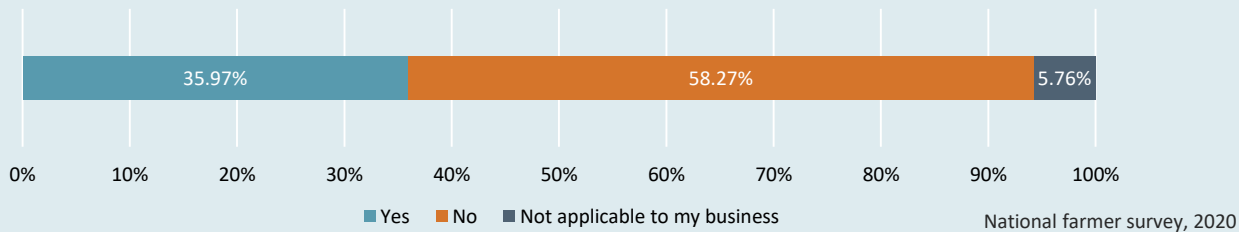
Applications for government assistance



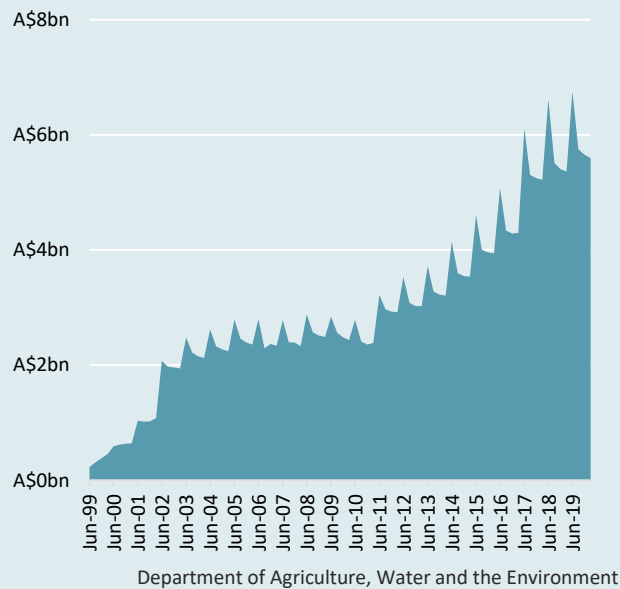
Awareness by government programme



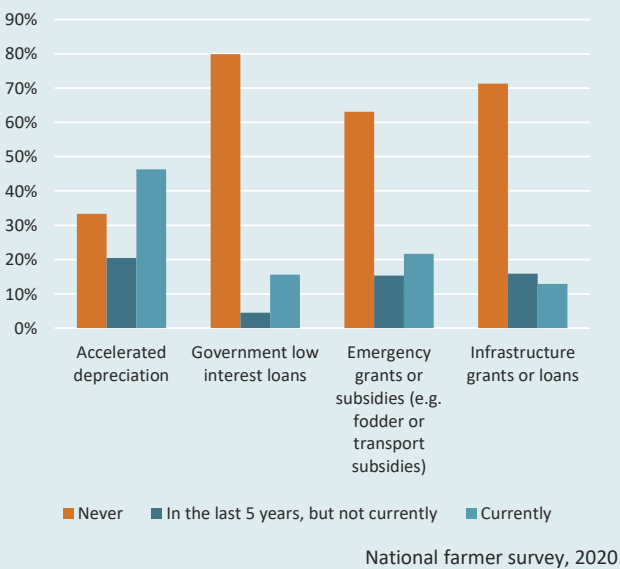
General awareness of government support programmes



