Response submission to the Productivity Commission Review of Part 3 of the Future Drought Fund Act

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Prepared by Dr Chad Renando, Research Fellow (Innovation Ecosystems)

Thank you for the opportunity to respond to the Productivity Commission's Review of Part 3 of the Future Drought Fund Act.

This response is prepared by Dr Chad Renando, Research Fellow (Innovation Ecosystems) with the Rural Economies Centre of Excellence at UniSQ.

This submission focuses on a response to commentary about the Future Drought Fund initiative relating to programs in which the author has first-hand experience and from the author's research focus of the contribution of the Australian innovation ecosystem to community resilience.

Dr Renando has contributed to the SQNNSW Drought Resilience Hubs MEL, initial discussions relating to Regional Drought Resilience Planning (RDRP), and the MEL for the Drought Resilience Leaders (DRL) program. The response is also informed by the author's other roles including CEO of Startup Status, a not-for-profit mapping and measuring the Australian innovation ecosystem and policy framework and Managing Director of the Global Entrepreneurship Network Australia.

2. How has the Future Drought Fund performed?

2.1.1. Rationale for government intervention

The Interim Report highlights reasons for government contribution with an emphasis on the need to address market failure. The stated rationale for government investment into the Future Drought Fund program includes addressing public good, environmental externalities, information failure, and coordination failures. The Report also notes a counterargument of government support as a moral hazard including unintended consequences.

The rationale for government investment is important as it sets the direction and justification for decisions about the intervention. As such, it is proposed that the rationale for government intervention into the Future Drought Fund also takes a systems thinking perspective.

Federal government creates the overall policy framework for innovation activities, facilitates innovation through direct procurement of innovation and entrepreneurial services, and has the potential for significant funding, culture, and leadership contribution. Approaches to Australian innovation policy over the past four decades have been described as a distinction between systems thinking or addressing market failure (Dodgson et al., 2011), protectionist intervention versus economy-wide perspectives (Conley & van Acker, 2011), neoclassical efficiency-focused models versus evolutionary National Innovation System perspectives (Marsh & Edwards, 2008), transition versus transformation approaches (Hefferan & Fern, 2018; Popov, 2007), or following three broad theoretical approaches of interventionist, free market, and systems thinking (George & Tarr, 2021) (Figure 1).

George and Tarr's review highlights observations common to other critiques. Interventionist approaches are seen as ad hoc, inconsistent, and lacking public engagement. Free market approaches that emphasise market leadership with government intervention filling in gaps or market failures can neglect those who are not dominant market actors and not account for long-term value outside of immediate shareholder interest. Systems thinking perspectives are positioned as an integrated approach between government interventions and free market approaches.
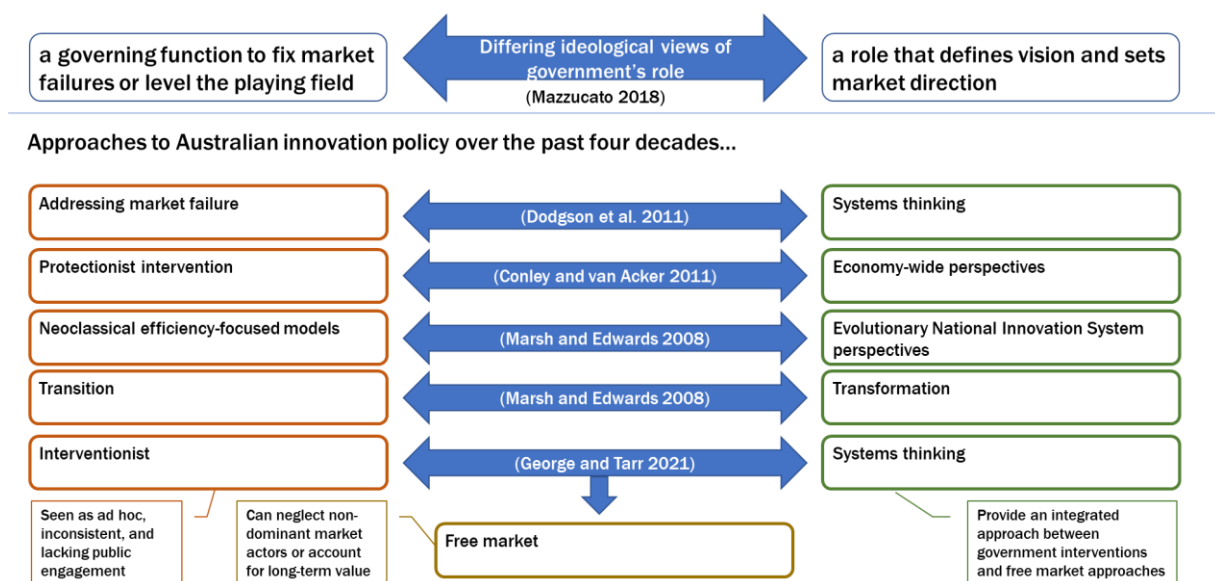

