



Farming Forever

A national plan for climate change
and agriculture



farmersforclimateaction.org.au



We recognise the assistance of Nation Partners in stakeholder engagement and the development of this report.

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Executive summary

Climate change poses a serious and ongoing risk to the Australian agricultural sector's viability which, in turn, impacts our long-term food security and the sustainability of regional communities. Agriculture is the most vulnerable sector to climate impacts and projected productivity declines are likely to impact all subsectors. Changes in seasonal conditions have already reduced farm profits by an average of 23% over the period 2001 to 2020.¹

We are all dependent upon a viable agriculture sector. Farmers produce more than 90% of the fresh food we consume in Australia and still manage to export around 70% per year.² When farmers experience climate-driven disasters on farms and along freight routes, consumers experience empty supermarket shelves and higher prices.

Currently, a cohesive national plan to mitigate the negative impacts of climate change while improving resilience in agriculture to ensure farmers benefit from the shift to a zero carbon economy does not exist.

The agriculture sector has been leading Australia in reducing emissions since 1990.. Commodities are setting ambitious targets, including red meat's carbon neutral 2030 (CN30) goal and pork is working towards net zero by 2025.

Australian farmers have a unique role in the national movement towards net zero emissions as stewards managing more than half of Australia's landmass.³ This means Australian farmers will play host to the renewable energy

developments, powerlines and associated infrastructure that will power our future energy grid. At the same time, these farms are uniquely exposed to the impacts of a changing climate. As these changes become more apparent, their associated environmental, social and economic responsibilities are becoming increasingly difficult to navigate.⁴

Future-proofing our farms can reduce national emissions and increase productivity across the agriculture sector. It can also position Australia as a renewable energy superpower, ensure food security and market accessibility, and unlock exciting new opportunities for Australia.

Farmers for Climate Action has surveyed farmers across the country to better understand the challenges they face, as well as the opportunities they see from taking action on climate change, both on farm and across the country. The overwhelming finding from our engagement, which included surveying 600 farmers and extensive, in-person farmer and industry roundtables at the end of 2022, is that farmers want to take action to reduce on-farm emissions but don't know where to turn. The sector is looking to the leadership of the Federal Government to ensure opportunities aren't missed and farmers are not left behind.

This engagement forms the basis of our calls for a national climate change and agriculture roadmap, and it has informed the four key themes and our policy proposals.



Key findings and recommendations

Emissions reduction and innovation

Key findings of our consultations:

- Most farmers want to take action on climate change by trialling new technologies and products, and change their farming practices if it will benefit themselves and the environment.⁵
- Although 93% of respondent farmers expressed a willingness to change farming practices, 70% have not yet been involved in any extension program.⁶ Channelling investment into extension will help to bridge the gap between this willingness and actual on-farm uptake of new practices.
- Landcare and Natural Resource Management (NRM) Regions are the most trusted source of information about climate change adaptation.⁷

Recommendations:

1. Significantly increased Federal funding specifically for research, development and commercialisation of mitigation and adaptation solutions for specific commodities as well as the sector as a whole. This could include a new mechanism to support farmers to invest in emissions reduction technologies and initiatives that are available but cost prohibitive, such as an instant tax asset write-off for renewable energy or on-farm energy storage.
2. Fund practical on-farm extension programs using the existing network of extension providers, including Rural Research and Development Corporations (RDCs), Drought Resilience Adoption and Innovation Hubs, state governments, Landcare networks and farmer-led groups, to enable producers to understand, measure and reduce on-farm emissions. This program could be similar to the Victorian On-Farm Action Plan Pilot.

Resilient landscapes

Key findings of our consultations:

- The carbon market has the potential to unlock significant on-farm, industry, environmental and social benefits.⁸ These benefits come with a range of risks to be addressed and minimised in a national policy to encourage widespread farmer participation, particularly given that only 10% of surveyed farmers are currently active in the carbon market.⁹
- The carbon market appears to have significant issues with eligibility and the value it would be perceived to generate with 38% of respondent farmers indicating that they do not participate because they do not know how to, and 70% not understanding the carbon market itself.¹⁰

Recommendations:

1. Invest in NRM Regions to employ a network of dedicated carbon farming extension officers.
2. Commit to fully funding the finalised National Soil Action Plan to ensure the health of the natural resource all farmers rely upon is prioritised.



