QUEENSLAND FARMERS' FEDERATION

Impact of Climate Risk on Insurance **Premiums and Availability**

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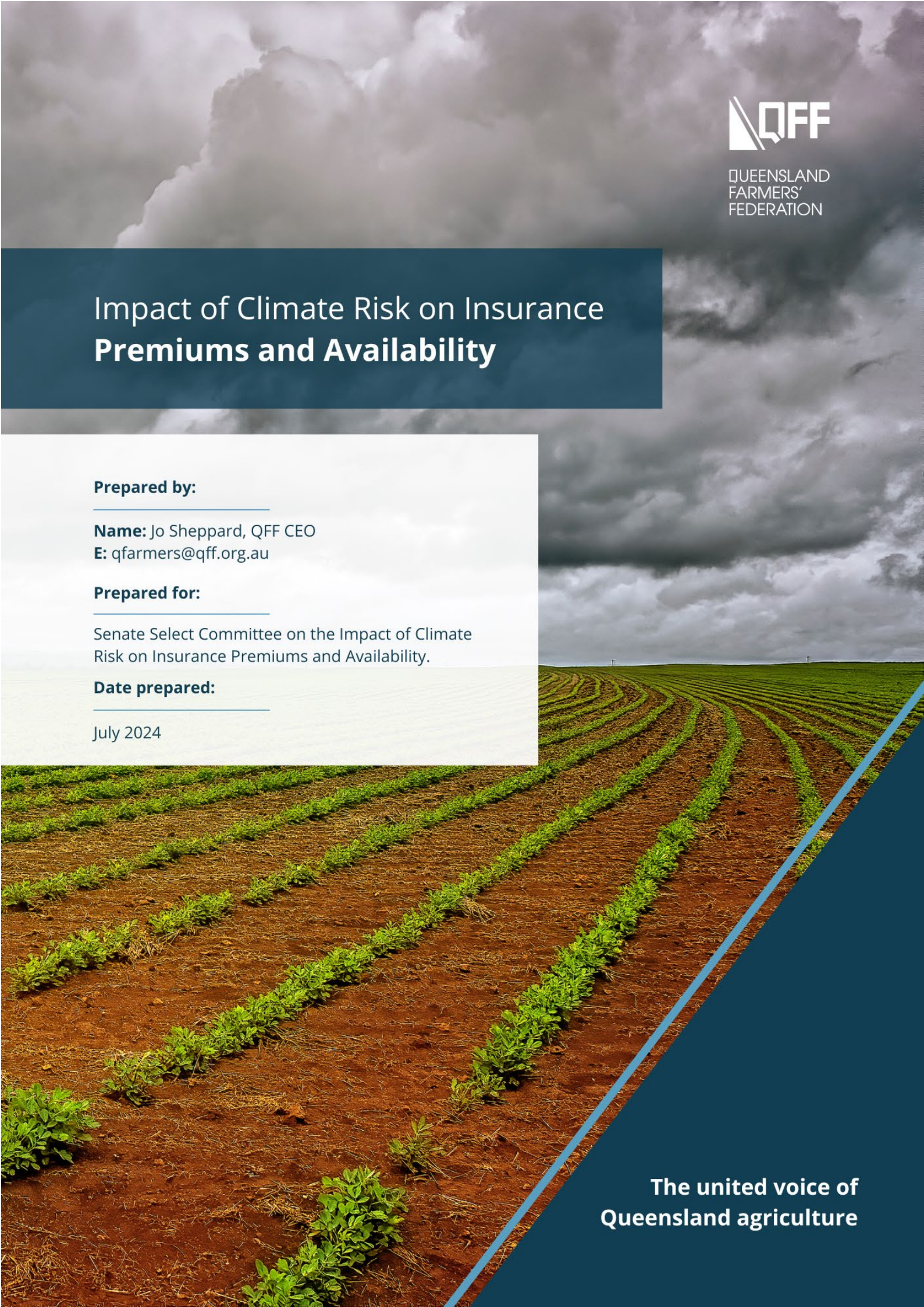

The united voice of Queensland agriculture

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This submission is provided to:

Senate Select Committee on the Impact of Climate Risk on Insurance Premiums and Availability
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Our members