Value of Farm Management Deposits held

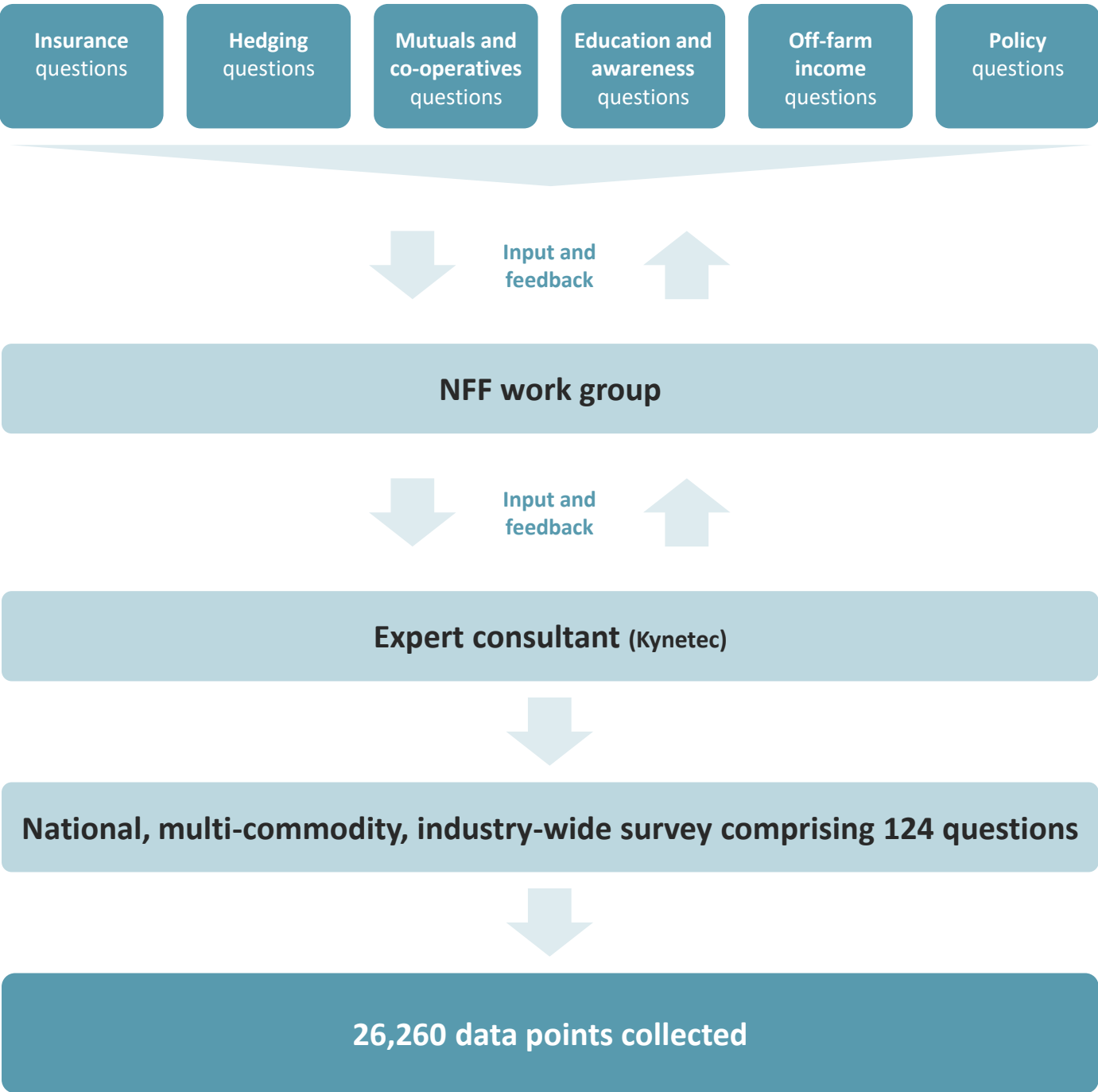


Use of government programmes



The project included a comprehensive farmer survey

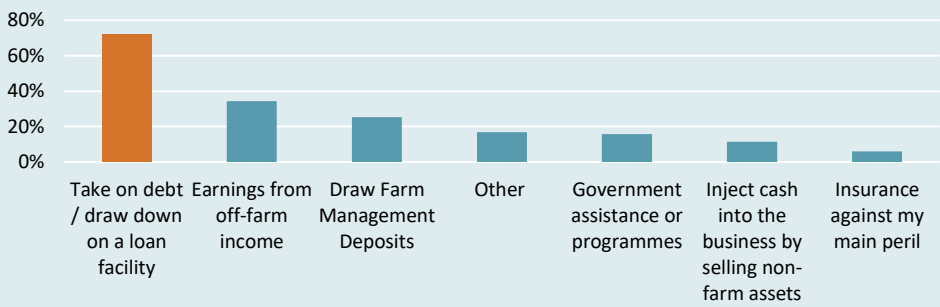
The national survey was a questionnaire designed to cover the six approaches to risk management outlined immediately below. The survey comprised 124 questions and was distributed to a broad range of industry stakeholders, including farmers, mutuals, co-operatives, industry associations, government bodies and other industry participants. The survey was made available to participants by email and other social media channels and delivered using online polling software.