Thriving communities and people

Key findings of our consultations:

- There is a general lack of understanding of the Future Drought Fund with 90% of respondents not having accessed it and 70% not knowing of its effectiveness.¹¹
- Government funds and grant schemes for agriculture such as the Future Drought Fund and Emissions Reduction Fund appear to be underutilised by farmers due to the complexity and administrative cost of accessing such support.¹²
- 50% of farmers who have had interactions with transmission line development proposals were dissatisfied with the way it was managed.¹³

Recommendations:

1. Develop a new national resilience fund, similar to Future Drought Fund, to build the capacity of rural communities to prepare for the range of natural disasters they face.
2. Provide a mechanism for improved benefit sharing arrangements for transmission hosts and communities, including higher annual payments to hosts, payments to impacted neighbours, and funding for community benefit programs.¹⁴
3. The Federal Government should make direct efforts to streamline processes and provide direct assistance to farmers wanting to participate in government programs.

Secure markets

Key findings of our consultations:

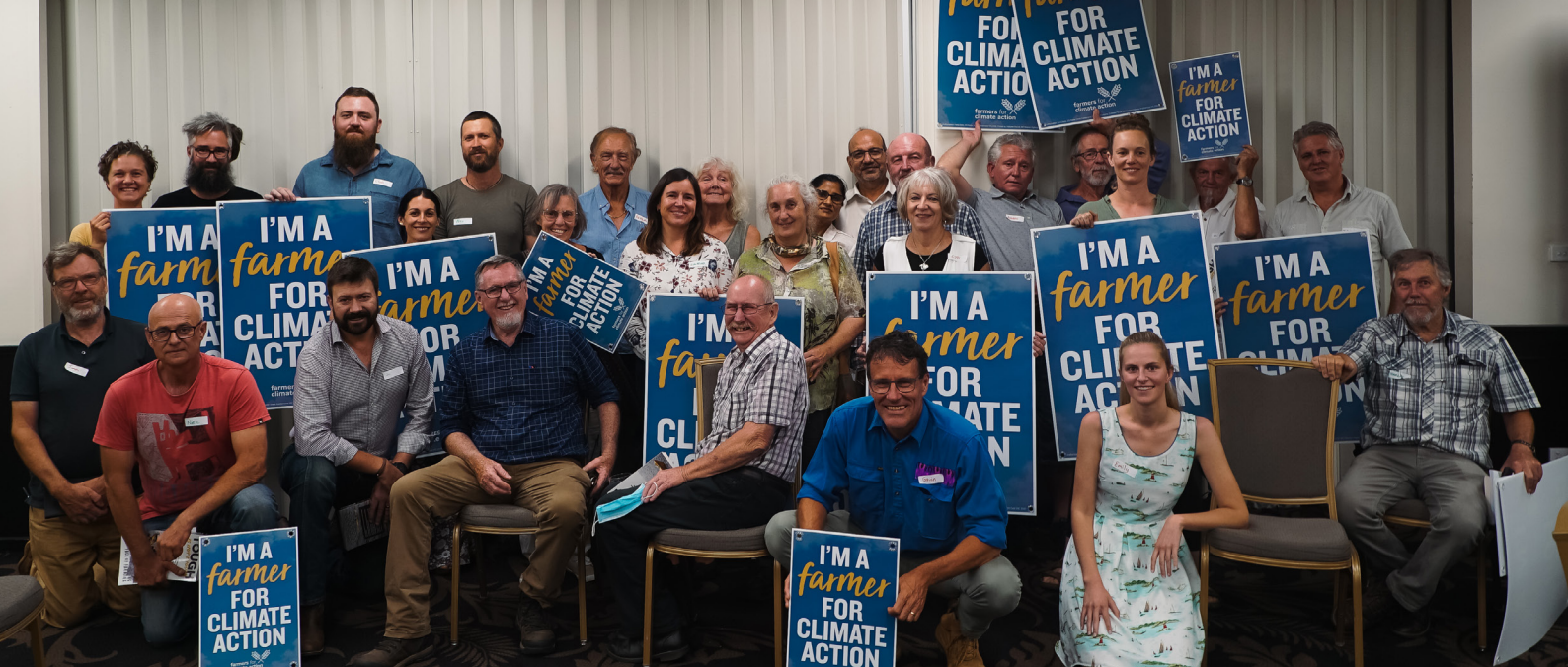
- While more than half of surveyed farmers feel well-informed about changing regulations in their local and international marketplaces, there are still many (40%) who do not feel well informed.¹⁵
- Supply chain uncertainties resulting from climate change and extreme weather events such as drought, floods and heat waves have major trade implications for producers.¹⁶
- Farmers know that without incorporating sustainability into their production, they might not be able to access premium prices for their produce and/or might be shut out of local and international markets.¹⁷

Recommendations:

1. Commission a national agriculture risk assessment, to monitor existing and emerging risks affecting Australian producers and provide a framework to respond at the national level.
2. Establish a standardised system to enable farmers to measure sustainability using one universal framework. This could leverage the work already underway in the Australian Agricultural Sustainability Framework.







Introduction

Farmers for Climate Action is a movement of farmers, agricultural leaders and rural Australians advocating for Australia to adopt strong economy-wide climate policies by growing the number of farmers, farming communities and elected representatives championing ambitious action.