- Canegrowers
- Cotton Australia
- Queensland Fruit & Vegetable Growers
- Nursery & Garden Industry Queensland
- eastAUSmilk
- Australian Cane Farmers Assocation
- Queensland United Egg Producers
- Turf Queensland
- Pork Queensland
- Bundaberg Regional Irrigators Group
- Burdekin River Irrigation Area
- Central Downs Irrigators Ltd
- Fairburn Irrigation Network
- Mallawa Irrigation
- Pioneer Valley Water Co-operative Ltd
- Theodore Water Pty Ltd
- Eton Irrigation
- Lockyer Valley Water Users

About the Queensland Farmers' Federation

The Queensland Farmers' Federation (QFF) is the united voice of agriculture in Queensland.

We are a member-based organisation representing the interests of peak agriculture industry organisations, both state and national. Through our peak body members QFF represents more than 13,000 primary producers across the cotton, sugarcane, horticulture, dairy, nursery and garden, poultry, eggs, pork, and intensive animal industries.

We unite the sector to engage in a broad range of economic, social, environmental, and regional issues through advocacy, policy development, and project activity. We work with the government of the day on behalf of industry, farmers, and the community to provide powerful representation and contribution to the policy direction, sustainability, and future growth of Queensland's agriculture sector.

Our Council of member representatives and policy committees set the strategic priorities for policy development and advocacy, while our Board ensures our corporate governance.

QFF draws on the expertise and industry knowledge of our members and through our commitment to collaboration and considered policy development, we lead Queensland's agriculture sector towards a strong future, ensuring our members are ahead of the game and have a voice at the table on the issues that matter to their members.

Submission

QFF welcomes the opportunity to provide comment on the Senate Select Committee on the Impact of Climate Risk on Insurance Premiums and Availability.

We provide this submission without prejudice to any additional submission from our members or individual farmers.

Introduction

Queensland farmers are subject to highly variable climatic conditions from drought to floods, cyclones, hail and fire which can undermine production. Insurance will play an increasingly important role in helping Queensland farmers manage their climate risk. Currently, the use of insurance to manage climate related production risk is underutilised predominately due to a lack of affordability and availability. Queensland Farmers Federation in partnership with University of Southern Queensland and global insurance partners, WTW and CelsiusPro Australia, has undertaken a wide body of research looking at potential insurance solutions for climate risk in agriculture.[1]

Insurance options for farming businesses in Australia typically fall into two structural categories.

[1] QFF Webpage – Resources (Insurance)

First, there is the "traditional" indemnity products which generally includes include all the standard types of insurance cover for physical assets (buildings, vehicles etc) as well as other personal and business-related insurances (life and trauma insurance, key man insurance etc) but can also include in some instances crop insurance to protect against the loss of production in event of a climatic event (named peril or MPCI).

The second category is a more a more recent addition to the insurance market "index-based" or "parametric" insurance, the two names are often used interchangeably to describe the same thing but, in this submission, we will use the term "parametric insurance" for consistency. Parametric insurance provides coverage based on predefined parameters such as rainfall levels or temperature thresholds. This eliminates the need for lengthy claims processes and ensures a faster payout, crucial for farmers facing immediate financial strain due to weather-related losses. The policyholder has the flexibility to choose specific indices relevant to their crops tailoring the coverage to their unique needs. This customisation ensures that the insurance aligns closely with the specific risks faced by the farm business, enhancing the overall effectiveness of the coverage.[2]

Historically, there has been three types of crop insurance available to farming business in Australia:

1. **Single / 'named' peril crop insurance**: typically hail, frost, or fire. This insurance is traditional indemnity style insurance and is the most widely available, however its availability is decreasing for reasons discussed below.
2. **Multi-peril crop insurance (MPCI)**: typically, whole farm yield loss protection (equivalent to 'all-risks') where exclusions are specified in the policy such as failure to carry out good farming practice. Payout occurs if actual farm-level yields, profit margin or revenue fall below a pre-specified trigger. Again, these products typically fall into the 'traditional indemnity structure' category. Since 2019, the availability of multi-peril crop insurance has become extremely limited widely taken up as a result of a detrimental cycle of adverse selection, poor results and increasing premium costs.
3. **Weather index-based 'parametric' crop insurance**: Based on an index derived from one or multiple weather variables, such as rainfall or temperature. Weather data can be collected from the nearest weather station or synthetic estimates of weather based on interpolation between multiple nearby weather stations and other data sources.

