

Southern Queensland and Northern New South Wales Drought Resilience and Innovation Hub

PRODUCTIVITY COMMISSION SUBMISSION
Inquiry into Part 3 of the Future Drought Fund
Act 2019

This submission is made on behalf of the executive of the Southern Queensland Northern New South Wales Drought Innovation and Adoption Hub (SQNNSW Hub) by Prof the Hon John McVeigh. Prof McVeigh does so in his capacities as:

- Director, SQNNSW Innovation Hub;
- Executive Director, Institute for Resilient Regions, University of Southern Queensland (UniSQ);
- Chair, Toowoomba and Surat Basin Enterprise (TSBE), a leading regional economic development organisation covering much of the Southern Queensland region of the SQNNSW Hub;
- Board Member, Queensland College of Wine Tourism (QCWT), the host of the SQNNSW Hub's Stanthorpe Node.
- Prof McVeigh is a former Queensland State Minister for Agriculture Fisheries and Forestry and a former Federal Minister for Regional Development, Local Government and Territories.

In order to provide comprehensive context for our answers to the Commission's queries, this submission includes:

- (a) A background to the Hub's unique formation and structure;
- (b) A summary of the current status of the Hub in March 2023; and
- (c) Addressing each of the Commission's questions.

A. Background

The SQNNSW Hub is one of the eight national Drought Resilience Adoption and Innovation Hubs and one of only two that straddle a state border.

With a regional footprint from Longreach in the north to Dubbo in the south; from the east coast to the Southern Australian & Northern Territory borders in the west; the SQNNSW Hub covers over 1.7M km² with a uniquely diversified range of agricultural industries from cotton to sugar; grain to grazing; and horticulture to intensive animal industries, dairy, tree cropping among many other pursuits.

The SQNNSW Hub is headquartered at UniSQ in Toowoomba on the Darling Downs, with Nodes in regions including:

- Longreach in central western Queensland partnering with the Central West Remote Area Planning and Development Board (RAPAD) https://rapad.com.au/;
- Roma in the Maranoa region partnering with Southern Queensland Landscapes (SQL) -https://www.sqlandscapes.org.au/ extending into southwest Queensland;
- **Stanthorpe** on the Granite Belt partnering with the Queensland College of Wine Tourism (QCWT) https://qcwt.com.au/;
- **Kilcoy** in the Somerset region partnering with Healthy Land & Water (HLW) https://hlw.org.au/ extending throughout southeast Queensland;
- Narrabri partnering with the NSW Local Land Services (LLS) and NSW Department of Primary Industries (NSWDPI) extending across northwest NSW;
- **Lismore** partnering with Southern Cross University (SCU) covering the northeast and northern rivers region of NSW; and
- **Armidale** partnering with the University of New England (UNE) covering the Northern Tablelands and Central West regions of NSW).
- Efforts are continuing to ensure collaborative coverage with the Tropical North Queensland
 Drought Innovation Hub and Southern NSW Hubs in regions such as Bundaberg/Wide Bay region
 in QLD and the northern Hunter region in NSW.

With UniSQ being the successful bidder for the SQNNSW Hub region, it was a contractual requirement of the Commonwealth to incorporate their only recognised 'Dedicated Node' at UNE Armidale wherein UNE was allocated its own \$2m funding arrangement under the FDF. As per Commonwealth requirements for the SQNNSW Hub, these funds flow entirely to the Armidale node but must be administered and acquitted via UniSQ as the lead of the SQNNSW Hub.

The SQNNSW Hub has 37 Members and Network Partners and has secured funding made up of:

- \$8m FDF Hub grant;
- \$2m Dedicated Armidale Node funding stream;
- \$2.5m Ag Innovation grant;
- \$2.5m Ag Innovation partner in-kind;
- \$375,000 soils coordinator;
- \$1.125m extension officers; and
- \$10.38m In-kind,
- Resulting in 'total hub funds' to date of \$26.88m.

It was the decision of the Hub executive that the most recent extension officer funding would be utilised entirely to support extension positions and efforts being appointed and allocated at each of the node locations throughout the Hub region.

The Hub's Mission is to support producers and their communities in growing resilience and capacity in managing climate variability through:

- Innovation extension and adoption of agtech, soils knowledge and practice change info.
- Collaboration with service providers, business partners, producers' groups
- Building capacity and capability with producers, regions and community

Determined through initial strategic planning in line with the first approved activity, the Hub's codesigned priorities are:

- (i) Data & Decision making (access to, as well as prioritisation and interpretation of data relevant to drought preparedness and resilience);
- (ii) Wellbeing and employability in regions across the Hub;
- (iii) Environmental Commodities as an alternate business opportunity for landholders throughout the Hub region; and
- (iv) Best Practice Agriculture and Preparing for Drought in terms of agronomic, land management, animal husbandry and farm management research and methodologies.

