Productivity Commission
Review of Part 3 of the Future Drought Fund Act
Interim report information and feedback submission

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This submission is made by Ms Lu Hogan and Professor Lewis Kahn from the University of New England (UNE). The views represented in this document are personal and have developed as a result of our following engagement with the Future Drought Fund:

1. Leaders of the unsuccessful UNE bid to lead the SQNNSW Drought Resilience Adoption and Innovation Hub (Hub).
2. Recipients of additional funding from FDF to operate a dedicated Node at Armidale (UNE), under the management of the University of Southern Queensland (USQ), the successful tenderers for the leadership of the SQNNSW Hub.
3. Manager of the Armidale Node of the SQNNSW Hub (Lu Hogan)
4. Project Leader – FDF Innovation Grant – Decide and Thrive (Lewis Kahn)
5. Project Leader – FDF Drought Resilient Soils and Landscapes Program – Drought Resilient Pasture Landscapes Scaled Through Communities of Practice (Lewis Kahn)
6. Project Leader – FDF Innovation Grant – Empowering Generation Z (Lu Hogan)
7. Project Team – FDF Regional Drought Resilience Plan Program – Pilot project with Gwydir and Inverell Shire Councils (Lu Hogan and Lewis Kahn)
8. Project Leader – Agricultural Innovation Hubs Program – Development of Ag360 Phone Apps (Lu Hogan)

Executive Summary

We support a great many of the recommendations in this interim report, and offer additional insights, including:

- ongoing support for the Hubs is welcome, but there would be benefits to implementing some changes as part of the upcoming Funding Plan
- there are a number of overlapping activities within the FDF, but there are potential benefits from cooperation
- demonstration of climate change resilience will require investment in longer term research, trialling, modelling and demonstration of altered production systems with adequate measurement and cost benefit analysis
- encouraging FDF programs to actively and meaningfully partner with existing natural resource management organisations should be considered, to support both economic and environmental resilience
- there are programs developed via the FDF, for example the Farming Family Reboot program, that have the potential to contribute to social resilience at a national scale through integrated delivery with economic and environmental content
- clarity is needed about how all the individual projects and programs achieve the overall goal of the FDF
- we agree that the FDF program needs more clearly defined objectives and measurable outputs and outcomes linked to a program logic
- a knowledge management system, that aggregated and shared all product and content developed by FDF programs, would be a valuable addition to the Future Drought Fund, as would opportunities for implementers to exchange ideas and learnings face-to-face
- there are “on-ground” examples of effective MEL processes, including the use of feedback from FDF projects being used to improve other projects, inform research, and inform partner activities
- we believe providing specific funding and resources to improve engagement with, and benefits for Aboriginal and Torres Strait Islander peoples is worthwhile
- further information is needed about the uptake of both DR.SAT and CSA
- there is a need to be realistic about the interweaving of private and public benefits
- supporting agricultural innovation is an important facet of the Future Drought Fund, and there remains a role in fostering collaboration, and identifying (and funding) current gaps.

Interim recommendation 1

Building resilience to climate change should be more explicitly recognised as an objective

Recommendation 1 is supported. A greater focus on transformational change requires that the Future Drought Fund addresses resilience to climate change, not just drought. Drought is just one extreme of the climate variation experienced by rural communities. The predictions are that climate change will increase the severity and frequency of extreme climatic conditions. Limiting the Future Drought Fund to drought resilience will skew investment outcomes to incremental and transitional change, rather than supporting the possibilities of establishing new agricultural systems (as regionally appropriate) better suited to the changing climatic landscape.

Information request 1 – recognising climate resilience

If climate change resilience is recognised as a priority, investment can then be tracked against activities that seek to address the three stages of resilience: absorb, adapt, transform. A discussion about investment across these three stages must be informed by a thorough understanding of current industry preparedness.

Implicit also in shifting to building resilience to climate change is the shift from addressing episodic climate events to seizing the opportunity with everyday climate variation. A practical example being the importance of profit making during “good” seasons/years to:

a) invest in capital projects for the business; and
b) provide financial resilience during periods of loss or poor returns.