   A further analysis and explanation of crop insurance products is undertaken in detail in the report *Insurance in the agricultural sector* developed on behalf of the National Farmers Federation [3].

There is no doubt that many small business owners are expressing frustration about being able to secure appropriate and affordable insurance[4]. This sentiment is felt even more by farming businesses whose main source of income is at the direct mercy of climate risks. The effects of climate variability on farms are complex and can vary greatly across locations, farm types and sizes,

[2] Parametric Insurance: What is it, and why should I use it? Queensland Farmers Federation
[3] Final Report: Insurance in the agricultural sector On-farm Financial Risk Management Project – National Farmers Federation
[4] Small Business Natural Disaster Preparedness and Resilience Inquiry Final Report March 2022

but on average, cropping farms face greater exposure to climate risk than livestock farms[5]. QFF would take this opportunity to point the Committee to the submission made by our member Canegrowers about the specific impacts of climate risk on insurance premiums and availability for sugar cane production businesses.

This risk exposure coupled with ABARES modelling estimates that changes in seasonal conditions over the period 2001 to 2020 (relative to 1950 to 2000) have reduced annual average broadacre farm profits by 23%, or around $29,200 per farm[5]. This demonstrates that there is significant need for government policies to support a robust and affordable crop insurance industry to ensure the viability of agricultural businesses that support regional communities.

Key messages from farmer surveys undertaken by QFF and our project partners identified that traditional indemnity insurance products available to Queensland farmers may not address critical risks to the production and/or profitability and that farmers would prefer insurance products available that cover them against profitability losses across multiple risk factors including climate risk[6]. For this reason, this submission will focus broadly on the ways government can assist in fostering a sustainable parametric crop insurance market. Knowing that while the affordability and availability of traditional indemnity insurance offerings for small business are being impacted by climate risk, these issues will be widely addressed elsewhere.

Response to Terms of Reference

(a) & (b) the unaffordability and unavailability of insurance in some regions due to climate-driven disasters.

Weather risks specifically effect on-farm production and can include deficient or excess rainfall, temperature, and wind, which when combined can result in drought, heatwaves, frosts, floods, hail and cyclones.

Historically, there has been a relatively low uptake of crop insurance products such as MPCI, largely due to them only being available or known to broadacre farming businesses predominantly in Victoria and NSW. Historically these businesses are very used to hedging weather risk and are often comfortable with undertaking risk mitigation or "self-insuring". In addition to this there has been a severe information vacuum which has led to misinformation or prevalence of sharing of poor experiences from farmers as a result of increases in premiums or withdrawal from the market by providers. As a result, farmers tended to be unaware of the insurance products (particularly those of a parametric structure) available or underestimate the benefits.

According to the Queensland parliamentary report on the *Impact of climate change on Queensland agricultural production*, the overwhelming majority of Queensland farmers remain uninsured and are heavily exposed to climate risk as due to MPCI being considered prohibitively expensive. Instead, farmers often rely on disaster grants and loans provided by the Queensland and Commonwealth

[5] ABARES Snapshot of Australian Agriculture 2024
[6] Drought Climate Adaptation Program Summary Report - Producing Enhanced Agricultural Crop Insurance Systems

Governments. This has the effect of crowding out the private insurance sector as well as placing a considerable burden on the taxpayer[7].

As technology, data and innovations improve and climate change puts additional pressure on agricultural productivity, there is an increasing need and interest in insurance products that can help manage climate related production risk. Parametric insurance products present an opportunity for farm businesses across all crops from broadacre to horticulture to identify the weather risk to which their crop is most exposed, and tailor an insurance product that covers the weather risk that keeps them up at night.