Figure 1 Analysis of Australian federal innovation policy

The Initial Findings report *Table 1 – How FDF programs could address market failures* (p. 40) itemises market failure responses for each program. A consideration could also be made as to how the FDF

programs could provide systems-level change that perhaps could only be applied through government leadership.

For example, the Findings Report makes the market failure case for government involvement in the Drought Resilience Leaders program as promoting knowledge sharing, diffusion of best practices, and providing spillover benefits of community wellbeing and mental health. Applying a systems-level change perspective also considers the establishment of a national network of like-minded leaders as an asset providing long-term strength in the network and mobilising leaders for collective action towards drought.

The market failure case for Regional Drought Resilience Planning is made for overcoming coordination failures between different industries, sectors and governments. In addition, a system-perspective would acknowledge the opportunity to create a sustainable and connected national drought planning framework, reducing the burden and thereby government cost of future planning.

The rationale for government investment into the Hubs and associated programs is to overcome information barriers and broader coordination failures and support public good research and development. A systems approach would consider the hubs as a more legitimate role in the Australian innovation ecosystem, a system-level change to facilitate knowledge flow across geography, research translation lifecycles, and industry value chains.

Proposal 2.1.1-01: Systems-level leadership as rationale for government intervention

> It is proposed that consideration for systems leadership is included in the Findings report. Only highlighting the market failure response minimises the exclusive capacity for government to provide national leadership, culture change, and facilitate systems-level change through embedded resilience.

2.1.2. Programs align with the FDF's objectives

The Interim Report in *Table 2 - Alignment of FDF programs with the Funding Plan objectives* (p. 41, 42) provides a correlation of FDF programs against three dimensions of resilience: economic, environmental, and social. The allocation is based on program MEL plans and grant funding and also acknowledges that programs may overlap with other objectives. The allocation of a program exclusively to a single dimension provides the basis for commentary in the report about identifying the FDF's role in fostering social resilience.

It is proposed that an expanded view of resilience dimensions be applied to help identify program alignment and ensure the full potential of individual programs are understood. Acknowledging current work in Australia establishing resilience frameworks in the scope of climate change, infrastructure, and disaster response (Department of Agriculture, Water and the Environment, 2021; Global Access Partners Pty Ltd, 2021; Infrastructure Australia, 2022; Leadbeater et al., 2022), the work by Sharifi aggregating resilience instruments provides a broad view of community resilience that can broaden the perspective of potential program impact (Sharifi, 2016) (Table 1).

For example, the Drought Resilience Leaders program would be expected to contribute towards economic dynamism through connections with regional economy, business cooperation (inter and intra), diverse economic structure and livelihood strategies, openness to micro enterprises and micro-finance services, entrepreneurialism, and public-private partnership.

Proposal 2.1.2-01: Expanded subdimensions for community resilience

> It is proposed that an expanded view of resilience be applied to connect program outcomes and more broadly consider potential program impact.