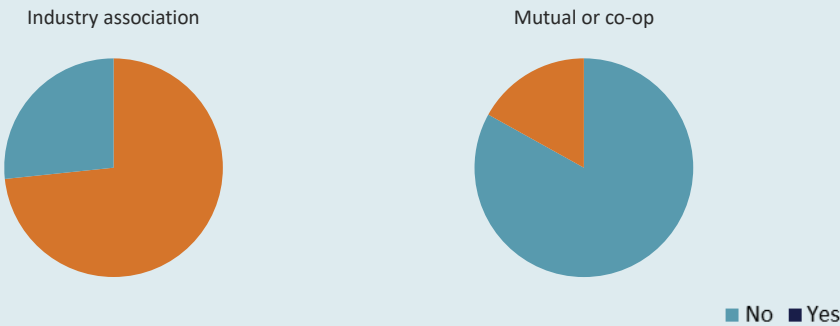
This provided useful quantitative evidence

Farmers surveyed primarily use debt to smooth out volatility of returns. Given the high average indebtedness in the sector, this approach has limitations and has been made possible thus far, in part, by growing land valuations

Primary financial mechanism to deal with losses



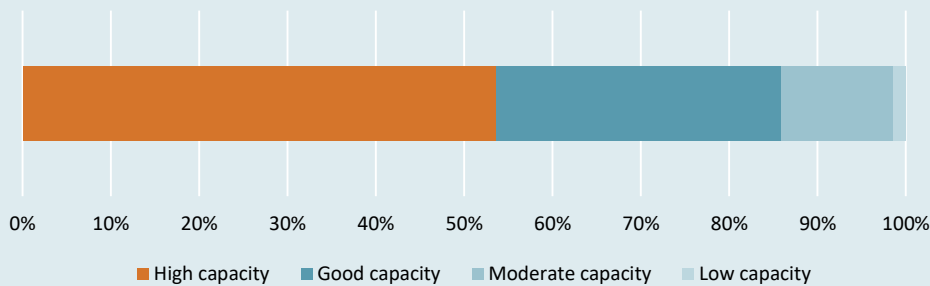
Membership of industry associations vs mutual and co-ops



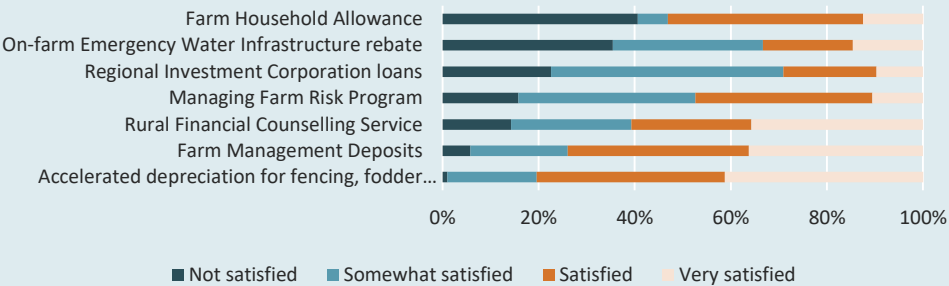
While most farmers belong to industry associations, few are members of mutuals and/or co-operatives. The potential role of industry associations in communicating with farmers should not be overlooked

Farmers consider business skills the most important factor in operating a sustainable business. Further, they rate their ability to manage this factor to be high – even well-informed farmers might elect to manage risk by alternative means

Farmers' self-assessment of ability to manage business skills



Farmers satisfaction with government programmes

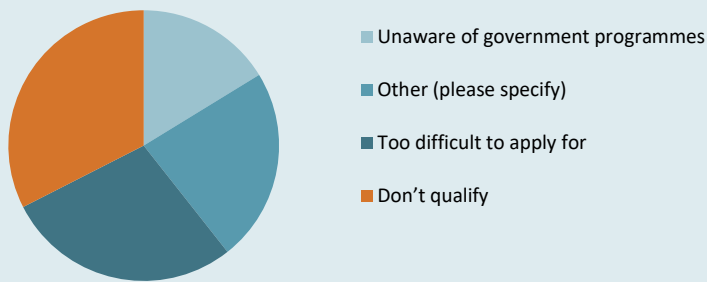


Farm Management Deposits are widely used, and farmers have expressed a high-level of satisfaction with the programme. Other programmes such as regional investment corporation loans should be reviewed