Due to major advances in weather technology and data collection there is now the means to develop highly tailored parametric insurance products. Parametric insurance does not provide an all-encompassing cover, it is designed to address the businesses greatest weather-related risk. The aim in the design of a parametric product is to structure the product in such a way that the risk defined accurately, the product must trigger in the desired scenario but not be so broad as to make the premium is cost prohibitive. Parametric insurance products also minimise the need for unnecessary administrative costs being built into the premium as there are no direct loss assessment costs, payouts are determined by specific weather conditions outlined in the product offering. These parameters are meticulously monitored using reliable data sources, ensuring that financial compensation is accurate and timely. A well-designed parametric insurance cover should be extremely efficient, it covers the desired risk and is deemed affordable by the farm business due to its cost benefit as there are minimal administrative and frictional costs. This efficiency provides swift financial relief streamlining access to funds and significantly reducing wait times, which allows farm businesses to focus on recovery and continuity without unnecessary delays. Parametric insurance is providing the most exciting advancements in the crop insurance market, which in the light of increasing climate risk is encouraging, however at the time of this submission insurance companies willing to offer parametric insurance is limited to small boutique companies and does not include any of the major insurance companies nation-wide. This issue further exacerbates the issue of unavailability as the smaller insurance companies simply do not have the resources or capacity to offer products to large numbers of clients or geographic areas.

The application of frictional costs and taxes such as stamp duty on crop and parametric insurance is a further contributor to the cost of insurance. QFF, Cotton Australia and other agricultural peak bodies have been advocating for the removal of stamp duty on crop and parametric insurance to support farmers in managing their own business risk. The 9% stamp duty on these insurance products is an additional barrier, increasing reliance on government support, and is a significant disincentive to primary producers in the adoption of these products. Other states in Australia have moved to address this issue, however, in Queensland the stamp duty tax remains in place for insurance products.

[7] Impact of climate change on Queensland agricultural production Report No. 8, 57th Parliament Health, Environment and Agriculture Committee May 2024

(c) The underlying causes and impacts of increases in insurance premiums & (e) the distributional impact of increases in insurance premiums across communities, demographics and regions

There is no escaping the fact that in a sector as exposed to the weather as agriculture, climate risk will lead to increases in insurance premiums. Nowhere has this been more evident than in the case of MPCI where poor seasonal conditions over successive years saw significant payouts leading to increasing premium costs and ultimately withdrawal of the product from the market [6].

For an agricultural weather insurance market to be sustainable, insurance must be beneficial to both farmers and insurers. Insurance transfers risk from farmers to insurers. Farmers need to receive enough benefits from transferring risk (such as improved preparedness, resilience and productivity) to cover their insurance premiums. At the same time, the insurance premiums need to be sufficient to compensate insurers for accepting the risk and their expenses.

While innovation is providing the opportunity to develop highly tailored and flexible parametric products, unfortunately the insurance and reinsurance market in Australia is extremely thin, this results in increases in insurance premiums which impacts communities and regions. Affordability and availability even for parametric products is being increasingly impacted by natural hazards impacting the reinsurance market resulting in increasing reinsurance costs and reduction of available capacity. While in the traditional indemnity market this may result in a reduction in the amount of capacity, in an emerging market like that for parametric insurance it is completely stifling. In the last year reinsurance costs rose to 20-year highs on the back of reinsurers failing to earn their cost of capital in five out of the last six years[8]. The current set of circumstances has meant that a downward cycle exists resulting in higher premiums from a small insurance pool leading to a reduction in participants and thus a continuation in the pattern of high premiums and companies withdrawing from the market.

Insurance can play a pivotal role in the recovery of farming businesses to natural disasters and as a consequence the resilience of regional and rural communities to which they contribute. The income from insurance payments helps to stabilise the economy following the initial shock from the disaster, and the economic stimulus from claims payments promotes a more rapid return to normal economic activity. Being able to access and afford appropriate insurance is critical to farmers having the confidence to continue to invest in their enterprise over the long term, particularly in those regions that are subject to re-occurring weather events. This confidence ensures the future of food, fibre and foliage production is supported for future generations of farmers and consumers.

Without insurance, economies in regional and remote areas, may never fully recover from a natural disaster, as damage leads in some cases to a permanently impaired productive capacity in the long term. The relationship between insurance products paying out after natural disasters and positive recovery of GDP is well documented in large regional centres such as Townsville[9] and it is safe to assume that the relationship is even more strongly correlated where a local economy has a very high proportion of one particular type of businesses such as farming. This is further evidence that

[8] S&P Global: Pricing Momentum Is Helping Reinsurers Turn The Corner

[9] The backbone of regional and rural economies: Small business and community resilience IAG 2021

supports the importance of initiatives that ensure a fairly and efficiently priced insurance market. It's not just the economic recovery of a community that needs to be considered post disaster, often locally owned small businesses contribute to the local identity through the types of stores, products and services sold and designed. For example, communities are identified by the types of crops and meat they produce and this in turn can attract visitors (vineyards in the Barossa Valley, apples and cherries in the Huon Valley and dairy from Gippsland) [9]. A robust and sustainable insurance market in turn supports the social resilience of regional communities.