We are the only farmer-led organisation that specialises in climate action, and have campaigned for a national policy for climate change and agriculture since our inception.

We now represent more than 7,500 farmers across Australia, making us one of the largest farmer member bodies in the nation, and our supporter base includes over 35,000 Australians committed to climate action for our industry. The time for action has arrived.

We have led the development of research and published reports that have influenced decision-making and identified opportunities to adapt to and mitigate climate change. We are well-placed to capture the needs of Australian farmers, land managers, peak industry bodies and key stakeholders to influence national policy on climate change.

Farmers for Climate Action has developed this report in close consultation with members, farmers and land managers, climate leaders and industry experts to represent the diversity and wisdom that lives in farming communities across Australia and to provide inputs to national policy-making decisions.

This report does not attempt to list all actions needed to realise a more sustainable and climate resilient agricultural sector. Rather, it provides an achievable list of immediate and fundable recommendations to guide the development of a national agriculture and climate change policy.





Setting the scene

Australian farmers are on the front lines of climate change, facing more severe and frequent drought, heatwaves, fires and floods. The shift to a low-emissions world also presents farmers and rural communities with opportunities, such as drought resistant income from carbon credits and hosting renewable energy projects and/or associated transmission lines. Integrating climate resilience and sustainability into Australia's agricultural landscape has shifted from a 'nice-to-have' to a necessity as floods, fires, and droughts become more frequent and impacts more tangible.¹⁸

Extreme weather is making farming harder and more uncertain. Since the 1960s, the number of extreme fire danger days in Australia has increased tenfold from 14 days in 1960-69 to 143 days in 2010-2019.¹⁹

Farmers are adapting at a rapid rate, but there are limits. Although sector-wide productivity increases and adaptation efforts have offset negative climate impacts for over 30 years, annual farming profits are being reduced by changes in seasonal conditions and future climate impacts threaten to worsen conditions for Australian farmers.²⁰ Research by the Australian Bureau of Agricultural and Resource Economics (ABARES) reveals that climate change has already reduced the average Australian farm income by \$29,000 a year.²¹ Without adaptive measures, climate change

threatens to reduce farmer profitability and productivity by 40-60% by 2060.²²

To date, Australian state and territory governments have each established their own legislative and policy approaches to address climate change and agriculture.²³ As a result, several differing commodity-based, state-based, and regionally based adaptation approaches, emissions reduction targets and action plans exist.²⁴

Australian agriculture is setting ambitious agendas, but need greater support to make these goals a reality. In 2018, the National Farmers Federation (NFF) released its 2030 Roadmap and vision for Australia's agriculture industry to surpass \$100 billion in farm gate output by 2030.²⁵ The red meat sector has set a Carbon Neutral by 2030 target,²⁶ Australian Pork has a goal of net zero by 2025,²⁷ and dairy and grains have strong emissions intensity targets.²⁸

To realise these ambitions, the Federal Government must guide policy and provide tools and resources for industry to drive the improvement and innovation needed, in close collaboration with all stakeholders.²⁹





Farmer and industry engagement

We tested key themes and priorities with farmers and agriculture industry leaders through a series of thorough engagement exercises to capture the needs of farmers, land managers and industry stakeholders from across Australia.

Survey

A 20-question survey to farmers in our Australia-wide network was designed to delve into and identify the most prevalent challenges and opportunities for a national policy to address.

1,051 survey participants, including 599 farmers from across Australia.

Climate Leaders Network Roundtable event

We connected some of our most engaged and climate-smart farmers during our Climate Leaders Network Roundtable event to understand the support that farmers need to confront the challenges of adapting to climate change and building resilience.

27 farmers participated in our Climate Leaders Network Roundtable event.

Stakeholder interviews

We sat down with key industry stakeholders to listen to their experiences on-farm and in industry and understand how a national agriculture and climate change policy can be shaped to work for farmers.

Stakeholders included the Cattle Council and the National Farmers Federation.







What farmers need

Emissions reduction and innovation

Agriculture is one of the most exposed industries in Australia to the impacts of climate change. Farmers want to change practices and play a key role in Australia's decarbonisation journey.