Demonstration of climate change resilience will require investment in longer term research, trialling, modelling and demonstration of altered production systems with adequate measurement and cost benefit analysis. Planning should consider how to use existing (or develop) key national assessment indicators across financial, environmental, social outcomes to be able to associate (with consideration of appropriate time lags) broad industry changes with the timescale of Future Drought Fund.

Information request 2 – environmental and economic resilience

As noted in our previous submission, tensions can exist between profitability and natural capital.

However, Australia has a significant existing network of natural resource management organisations and Landcare groups working toward both environmental and economic resilience. The Future Drought Fund can leverage those networks, and has to some extent. The Armidale Node of the SQNNSW Innovation Hub is demonstrating how existing programs can work with natural resource management programs and organisations, such as GLENRAC Inc, to support environmental and economic benefits. With a vision to provide solutions for a sustainable and productive landscape in its area of operation, GLENRAC helps to link the Armidale Node-funded drought preparedness programs with its overall goals of sustainable agriculture, natural resource management and community capacity building. This partnership ensures the Node achieves drought preparedness outcomes, within existing (and expanding) landholder networks.

While specifying specific activities at the national scale may not be appropriate, encouraging the drought Hubs to *actively and meaningfully* partner with existing natural resource management networks should be considered.

However, environmental and economic outcomes will not always be mutually reinforcing. There will be trade-offs at times. When considering the mutuality of environmental and economic benefits, the issue of scale becomes an essential concept. For example, where area/s are used for more intensive agricultural practices (.e.g cropping, containment areas), there may be a more negative impact on the immediate area/s but the income from the activity may have positive impacts across a much broader area, through access to financial resources or through avoidance of environmental harm.

Measuring the causal links between actions and improved resilience will be challenging. It is likely that only projects with the experimental design to provide comment on causality can do this. At the larger scale of regions, states, or national the best that can be achieved is association.

Information request 3 – social resilience

Social resilience outcomes and investment are better integrated into natural resource management and economic programs. The Farming Family Reboot Workshop program developed by the Armidale Node of the SQNNSW Innovation Hub is an excellent example of an integrated program that delivers on economic, environmental and social outcomes. Participants in the 6-day program gain skills in goal setting, strategy development, business management, grazing management, the use of Ag360 to predict future rainfall and environmental conditions on farm; as well as mental and physical wellbeing. The Farming Family Reboot video (a video about the impact of this program can be seen in the Science to Practice recording, from the 20:18 mark - https://vimeo.com/838569254) developed for the Science Practice Forum provides multiple testimonials of the value and impact of this program. Program partner Rural Aid has a strong interest in scaling the program for national delivery. A national delivery model could be developed as a collaboration between UNE, Rural Aid, the state-based Farm Business Resilience Programs, local government and natural resource management organisations.

Information request 4 – monitoring, evaluation and learning

As noted in our previous submission, it is currently unclear how MEL data will be amalgamated to demonstrate outcomes and cost benefit at the whole-of-plan level.

The FDF needs to develop a suite of high level and measurable outcomes and a program logic. Decisions regarding investment in programs should be subject to confirmation that the program and individual funded projects will contribute to the high-level outcomes. The monitoring and evaluation process for each major activity and individual grant needs to be designed to aggregate up against the FDF outcomes. However, for individual grant recipients, this needs to be balanced against capacity within the funded activity.

Interim recommendation 2

Establishing a drought and climate change resilience knowledge management system

A knowledge management system, that aggregated and shared all product and content developed by FDF programs, would be a valuable addition to the Future Drought Fund. The design of any such system has to meet the needs of the community of "users".

- What will be the balance between time to input information against retrieved value?
- What information will be entered to the system? By whom?
- Would this have a human component, i.e. a skilled person to speak with?
- Will this influence reporting requirements to best capture lessons learnt and tips for others?

However, another important opportunity is to support project teams to meet face-to-face, to exchange ideas, experiences and consider collaboration. While the online Science to Practice forum provides the opportunity to showcase activities to a wider audience, it does not provide an adequate exchange with regard to learning, improvement and brokering future collaborations.