Currently, where there are gaps in the insurance market either from an affordability or accessibility perspective, as a consequence the responsibility often falls to government to provide post-disaster recovery payments to support community and economic recovery resulting in considerable burden on the taxpayer. These costs are only expected to increase with the forecast annual cost to governments expected to exceed 2.5bn by 2050 and post disaster spend outstripping pre-disaster spend 10:1.[10] With this in mind there is significant opportunity for governments to play a part in building the preparedness of businesses by investing pre-event to address the affordability element by sharing the cost burden with the insurance sector.

(f) The role of governments to implement climate adaptation and resilience measures to reduce risks and the cost of insurance

Risk management in the face of increasing climate risk is an area the requires the cost burden to be spread across the private, public and community sectors. There is a role for government to facilitate the development of a robust agricultural insurance market, but the investment must be systematic to ensure the success of the market is supported as a whole. The numbered points below outline the opportunities for government to have a role in reducing climate risk and the cost of insurance for agriculture.

1. Support for the provision of increasing data collection, verification and supply systems needed to refine risk models and reduce information asymmetries. The intended consequence of this would be to reduce the impact of basis risk6. For example, a case study based on 13 farmers in northern NSW between 2016 and 2019, found that farmers would have missed insurance payouts for drought about 24 per cent of the time, if their policies were based on the nearest Bureau of Meteorology (BoM) weather station[3]. The Australian Bureau of Statistics (ABS) in collaboration with ABARES are investigating new data sources that will improve regional level crop yield data on an annual basis[11]. There is potential to use this data to help structure a regional programme, but this would require more years of reporting (beyond 2023) and confidence that this data will be reported consistently and accurately. Consistent reporting of regional level data will have benefits beyond insurance solutions. A more robust and granular dataset on farmers' yields will allow more detailed analyses, allowing for better planning, management, and decision making for the agricultural sector. Further resourcing and

[10] Building our Nation's Resilience to Natural Disasters – Australian Business Round Table for Disaster Resilience

[11] ABS Statistics on the production and value of a range of broadacre crops 2022-2023

collaboration with the insurance and agriculture industries on the use of this data is a crucial role for government.

2. Support for the development and commercialisation of risk pooling methods such as a Discretionary Mutual Model (discussed further in the section below).

3. Support the further development of the parametric insurance industry by facilitating a reinsurance vehicle, for example, through the Australian Reinsurance Pool Corporation. Reinsurance is the practice whereby insurers transfer portions of their risk portfolios to reinsurers to limit their own exposures and claims. Reinsurance allows insurers to remain financially stable, particularly following a large event or series of events[12], however as discussed previously the reinsurance market in Australia is particularly thin, resulting in a fragility of the market. The Government could also act as the sole reinsurer or could share the risk with private reinsurers. If government can provide protection at terms more economic and consistent than the commercial reinsurance market, this will help reduce and stabilise the premiums offered to farm businesses. These technical premiums can be reduced by:

- Geographic diversification, i.e. writing the risk as a portfolio rather than on a state-by-state basis.
- Using reinsurance (risk layering) to protect the scheme in extreme scenarios.

4. Facilitate the removal frictional costs such as stamp duty and GST from insurance premiums which currently adds ~20% to the premium cost for farmers in QLD, WA and SA and 10% for farmers in NSW and VIC. The application of taxes such as stamp duty on crop and parametric insurance is a further contributor to the cost of insurance. QFF, Cotton Australia and other agricultural peak bodies have been advocating for the removal of stamp duty on crop and parametric insurance to support farmers in managing their own business risk. The 9% stamp duty on these insurance products is an additional barrier to primary producers managing their own risk, increasing reliance on government support. These frictional costs further increase the cost to farmers and act as a disincentive to insurance purchasing. Given the different frictional costs that currently apply across the states, any national insurance programme would need to have frictional costs such as stamp duty removal applied consistently to ensure equity between the states.