To ensure farmers are able to assume an active role in mitigating climate risks and reducing emissions, they must be supported by a robust research, development, and extension (RD&E) framework.³⁰ Without this knowledge base and connectivity to tools and resources, innovative technologies will remain costly, industry productivity will decrease, and private investment will be discouraged.³¹ Increased Federal Government investment in extension programs is therefore needed to lower the barriers preventing farmers from adopting new emissions reduction technologies and practices.³²

Whilst many tools and climate projections exist to support farmers to respond to climate impacts, a lack of coordination across programs and R&D has challenged on-farm application of these tools to improve day-to-day farm management.³³ A national strategy must therefore create the policy settings needed to support these programs and harmonise action across jurisdictions.³⁴ The Australian Agriculture Sustainability Framework cites that the most effective incentive and reward mechanism to engage farmers in the achievement of biodiversity and sustainability outcomes is via an overarching framework through which farmers are given agency and are connected with current and emerging sustainability programs.³⁵



Roundtable forums and stakeholder engagement

Extension programs

Engagement with farmers revealed that the most successful extension programs are run by those who already practice the technology and can instill confidence that uptake will be successful and time or cost effective. Industry stakeholders agreed that witnessing others successfully implement new technologies and practices is needed to encourage widespread uptake. It is widely perceived amongst stakeholders that extension programs are where the Government can be of most impact in the transition to emissions reduction in agriculture.

Accessibility

The farm-scale accessibility of extension programs also emerged as a common challenge with a farmer noting they are located over 600km away from the training centre. Here, industry experts indicated that having a diversity of players delivering extension programs creates the public and private sector partnership approach needed for farmers to be able to select their trusted information source suitable to their geography. To better facilitate face-to-face learning and extension programs, increased Federal Government investment in existing networks such as Drought Resilience Adoption and Innovation Hubs and Landcare was suggested.

Investment barriers

When discussing barriers to emissions reduction investment at the farm level, a shared experience amongst stakeholders was the lack of technical and scientific field experts to engage on farm to assist in applying new technologies, strategies, or practices. Despite the high interest in emissions management and reduction strategies, such as carbon accounting, there is a low level of immediately applicable R&D easy to apply on-farm, and clear and incontestable methodologies.

Incentives

Proposed solutions to uptake barriers from a financial perspective varied amongst industry leaders. Some suggested the need for positive incentives for producers to participate in new pilot programs, and others suggested that it is naturally in the farmer's economic and production-based best interest to adopt emissions reduction practices. More broadly, there was agreement that investment in information systems such as decision support tools will better support the adoption of new technologies and practices.





Survey results

Federal Government support is needed to implement resilience-building measures on-farm. Survey findings point towards regenerative farming (13%), reduced finance costs via tax write offs and no interest loans to de-risk changes (9%), improved education and information on benefits of changing practices (8%), increased research funding (7%), less subsidisation of non-climate friendly practices (6%), and creating an effective carbon trading system (6%) as key ways that the Government can support the transition.³⁶

Three-quarters of respondent farmers believe they are well informed about climate adaptation, however, several barriers prevent them from investing in emissions reduction practices. The most significant are insufficient information and the cost of finance.³⁷ Together, these two barriers reduce investment confidence to trial new technologies and practices. Incentives can be introduced to

control this risk and encourage adaptation with survey results reflecting a particular interest in subsidies (23%), low-cost finance (20%), and instant tax asset write off (14%).³⁸

Although 93% of respondent farmers expressed a willingness to change farming practices to benefit themselves and the environment, 70% have not yet been involved in any on-farm climate change extension program.³⁹ Channelling investment into these programs may help to bridge the gap between this willingness and actual on-farm uptake and application of new practices. It must be remembered that successful uptake and increased resilience is predicated on and facilitated by effective, sustained and genuine community engagement.

93%

of farmers are willing to change farming practices to benefit themselves and the environment



Case study: modelling success for on-farm emissions reduction

Olivia Lawson and her husband run Paringa Livestock, a breeder of elite genetics for Australian beef producers, which is based in central Victoria.

Olivia is among the first participants of the Victorian On-Farm Emissions Action Plan Pilot, an emissions analysis and reduction program delivered by Agriculture Victoria. The program will support up to 250 farm businesses across Victoria to understand their on-farm emissions profile, develop an emissions reduction action plan, and implement the recommendations supported by a grant of up to \$16,000. The one-on-one, in-person engagement with technical experts from Agriculture Victoria throughout the program is helping Olivia to understand exactly what emissions are reducible on her property.

The moral incentive to reduce emissions is clear and accepted by producers, says Olivia. But it is ultimately this type of grant incentive model which will help to bring along the “middle chunk” of farmers who are ready for climate action but need

some assurance that their participation will be financially worthwhile.

For Olivia, the accessibility and thoroughness of the technical experts reduces the experimentation risk typically associated with one-time grants and is empowering her to prioritise the solutions that are achievable on-farm now and into the future.



Recommendations

1. Increase Federal funding specifically for research, development and commercialisation of mitigation and adaptation solutions for specific commodities as well as the sector as a whole. This could include a new mechanism to support farmers to invest in emissions reduction technologies and initiatives that are available but cost prohibitive, such as an instant tax asset write-off for renewable energy or on-farm energy storage.
2. Fund practical on-farm extension programs using the existing network of extension providers, including Rural Research and Development Corporations (RDCs), Drought Resilience Adoption and Innovation Hubs, state governments, Landcare networks and farmer-led groups, to enable producers to understand, measure and reduce on-farm emissions. This program could be similar to the Victorian On-Farm Action Plan Pilot.