Information request 5 – Funding Plan

We agree that the FDF program needs more clearly defined objectives and measurable outputs and outcomes linked to a program logic.
In addition, the Funding Plan should provide scope for investing in longer-term programs/projects. As we noted under *Information request 1*, demonstrating climate change resilience to agricultural industries and communities to allow for transformational change will require investment in longer term research, trialling, modelling and the demonstration of altered production systems, with adequate measurement and cost benefit analysis.

Interim finding 4

Monitoring, evaluation and learning activities have not adequately tracked performance

As the Future Drought Fund itself acknowledges in its *Monitoring, Evaluation and Learning Framework*, the funding Plan program logic "expresses the highest order of what the Funding Plan is expected to achieve". This means the program logic available to program managers, expresses outcome as, for example, "more primary producers adopt transformative strategies", rather than providing any guidance on how many producers that might be, or specifics of how each of the listed Activities (e.g. Knowledge & Innovation Hubs) is expected to contribute. Implementation of the next round of funding would benefit from clearly defined and measurable outcomes and outputs and allocation of targets across the various programs.

Information request 6 – MEL requirements

As per our comments for *Information request 4,* program implementers would benefit from understanding how their measurable outputs and outcomes flow upward in the program logic, to achieving the FDF's stated vision: *an innovative and profitable farming sector, a sustainable natural environment and adaptable rural, regional and remote communities – all with increased resilience to the impacts of drought and climate change.*

We also once again note that the opportunity to meet face-to-face to share learnings would also benefit program implementers with regard to achieving the MEL outcomes for the Future Drought Fund.

Information request 7 – effective MEL examples

Learning activities used to improve implementation: At the Armidale Node of the SQNNSW Innovation Hub, we are utilising feedback from FDF funded-Soils and Landscapes project participants to improve Ag360, a predictive tool providing customised rainfall forecasts for the next 6 months and predictions of resulting soil moisture, pasture production and animal performance. Ag360 is supported by the Agricultural Innovation Hubs Program.

Partnerships: Strong partnership have been developed between UNE, Rural Aid, Bush Agribusiness, Meridian Agriculture, Rural Adversity Mental Health Program (RAMPH), Gwydir Shire Council, NSW DPI FBRP and Animal Health and Nutrition Pty Ltd leading to collaboration on major projects such as the Farming Family Reboot, Business Coaching and Drought Lot Tours. In addition, the Node and its partners have the ability to seize opportunities to present on topics such as business resilience at events hosted by other Nodes. The relationships built and more importantly, actively maintained, with these Node-secured partners has been critical to both project development and implementation.

Knowledge uptake: Insights and feedback from Farming Family Reboot and Ag360 programs has been used to:

- secure program co-investment from the NSW DPI Farm Business Resilience Program
- inform research at the Manna Institute, a partnership of seven regional universities building place-based research capacity to improve mental health in regional, rural and remote Australia
- inform the activities and priorities of one of Australia's largest rural charities, Rural Aid, and
- the design of new courses in succession planning at UNE.

Interim finding 5

Aboriginal and Torres Strait Islander people have had limited participation in the Future Drought Fund

Information request 8 – Aboriginal and Torres Strait Islander people engagement

We believe the following options have particular merit, for the Future Drought Fund:

- providing specific funding and resources to Aboriginal and Torres Strait Islander organisations, the Hubs and other relevant organisations to advise on and undertake engagement
- improving guidance about how Hubs and other organisations can meaningfully engage with existing networks to foster strong partnerships with Aboriginal and Torres Strait Islander people
- embedding Aboriginal and Torres Strait Islander outcomes in the Monitoring, Evaluation and Learning Framework
- establishing a specific funding stream for Aboriginal and Torres Strait Islander people and organisations.

Interim finding 6

Investing in climate information services is appropriate, but funding two overlapping tools may be unnecessary

Information request 9 – CSA & DR.SAT

CSA has proven to be the more useful of the two tools, but more information is required before useful information can be provided in response to this request.

- The extent that CSA currently meets various end user needs?
- How is the information used?
- How it could better link to existing providers of similar info (e.g. Ag360).