To date, the SQNNSW Hub's focus has been to establish and bed down the structure and relationships outlined above and to begin the process of helping empower stakeholders to apply proven drought-resilience research, build the drought resilience and preparedness capacities of regional communities and people, and foster agricultural innovation.

It is important to recognise that the Hub's role, in line with the approved activities in our FDF Commonwealth contract, is as a supported network to connect, facilitate and broker drought resilience and agricultural innovation knowledge to breach the agricultural extension gaps and agricultural innovation shortcomings as outlined by the Commonwealth Department in the first face to face Hub Directors meeting in Canberra post COVID restrictions in May 2022. We are about building extension, adoption and commercialisation of proven and new technologies and methodologies; we are not a traditional research organisation simply looking to maximise its own income from FDF sources in its own right; and we are not a funding body with discretionary funds.

In order to maintain a focus on ensuring maximum funding flows through to this outward-looking extension, adoption and commercialisation charter, the key financial metrics focussed upon by the Hub Executive include:

- The Hub Director position is fully funded in kind by UniSQ, not through FDF funds;
- 4.23% of total hub funds are on Hub executive costs (including Manager, Knowledge Broker, and First Nations Liaison positions)
- The remaining funds are expended as per the RDEAC Commonwealth approved plan on extension and adoption, node operations (RAPAD, SQL, QCWT, HLW, LLS & NSW DPI, SCU and UNE) and other approved activities including workshop / events / field days and supporting partner organisations in their community lead endeavours.

B. Where are we in March 2023?

Directly engaging with our stakeholders and instigating or taking part in important on-the-ground works has been our main focus. Some highlights for our Hub in the last six months include:

- targeted on-ground workshops and activities with landholders;
- held, supported, spoke at or attended more than 80 events, reaching more than 3,000 people with relevant Hub information;
- cross-organisation and cross-border community of practice meetings for those involved in the farmer finance and soil health across the region;
- developing eight new agricultural innovation activities;
- furthering the Hub's co-design activities;
- working with the Nodes to better articulate the goals of the Hub;
- creating a process to inspire new project concepts, with Members and Partners working via their nearest Node;
- securing additional Hub Members and Partners;
- actively collaborating with neighbouring Hub; and
- participating in the ABARES Outlook Conference and Science to Practice Forum.

Importantly, the Hub and Nodes actively held, supported, presented at or participated in 88 events involving more than 3,000 people across Northern New South Wales and Southern Queensland, ranging from mental health provider forums to agritech workshops in the last six months.

C. Addressing the Productivity Commission questions

1. Are the funding principles, vision, aim, strategic priorities, and objectives of the Funding Plan (attachment B) appropriate and effective?

The structure of the funding plan is appropriate in our case, particularly the hub and node model spread across southern Queensland and northern New South Wales. The Hub model has been an enormous investment in time and hub funds (grant plus partners) to establish primarily during 2022.

It has taken 18 months to embed the hub and nodes into the region. Now, the Hub can progress in 2023 to get action on the ground to ensure the funding is effective and co-designed with community members within their regions.

It would be difficult, if not impossible, to continue this public good work and continue to leverage the structure that has been established without the continued government funding model. It is strongly suggested though, that a longer-term funding cycle (that maintains the commitment and discipline of co-investment) would better support the movement away from in-drought support and short-term measures to proper preparedness and ability to sustain through climate variability.

Equally, program streamlining including clearer and more reasonable timing of funding submissions as well as greater integration between the individual FDF programs, would be significant improvements.

In terms of the FDF Funding Principles:

- The public good function is the key feature of the entire FDF, particularly the Hubs program. No individual agency public or private would be able to support activities that have been established in their own right given the public good element.
- Our hub appreciates the FDF priorities on drought preparedness and resilience are in significant
 contrast to previous Commonwealth and State government program that focussed on indrought assistance (indeed our Hub Director was involved in the initial inter-governmental
 agreements to transition away from such approaches approximately 10 years ago).
- It is vital to continue to integrate Hub activities with state agencies (e.g., whilst it could be suggested that the FDF Hubs, Regional Drought Resilience Planning, Farm Drought Resilience and Drought Resilience Leaders programs were designed as silos, the SQNNSW Hub has seen great benefit in considering integration between the programs.
- Innovation is necessary and fundamental to change but innovation consists of incremental steps towards a clear vision. Such change must be community and industry lead; and codesigned.
- Whilst critics might argue they were rolled out in a 'silo' fashion, it should be recognised the
 eight FDF programs can and should be coordinated across the spectrum in order to address
 national, state, regional, industry and community priorities; as well as enterprise, farm and
 individual realities.
- Our Hub is focussed on accommodating the diversity of each community and region from an industry, culture and first nations perspective. It is absolutely necessary to collaborate with existing community networks, Indigenous organisations and communities, natural resource management organisations, industry, and farmer groups.
- In order to fine-tune and direct investments within the envelope of approved activity budgets, our Hub has developed and utilised a transparent expression of interest process with stakeholders and partners.
- We believe extension and adoption activities should focus on practice change embracing and adapting to change with a strong appreciation of the value of peer-to-peer learning.
- In terms of methods to measure and analyse impact of activities in the SQNNSW region, our Hub can offer the following observations:
 - Our Hub social reach to date is 39,515,715 and 603 different posts,
 - It has been identified that there is not a lack of information / knowledge availability, but a need to access and help make sense of the knowledge that is available through trusted networks. The primary knowledge distribution channel for new node managers has been to leverage informal networks and build trust.
 - To address this the Hub approach has been to: (i) Establish Primary Public platforms and provide consistent and reliable content, (ii) Build relationships with Secondary Public platforms and Traditional Media to deliver content to a wider audience, and (iii) Build capability and consistency of practice in internal systems.
 - Science to Practice Forum involvement was successful With a variety of polls taken during the forum, the SQNNSW Hub had the highest count of attendees in any Hub regions across Australia.
 - The SQNNSW Hub Regional Soils Coordinator Cameron Leckie has extensive meeting logs which he has obtained from being out in the region visiting and presenting to 144 different people, places or event in 2022 and 43 to date in 2023.

- The SQNNSW Newsletter subscribers 25% primary producers or involved in agribusinesses, finance, agtech, or agricultural advisory services, and a further 8% were involve in natural resource management (e.g., Landcare groups)
- In our Hub knowledge is shared and freely made available through the important Knowledge
 Broker function (2 FTE); the development of decision making toolkits being developed through
 adaptation and application of climate related data for farming systems and agribusiness; sharing
 and linking of information and skills between and from Hub partners; a significant online
 presence; and examples of open networking development activities such as that being led by
 SCU in regenerative agriculture knowledge.

In terms of the FDF **Vision** of "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" is quite apt in the SQNNSW Hub region and one that provides a comprehensive backdrop for the approved activities under our agreement with the Commonwealth. The economic, social and environmental imperatives in this vision statement could be also include unique regional leadership structures and mores in different areas which ideally facilitate and encourage practice change and preparedness.

In terms of the FDF **Aim** 'to enhance the public good by building drought resilience in Australia's agricultural sector, the agricultural landscape, and communities', as outlined above our view is that co-investment by industry and communities in the FDF activities is important, and other funding should always be sought, but the public good element is such that ongoing Commonwealth investment in an on-going resilience building effort is necessary. Without that the establish efforts of the last two years will go to waste.

The FDF's **Strategic Priorities** of 'economic resilience for an innovative and profitable agricultural sector, environmental resilience for sustainable and improved functioning of farming landscapes, and social resilience for resourceful and adaptable communities'; are again all clearly in line with the reality and opportunities for regional industries, communities and landscapes who otherwise would fail in the face of climate variability and agricultural change.

The FDF **Objectives** to 'grow the self-reliance and performance (productivity and profitability) of the agricultural sector, improve the natural capital of agricultural landscapes for better environmental outcomes, and strengthen the wellbeing and social capital of rural, regional and remote communities' are once again very relevant to our Hub region and strategic priorities above of resilience in agriculture, landscapes and communities through our region.

2. Do the programs, arrangements and grants focus on the right priorities to support drought resilience? If not, what should the programs, arrangements and grants focus on and why?

Yes. However, we believe the entire FDF program could be better focused if the hub structure was utilised as the heart of all FDF activities. The Drought Resilient Leaders Program (DRLP) for example could benefit from relevant hubs hosting ongoing alumni support and activities for DRLP graduates. The implementation of Regional Drought Resilience Plans (RDRP) for example could be coordinated through relevant hubs. In fact, upon reflection it could be suggested that RDRPs could have been completed first, thus providing a basis for initial strategic planning across Hub regions. New FDF Grant rounds are now required to reflect hub priorities which is positive and proof that hubs are actually at the coal face of drought resilience.

- The Drought innovation hubs are now established and ideally placed to leverage whatever public good investment is available with other partner funding to continue to build a legacy for the long term.
- Given their developing regional expertise, future FDF program arrangements and grant rounds should be co-designed between the department and hubs.
- Whilst government agencies, particularly at a State level, have gradually withdrawn from agricultural extension services over recent decades, the public good benefit of such services has been lost. Commercial extension services can only be reasonably expected to focus their attention on their clients and adoption of new technology and methodologies has become piecemeal. The FDF Hubs have only just begun the task of rebuilding a coordinated extension and adoption network an effort that must be retained if regional communities and industries are to continue to build resilience.