What farmers need

Resilient landscapes

Farmers are reliant on access to natural capital to a greater degree than almost any other sector of the economy. They are entirely dependent on soils, water, vegetation and the surrounding environment to function correctly. Climate change is already putting strain on these resources. As the managers of over 50% of Australia's landmass, farmers have an obligation and economic imperative to care for this natural capital.⁴⁰

ClimateWorks (2019) found that whilst investment in the sustainable land use and food sectors has created \$4.5 trillion worth of global business opportunities per annum by 2030, maturing the tools and systems to effectively measure natural capital should be prioritised to further improve land use sustainability.⁴¹

As the Federal Government is utilising natural capital markets as a key policy mechanism for addressing climate change and biodiversity, it must be ensured that these markets are

operated with unquestionable integrity and transparency, good governance, and are overseen by a genuinely independent body. These markets should not be used essentially as 'greenwashing' to allow continued harmful emissions and biodiversity losses by providing cheap offsets that rely heavily on false equivalencies. If the carbon market crashes because of integrity issues, farmers are the losers.

Although offsetting alone cannot, and should not, achieve industry emissions reduction targets, the carbon market is referenced across literature as a useful way to give choice to farmers, diversify income streams, build income resilience, improve agricultural productivity, and incentivise adaptation.⁴² It is also cited as a method to stabilise the sector's economy, improve social cohesion and natural resource management, and increase carbon sinks.⁴³



Roundtable forums and stakeholder engagement

Integrity

Farmers are concerned that large corporate companies may purchase vast land parcels to offset their emissions via the carbon market and avoid genuine emissions reduction efforts. The carbon market must therefore be governed by a robust framework to avoid integrity scandals causing credit crashes. Industry actors also emphasised the need for the Federal Government to continue to develop a trusted carbon marketplace to improve farmer participation.

Consistency

A perceived risk of the carbon market is that if banks and trading exporters request different carbon data sets of farmers, farmers will need to present data in different forms to meet internal private sector reporting obligations for those companies. The Government therefore has an opportunity to incentivise the private sector to capture carbon data from farmers in one consistent format and metric.

Investment costs

It was noted by farmers and echoed by industry experts that the Federal Government must play a role in building a framework and setting standards for farmers to access good advice and conduct baseline carbon audits to track their emissions reduction progress – a process that can precede the implementation of new technologies. However, the costliness of carbon accounting and market participation generated differing responses amongst industry leaders. Where some experts expressed that on-farm carbon accounting was too costly and purposeless unless the farmer is actively selling their carbon, other experts disagreed that cost was a barrier to action. Instead, the greatest obstacles were identified in the inability to access expertise and robust methodologies – both of which are inexpensive interventions. To alleviate financial barriers, however, it was suggested to introduce discounts and cheaper capital for farmers with demonstrated emissions profiles and reductions to offset investments needed.

Survey results

The carbon market has a unique potential to unlock significant on-farm, industry, environmental and social benefits.⁴⁴ These benefits come with a range of risks to be addressed and minimised in a national strategy to encourage widespread farmer participation, particularly given that only 10% of surveyed farmers are currently active in the carbon market.⁴⁵

The carbon market appears to have significant issues with eligibility and the value it would be perceived to generate with 38% of respondent farmers indicating that they do not participate because they do not know how to and 70% not feeling confident that they understand the carbon market itself.⁴⁶ Notably, 12% of respondent farmers refrained from participating in the carbon market as they do not agree with it in principle.⁴⁷

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There are a range of ecosystem services, provided by functional biodiversity, that we could be utilising within our production systems. All these services can reduce costs at the same time as increasing yield and quality.

Sophie Angove, SA producer



Case study: diverse and healthy ecosystems

Rae Young and her husband run Lewisham, an ethical wool producing property located in Ross, Tasmania.

As a former botanist, Rae notices the loss of diversity on her farm and understands the importance of revegetation to restore and protect the health of the catchment.

Each year, Rae grows about 12,000 to 20,000 of approximately 50 different plant species to create dense clumps of habitat attracting new and diverse ecosystems of insects and spiders. Rae notes that these “small things” in the layers of a healthy ecosystem are not typically noticed when they’re there, or when they’re gone, but lay the groundwork to attract other larger species, such as birds, to the area.

Passionate about strong land clearance legislation, Rae emphasises that once land is cleared farmers inherit additional work to maintain the landscape. Unfortunately, Rae says, this typically results in the heavy use of

chemicals such as pesticides, fungicides and herbicides – a process Rae sees as out of sync with nature and emissions intensive. This is partly why Lewisham is a low input farm and why Rae believes the way that we value complex ecosystems and protect existing biodiversity needs attention.