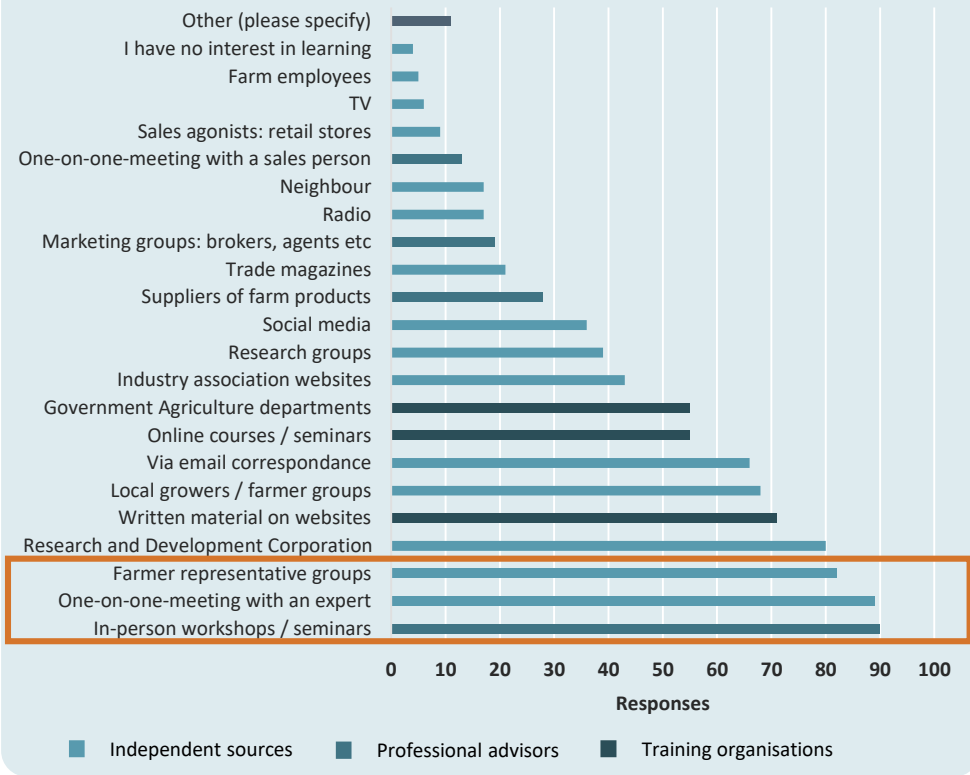
The data helped shape the recommendations

The majority of farmers believe application processes are too hard or that they do not qualify for government programmes. This should be taken into account in any proposed new policies as well as any changes to existing programmes

Reasons for not applying to government programmes



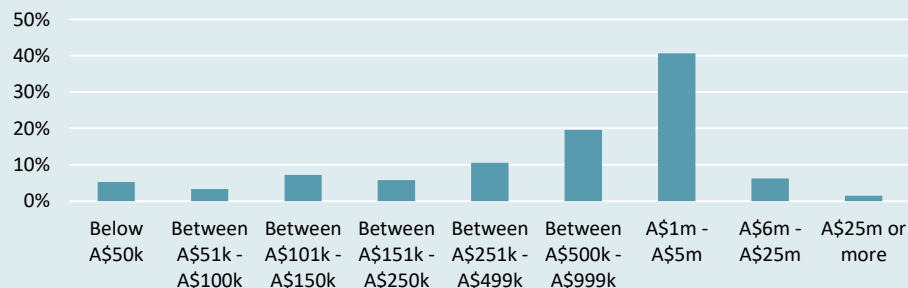
Information sources used by farmers



Farmers receive information and like to learn about financial risk management products from a number of different sources. The fragmentation in the provision of information and education for farmers is evidenced by the large number of channels used to communicate with primary producers

The survey covered a wide range of farm sizes. This was important to the project, in order that we could build understanding of the perceived needs of all farmers

Surveyed farmers' self-declared estimated annual revenue



Further information

For more detailed analysis, you can view the underlying sub-project team reports at nff.org.au



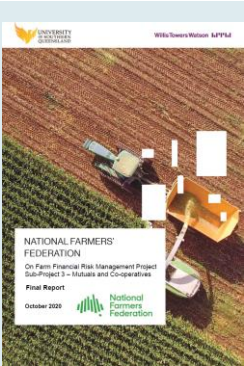
Insurance



Hedging



Off-farm income



Mutuals and co-operatives



Education and awareness



Government policy

There are many useful sources of data on the Australian agricultural sector

[ABARES](#)

[ABS](#)

[AgForce](#)

[Data.gov.au](#)

[Department of Agriculture](#)

[GrainGrowers](#)

[NFF](#)

[NSW DPI](#)

[NSW Farmers](#)

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