3. Should the scope of the Fund be broadened to support resilience to climate change? Why or why not?

It is the experience of the SQNNSW Hub that stakeholders recognise drought as part of the broader climate cycle.

- The concept of drought preparedness, particularly during the wetter periods and higher commodity
 price experiences across our hub footprint during our establishment period, whilst not always top of
 mind for all stakeholders has still resonated in terms of 'getting ready during the good times'. The
 establishment of our Lismore node during periods of some of the worst flooding on record is a case
 in point.
- Promotion and adoption of wholistic farm and landscape approaches such as regenerative
 agriculture, as championed across our Hub region by SCU (Lismore Node) and Hub partners RCS, are
 strongly based in a broader climate adaptation mindset. This is being well received in rangelands
 areas (e.g., Longreach Node) as well as through collaborations such as the Local Government
 Association of Queensland's (LGAQ) 'Climate Resilient Councils' program with the Mayors of Scenic
 Rim and Blackall Tambo Regional Councils being strong public proponents.
- During initial strategic planning across our Hub region, one of the co-designed priorities as outlined above was that of Environmental Markets - in terms of landholders wanting to know what opportunities there are to diversify income and land management benefits. This again is clear evidence of thinking beyond drought to broader climate realities.

As in any extension effort however, care must be taken to not lose the benefit of specific drought resilience knowledge and tools under a broader climate-oriented program. Equally, those less accepting of climate change discussions need to be considered, at least in terms of language used, if real practice change is to be achieved over the longer term.

4. How could the Fund enhance engagement with and benefits for Aboriginal and Torres Strait Islander people?

Since its inception the SQNNSW Hub has had a First Nations Liaison position as part of the Hub executive, and this was upgraded to a First Nations Knowledge Broker function during 2022. This function is fundamental to our Hub with plans to continue to gather where appropriate First Nation's knowledge and stories to be shared across communities, across regions, our Hub footprint and beyond. The history of drought and climate knowledge in this continent didn't start two hundred years ago so this First Nations knowledge is recognised as the foundation of our efforts.

5. What opportunities are there to enhance collaboration in planning and delivering drought resilience initiatives, including with state and territory governments?

As outlined throughout this submission, the SQNNSW Hub has been striving to coordinate its activities with other FDF Programs including Drought Resilient Leaders, Regional Drought Resilience Planning and Farm Business Resilience Planning. The significance of these interactions is in the collaboration with other agencies – ARLP, FRRR, QDAF and NSWDPI among others.

The SQNNSW Hub together with the SNSW Hub has been interacting with NSW DPI and NSW LLS during the last twelve months in order to plan consistent Hub activities across the State. In many ways this collaboration, instigated initially by the Hubs, has led to new avenues of coordination between NSWDPI and NSWLLS that didn't appear to exist previously.

Indeed, the host of the SQNNSW Hub, UniSQ, is well integrated into Queensland State drought program collaborations including:

- The Northern Australian Climate Program (NACP www.nacp.org.au), with QDAF and Meat and Livestock Australia (MLA) led through UniSQ's Centre for Climate Sciences. Other NACP program partners include Bureau of Meteorology, UK Met Office, NTDPI, WADPI
- The Drought and Climate Adaptation Program (DCAP www.longpaddock.qld.gov.au), with QDAF, Queensland Department of Environment and Science (QDES), BoM and MLA again led through UniSQ's Centre for Climate Sciences.
- 6. Are there any other changes needed to improve the effectiveness of Part 3 of the Act? Who needs to do what to make those changes happen?

The process of allocating funds that support drought resilience under the FDF could undoubtedly be improved. Much of the relevant critique in this regard would been captured in ongoing discussions between Hub Directors and the Department but it is particularly worth taking note of the following.

The timing of grant calls is often ignorant or at least inconsiderate of the realities for potential applicants, especially those in commercial farming and agribusiness enterprises. This timing should take into account holiday periods (e.g., grant calls in December with closing dates in January is quite simply unreasonable), planting and harvesting schedules, wet seasons and other predictable or known events and seasons.

If Hubs are truly to be recognised as regionally relevant knowledge sharing networks, they should be fully utilised in both program planning and particularly grant and funding arrangements.

Planning and allocation of funding and support between the FDF programs could be improved. For example, it may have been beneficial to roll out the Regional Drought Resilience Planning process first, such that other programs, including the Hubs, could then have been established with some regional prioritisation having been identified.

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3 March 2023