Recommendations

- 1. Invest in NRM Regions to employ a network of dedicated carbon farming extension officers to:**
 - a. Increase participation in carbon farming
 - b. Optimise project co-benefits, such as biodiversity, water quality and social and cultural outcomes
 - c. Support alignment of carbon farming projects with regional NRM plans
 - d. Support reviews and development of methods under the scheme to ensure continuous improvement and integrity.
- 2. Commit to fully-funding the finalised National Soil Action Plan to ensure the health of the natural resource all farmers rely upon is prioritised.**







What farmers need

Thriving communities

Australia's rural and regional communities provide the backbone of a strong agricultural sector. The impacts of extreme weather events such as drought, floods, bushfires and heatwaves are being felt across the country year after year. Each of these events has entirely different immediate and long lasting impacts that require differing approaches to build resilience. Robust national support schemes are needed to enable farmers to anticipate, respond to and recover from one-off and long-term climate events and impacts.⁴⁸

ABARES (2021) highlighted the need for the Government to constantly assess and possibly expand drought support schemes such as the Future Drought Fund as climate impacts complicate conventional definitions of drought.⁴⁹ The potential of the Future Drought Fund to play a role in clearly communicating climate information and in supporting R&D corporations to explore new commodities and non-traditional farming activities were identified as key opportunities to improve the fund.⁵⁰

Many agricultural grant fund programs are oversubscribed, yet many farmers reported not knowing of the existence of the Future Drought Fund or engaging in similar programs. Barriers such as complexity, lack of awareness and administrative hurdles were expressed by farmers and industry leaders as reasons why there remains a lack of utilisation amongst the broader farming community.

New transmission infrastructure is needed to support Australia's shift to clean energy and transfer electricity from regional generation areas to populations and business centres for use.⁵¹ However, farmers are concerned about the impacts this process will have on food security, land use and production on-farm. A national approach should respond to calls for improved stakeholder consultation, planning, and compensation arrangements for impacted farmers.



Roundtable forums and stakeholder engagement

Revising the Future Drought Fund

The prospect of Future Drought Fund style initiatives to support farmers to prepare for and respond to climate uncertainties beyond drought enjoyed widespread support amongst farmers and industry experts. However, a general lack of familiarity of the fund amongst roundtable participants suggests that communication of the fund's existence and purpose still has a significant way to go to build drought resilience amongst farmers and rural communities. Beyond this, farmers identified that the Future Drought Fund being region-based is too high a level. Future revisions of the fund should consider a place-based approach to better reflect the relationship between stakeholders, industry bodies, and farmers.

Administration barriers

Frustration was also expressed in relation to the inaccessibility of grant programs and funds with a farmer indicating their fund application was still pending after more than 10 months and automated responses to requests for assistance included an up to 15-business day response time. The provision of financing and grant application support through extension programs is considered beneficial in navigating red tape, over regulation and administration barriers preventing small business operators from taking up programs to support emissions reduction.

90% of farmers surveyed have not accessed the Future Drought Fund

Survey results

The Future Drought Fund appears to have significant issues with awareness and participation across farming communities. Surveyed farmers expressed a general lack of understanding of the Future Drought Fund with 90% of respondents not having accessed it and 70% not knowing of its effectiveness.⁵²

Eligibility and awareness

Farmers need better connectivity to the types of grants, funds and programs they are eligible for and can access. The Government can assist by establishing a central portal containing information by state or farming region of what resources, programs, and networks are available to farmers and land managers.

Incentives

When asked about barriers to accessing support and investing in emissions reduction, stakeholders expressed the need for federal grant schemes to incorporate incentives due to the typical requirement for farmers to assume experimentation risks when using the grant. It was widely agreed that farmers should be supported to implement evidence-based solutions seen in research to reduce or eliminate experimentation risks. It was also suggested that future funds be designed with an intent to encourage more behavioural changes on-farm and long-term adaptation measures to avoid being perceived solely as a short-term economic benefit or incentive.

Landcare

Landcare was referenced as a successful and well-introduced model for future support schemes to emulate. It was suggested by farmers that the Government consider broadening the remit of Landcare to have a climate change focus supporting community-based movements around carbon capture. However, industry leaders expressed frustration that Landcare and NRM Regions Australia provide project-based funding, rather than longer-term or ongoing funding.



Case study: sustainable and resilient pathways

Angus Whyte and his wife, Kelly, run Wyndham Station, a livestock farm in south-west New South Wales.

Gus recognises the interest amongst farmers to adopt more innovative practices in response to climate change. However, this momentum is stagnated by administrative hurdles and long wait times to access various financial assistance schemes available to farmers.