It is our view, based on our own testing of DR.SAT and feedback from our stakeholders, that not much can be done to improve uptake of DR.SAT. It is unfortunate that the terms of reference and tender for the project were finalised before the Hubs were in place. The Hubs would have been able to provide input as to user needs and a better specification of the product would have resulted. Again, it would be useful to have more information about any public evaluations, noting that the planned review of DR.SAT was cancelled.

Interim finding 7

The Farm Business Resilience program has untapped potential for delivering public benefits

We need to be realistic about the emergence of private and public benefits. They are very often so tightly interwoven that it isn't possible to separate them. Put bluntly, farms that perform better financially and environmentally will deliver public benefits – both locally (employment, spending) and nationally (annual tax or levy takes). Placing the onus on grant applicants is often asking too much of those without direct skills in the flow-on areas. To what extent does the FDF need to be confident that the logic of farms in better shape is the cause of public good?

Information request 10 – Farm Business Resilience

Much of the Hub and other FDF program activity is also addressing farm business resilience. This is another example of overlapping activities, which can lead to confusion (on the part of stakeholders) and inefficiency (for the Future Drought Fund). However, there are potential benefits from cooperation. For example, UNE has entered into very positive discussions with NSW DPI about the potential for the FBRP to co-invest in the Farming Family Reboot and Ag360 programs developed and delivered by UNE and its partners.

Interim finding 8

Regional Drought Resilience Plans could be improved

These Plans may well be another example of where implementation of Future Drought Fund activities was rushed. To be effectively implemented, the Plans need a "home" with an organisation with the capacity (staff, finances and actual authority) to drive that implementation.

Information request 11 – Regional Drought Resilience Planning

The value of Regional Drought Resilience Planning as currently specified, is doubtful. The current program requires a consultation process with local government and community to understand needs and requirements for drought resilience "from the ground up". UNE took the lead in developing such a plan for the Gwydir and Inverell Shire Councils in the pilot program. The plan was developed with no knowledge of the associated implementation budget and is now bogged down in "top down" bureaucratic review and sign off processes with CSIRO, state and federal governments. This level of academic and bureaucratic intervention results in loss of local ownership and delays implementation. Thankfully for the Gwydir and Inverell communities, the Armidale Node of the SQNNSW Innovation Hub has been able to fund and implement some of the recommendations of the plan in the interim.

Interim finding 9

There is scope to improve the Drought Resilience Adoption and Innovation Hubs

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Interim recommendation 5

Improving the Drought Resilience Adoption and Innovation Hubs

The ongoing support for the Hubs is welcome, however, there would be benefits to implementing some changes as part of the upcoming Funding Plan.

- remove constraints related to Hubs operating across State boundaries or alternatively, establish extra hubs where these state boundary constraints are unlikely to be overcome (e.g. NSW/QLD)
- provide clarity on Hub roles and responsibilities and ensure their central role in facilitating and co-ordinating greater collaboration and leveraging across FDF programs and other State, Commonwealth and RDC funded programs
- ensure that the overhead costs of Hub operations are optimised, so that the maximum funds can be allocated to "on ground" delivery and activities with Hub members and partners.
- development of clear and measurable outputs and outcomes from Hub activity.

Interim finding 10

The role of Drought Resilience Innovation Grants

Supporting agricultural innovation is an important facet of the Future Drought Fund, and there remains a role in fostering collaboration, and identifying (and funding) current gaps.

Information request 12 – agricultural innovation

The FDF should take responsibility for identifying priorities for investment in major resilience challenges and broker collaborations between the RDCs, universities, CRCs and Hubs to deliver against the priorities. This would foster closer relationships between the many institutions undertaking agricultural innovation works. Taking a lead in identifying priorities and brokering collaboration is a useful way for the FDF to complement the innovation work already being undertaken.

However, it is also important to be open to innovation, so there should also be open calls to nominate areas of interest that may not be picked up elsewhere.

Interim finding 11

There are issues with relevance, overlap and measurement of the Better Prepared Communities programs

Information request 13 – Better Prepared Communities

We would recommend two complementary approaches to building community capacity:

i. social resilience programs delivered through local government as part of the Regional Drought Resilience Program and
ii. social resilience initiatives integrated with economic and environmental programs as described in Farming Family Reboot (see *Information request 3*).