5. Farming businesses manage 55% of Australian land mass as a result their exposure to climate variability is significant. For the large part farming businesses manage that risk effectively through proactive risk management strategies[5]. As discussed earlier, there will always be a portion of that risk that cannot be managed or mitigated and so must be transferred to the insurance market. To ensure effective collaboration with the insurance sector to safeguard the availability of the risk transfer market for agriculture, government should consider expanding the membership of the Hazards Insurance Partnership (HIP). The HIP membership should include representatives that have a detailed understanding of the unique insurance affordability and availability challenges that confront farming businesses.

[12] Australian Reinsurance Pool Corporation – About Us

6. Climate variability is increasing due to climate change. As such, any action by government to minimize greenhouse gas emissions will mitigate the severity and frequency natural disasters. Australia's commitment to reducing greenhouse gas emissions by 43% below 2005 levels by 2030 and achieving net zero emissions by 2050 [13] will contribute to reduce farming businesses exposure to natural hazards and associated crop losses.

(g) How the pricing of risk from climate-driven disasters can be better redistributed across the economy.

For any insurance risk transfer solution, there needs to be an efficient distribution mechanism, previously in this submission we have outlined how parametric insurance is the most efficient method of structuring an insurance policy, but there also needs to be an efficient vehicle for distributing the policies in a scalable way. One suggested method of doing so in a way that redistributes the cost of risk is use of risk pooling in the form of a Discretionary Mutual Model (DMM). In the Discretionary Mutual Model, farmers individually purchase an insurance policy from a specific identified climate-risk insurance mutual. Mutualisation allows farmers to benefit from lower overall premiums that insurance companies may otherwise charge. Benefits such as profit sharing or premium deferrals are possible in a mutual arrangement.

With any insurance model, insurance premiums are viewed as an extra cost and farmers will decide whether to buy cover based on their view of the value for money of the premium compared with the protection afforded by the solution. It is therefore important that affordability is considered when setting premium levels such that a sufficient pool of policyholders buy protection to ensure diversification of risk within the mutual.

In the early years of the development of the mutual, diversification benefit is hard to establish as the pool of buyers is limited, so the premium savings may not be as effective as with a developed mutual.

Ultimately with a larger pool of buyers, the benefits of diversification should feed through into lower premiums for the members.

QFF and its insurance research partners have significant experience in the development of risk pooling mechanisms and mutuals, if the committee needs further information QFF is available to provide it.

(h) Any other related matters.

Farm business owners and regional community leaders often report an aspiration (or indeed a requirement) to 'build back better' in an effort to build resilience which went unfulfilled due to insurance covering a 'like for like' replacement. With a policy focus on continuous improvement and better preparedness by landholders, at a minimum it is important that traditional indemnity insurance policies are written in such a way that they allow for resilience building in the replacement of assets. Additionally, support of the development of the parametric insurance market with its ability for customisation and relatively quick access to payouts post-disaster, can aid farmers to use

[13] Australia's emissions projections - Department of Climate Change, Energy, the Environment and Water

the funds for any purpose on farm – there are no restrictions on use – enabling businesses to return to production in a short period of time.

Summary

QFF thanks the committee for the opportunity to provide feedback on the impact climate risk is having on the availability and affordability of insurance and the implications for the many thousands of faming businesses across the country who are on the forefront of exposure to increasing climate variability.

There is a growing level of uncertainty when it comes to insurance. QFF is hearing increased commentary across industry around a decline in insurance options for those who operate a business in areas that are regularly impacted by weather events as well as in relation to the changing land use will allow new activities (for example hosting renewable energy infrastructure on farm) to be covered adequately in the future. With the uncertainty that currently exists, farmers are increasingly concerned about what insurance options they will have available to them in the future. This needs to be addressed as a matter of urgency so that communities and businesses have the confidence to continue investing and operating and the future of food and fibre production is supported for future generations of farmers and consumers.

As discussed in this submission, a robust, efficient, and sustainable insurance sector is an essential part of ensuring the future viability Australian agriculture sector and we welcome the committee's efforts to address the issues. If the committee would like further information on any of the content raised in this submission, QFF would be only too happy to provide it.

Yours sincerely

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