Gus is a strong advocate for fixed low interest loans for farmers eager to build climate resilience and invest in a more sustainable, profitable, and productive farming future. The unique ability of low interest loans to encourage long-term behavioural change is something Gus appreciates as a tool for farm businesses looking to implement climate-smart thinking, reduce risk, and make change.

Recently Gus had to wait nine months from applying to access funds for a fixed low interest loan – a timeframe he was not informed about before submitting his application. The commercial cost of waiting for finances to small farm businesses is sometimes more than the gain associated with a fixed low interest, says Gus.

Although confident the right type of funding is out there to support sustainable on-farm initiatives, Gus sees value in a more transparent and streamlined application process to avoid money being soaked up by administrative processes and delays.

When asked about the prospect of a national resilience fund, Gus noted that funding to encourage better farm management will act as a gateway for farmers to access other environmental services such as carbon and biodiversity credits. To Gus, the fund is the beginning of a more sustainable and resilient pathway with multiple layers of benefits.



Photo: [Carmel Zaccone](#)

Recommendations

1. **Develop a new national resilience fund, similar to Future Drought Fund, to build the capacity of rural communities to prepare for the range of natural disasters they face:**
 - a. Build on the learnings of the Future Drought Fund
 - b. Provide the structures for regional disaster planning for all natural disasters
 - c. Explore community wide adaptation needs.
2. Provide a mechanism for improved benefit sharing arrangements for transmission hosts and communities, including higher annual payments to hosts, payments to impacted neighbours, and funding for community benefit programs.⁵³
3. The Federal Government should make direct efforts to streamline processes and provide direct assistance to farmers wanting to participate in government programs.





Flooding of the Hawkesbury River and farm properties in Sackville, New South Wales. Communities along the Hawkesbury River have endured several flooding events in quick succession across 2021-22.



What farmers need

Secure markets

Climate impacts are posing a threat to our food production at the same time as regulatory responses are potentially limiting market access. Australian farming relies on export. Around 72 per cent of Australia's agriculture, fisheries and forest production is exported.⁵⁴ This year, the gross value of agricultural production is forecast to be \$85 billion.⁵⁵ Modelling predicts the accumulated economic loss of climate impacts on the sector will exceed \$19 billion by 2030, \$211 billion by 2050 and \$4 trillion by 2100 indicating an immediate need for policy intervention.⁵⁶

As some of the most advanced economies – including major trading partners of Australia – begin using trade policy as a way to drive international decarbonisation, the need to integrate climate resilience and sustainability into Australia's agricultural landscape has become even more urgent.⁵⁷ This pressure is in addition to that placed upon corporate companies by markets and consumers to transparently report the carbon contents of their products and associated supply chain emissions – a responsibility trickling down to farmers.⁵⁸ However, competing emissions calculation and reporting programs are creating complexity in the sustainability

standards, certification and accreditation markets reducing the ability of farmers and supply chain actors to understand and identify risks and opportunities.⁵⁹ An opportunity exists for a national strategy to introduce consistency and comparability across these processes to demystify the environmental responsibilities of farmers and incentivise conservation.⁶⁰

Notably, climate impacts may also create “value capture opportunities” for the agricultural supply chain including accessibility to new markets, price premiums, and new product opportunities.⁶¹ To meet industry growth targets \$159.5 billion in new capital must be injected into the Australian agriculture sector.⁶² This is possible if Australian farm businesses are supported to become investment-ready with financial management structures and practices in place to draw investment and capitalise on these growth opportunities.⁶³ For instance, the introduction and expected proliferation of export focused certification schemes (e.g., ‘carbon neutral’, ‘organic’ or ‘sustainable’ products) will determine future trade competitiveness of Australian products and enable producers to sell to international markets at premium prices.⁶⁴



Roundtable forums and stakeholder engagement

Harmonised industry standards

Farmers understand the importance of adopting sustainability measures to retain market access and potentially attract premium prices. However, they noted that the absence of a harmonised industry standard outlining the direction of sustainability in agriculture was creating complexity for farmers. Although non-binding, the Australian Agricultural Sustainability Framework is a positive starting point to align peak industry bodies under a common understanding of sustainability across Australian agriculture.

Global leadership

Industry leaders agreed that Australia should assume a more active role in creating our own sustainability standards, rather than being dictated to by international markets. This is because southern hemisphere production systems are different, and also because certain Australian products cannot access international markets due to emissions, genetics, biotechnologies and other factors. According to industry leaders, it is unclear how the Federal Government regulates imports with the same considerations.

Benefits and incentives

Participants frequently expressed concern about the market competitiveness of Australian products, noting the importance of convincing overseas, and possibly local, customers with tangible evidence that Australian farmers are committed to reducing the emissions profiles of their products. However, many farmers are also concerned that they will be forced to comply with

changing regulations to simply maintain market access with no additional benefit for this added workload.

Understanding requirements

New market standards, legislation and regulations not only have significant trade implications for producers, but also alter the responsibilities and obligations of farmers to satisfy new conditions. Regardless of one's level of engagement in international markets, a common anxiety amongst farmers is the uncertainty surrounding how international legislation or regulations will apply on the ground in Australian farming contexts. This ambiguity also applies to Environmental, Social and Governance (ESG) requirements to meet environmental obligations and access international markets. Industry experts agreed these requirements are not broken down to farmers, farm customers and suppliers.

Communicating impacts

Stakeholders identified a range of organisations and industry groups as having a key role in explaining changing regulations and standards, the obligation of the farmer, and the impact on export markets. These groups included those charging compulsory levies such as Meat and Livestock Australia (MLA), Dairy Australia, the Grains Research and Development Corporation (GRDC), and local catchment groups. Other farmers suggested it is the RDC's job to ensure members understand what their markets are, and the environmental goods and services markers needed applicable to domestic and international export markets for continued access.

Survey results

While more than half of respondent farmers feel well informed about changing regulations in the local and international marketplaces that their products are sold in, there are still many (40%) who do not feel well informed.⁶⁵

40%

of farmers do not feel well informed about changing market regulations





Case study: balancing financial and environmental outcomes

Iain and Kate Field run Leap Farm, a seasonal goat dairy and beef cattle farm located in Copping, Tasmania.

To maintain sustainability and market security, Iain has built a strong community around the Tongola Cheese brand and supplies directly to the local market of his region. To Leap Farm, a key benefit of a short supply chain is that risks associated with food spoilage, freight, waste, and supply chain disruptions and uncertainties are largely avoided.

As a former lecturer in ecology, Iain has always had a passion for data collection and conducts his own carbon accounting on-farm, with third-party verification. Although not formally certified, Leap Farm is carbon positive and sequesters three times as much carbon than it emits. The choice against becoming certified was informed by Iain's close connection to his market negating the need to demonstrate his sustainability via certification. Instead, Iain welcomes customers on-farm to witness his practices first-hand, and transparently shares his equations and calculations. The cost-neutrality of this choice also means that the savings can be spent on other operational practices and focussing on environmental and sustainability outcomes.

In addition to their current markets, Leap Farm and Tongola Cheese are diversifying into additional value-added by-products and becoming a destination product through agritourism. Bringing consumers to the source of their food is something that excites Iain when thinking about the future sustainability of Leap Farm. Iain is eager to see the industry reach higher standards through a careful balance of financial, environmental and social sustainability. A rising tide lifts all boats, says Iain.

“

We need to support all farmers to improve and maintain healthy agricultural landscapes enabling ecosystem services, food and fibre production, and strong vibrant rural communities.

Iain Field, Tas producer





Recommendations

1. **Commission a national agriculture risk assessment**, to monitor existing and emerging risks affecting Australian producers and provide a framework to respond at the national level.
2. **Establish a standardised system to enable farmers to measure sustainability metrics using one universal framework**, minimising paperwork and demonstrating their credentials and remaining competitive in both domestic and international markets, as well as financial institutions. This could leverage the work already underway in the Australian Agricultural Sustainability Framework.



Conclusion

Farmers across Australia are calling for the tools and policy foundations that enable them to meet the challenges of a changing climate, and realise the opportunities presented by low and zero emissions agriculture practices.

Agriculture's ability to respond to climate change and realise ambitions to exceed \$100 billion in farm output by 2030 depends in large part on how government, industry and farmers collaborate to harness strengths, address weaknesses, and mitigate risks.⁶⁶

A successful climate adaptation and mitigation policy for Australian agriculture must be underpinned by research into the practices that are already proving effective, identifying the priority gaps where action and strategic policy are needed, and ensuring appropriate resources to extend successful practices rapidly and extensively.⁶⁷

If the Federal Government fails to introduce rigorous and commensurate policies towards net zero by 2050 in this decade, Australia's annual emissions will need to be reduced by

24 million tonnes every year for 20 years and 2 billion extra tonnes will be emitted by 2050.⁶⁸ The slower we act in response to climate change, the steeper and more demanding the transition to net zero emissions will become.⁶⁹ All while faced with increasing climate extremes.

Farmers are looking for a national commitment to create the climate policies needed to future-proof Australian farms and set agriculture on the trajectory towards net zero emissions. The agriculture sector has shown its willingness to play an active role in creating more sustainable farming futures, but needs the support and leadership of the Federal Government to maximise opportunities.

Farmers for Climate Action is committed to working with governments and industry to realise a prosperous future for Australian farming, supported by strong climate policies that protect our farming future.



Notes

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