Table 1 Economic, Social, and Environmental resilience sub-dimensions and indicators

Dimension	Subdimension	Indicators	DRIH	DRLP	DRLDP
Economic	Structure	Employment rates and opportunities			
		Income (equality, multiple sources), poverty			
		Age structure of working population			
		Qualifications of working age population			
		Individuals with high and multiple skills; literacy (education)			
		Job density (housing-work proximity; extent of out-commuting)			
	Security	Individual and community savings			
		Collective ownership of community resources			
		Business mitigation, response, and redevelopment plan			
		Insurance (domestic and non-domestic) and social welfare			
		Financial instruments (Contingency funds, operating funds, capital funds, etc.)			
		Stability of prices and incomes			
		Stability of property value			
	Dynamism	Inward investment			
		Investment in green jobs and green economy (self-sufficiency, urban farming)			
		Connections with regional economy			
		Business cooperation (inter)			
		Business cooperation (Intra)			
		Diverse economic structure and livelihood strategies			
		Openness to micro enterprises and micro-finance services, entrepreneurialism			
		Public-private partnership			
		Private investment			
		Locally owned businesses and employers			
		Balance of local labour market supply and demand			
Environmental	Natural assets (environment and resources)	Ecosystem monitoring and protection			
		Using local knowledge and native species			
		Erosion protection			
		Protection of wetlands and watersheds			
		Availability and accessibility of resources (air, energy, water, food, soil, etc.)			
		Reduction of environmental impacts (various types of pollution			
		Quality of resources			
		Biodiversity and wildlife conservation			
		Resource management (production, consumption, conservation, recycling, etc.)			
Social	Social structure	Population composition			
		Language abilities			
		Car ownership, mobility			
		Land and home ownership			
		Diverse skills (to pool skills at time of disaster)			
	Community bonds, social support, and social institutions	Degree of connectedness across community groups			
		Volunteerism and civic engagement in social networks			
		Collective memories, knowledge, and experience			
		Trust, norms of reciprocity			
		Shared assets			
		Strong international civic organisations			
		Place attachment and sense of community pride			
		Existence of conflict resolution mechanisms			
		Empowerment and engagement of vulnerable groups, social safety-net mechanism			
		Crime prevention and reduction			

Dimension	Subdimension	Indicators	DRIH	DRLP	DRLDP
	Safety and well-being	Security services such as police			
		Physical health			
		Psychological health			
		Preventive health measures			
		Responsive health measures			
	Equity and diversity	Gender norms and equality			
		Ethnic equality			
		Involvement of minorities			
		Involvement of population with special needs			
		Diverse workforce in culturally diverse places			
		Decency, affordability, and fair access to basic needs, infrastructure and services			
	Local culture	Past experience with disaster recovery; learning from the past			
		Culture and historical preservation; indigenous knowledge and traditions			
		Considering and respecting local culture and specificities in the process			
		Positive social, cultural, behavioural norms			

Also to note cross-over with institutional and infrastructure dimensions of resilience in addition to the above social, economic, and environment. For example, it would be expected that the Drought Leadership Program would have strong contributions to several indicators in Institutional Leadership.

Dimension	Subdimension	Criteria
Institutional	Leadership and participation	Strong leadership
		Stability of leadership and political stability
		Shared, updated, and integrated planning vision (long term)
		Transparency, accountability, corruption, etc
		Multi-stakeholder planning and decision making
		Decentralised responsibilities and resources
	Management of resources	Efficient management of resources (funds, staff, etc)
		Skilled emergency practitioners
		Skilled personnel
		Population with emergency response and recover skills (first aid, etc.)
		Redundant capacity in terms of personnel
	Contingency, emergency, and recovery planning	Integration of risk reduction and resilience into development plans and policies
		Existence of climate change and environmental policy and plans
		Understanding risk patterns and trends
		Continuous and updated risk assessment, scenario making for different kinds of infrastructure and services (costs, losses, etc.)
		Emergency planning and existence of emergency operations centre that integrates different agencies and organisations
		Availability and update of contingency plans (e.g., post-storm traffic management)
		Availability of mitigation plan
		Early warning, evacuation plan, and access to evacuation information
		Inclusion of transient population (tourist, etc.) in emergency planning
		Inclusion of disaster resilience and lessons learned in the recovery plan
		Speed of recover and restoration
		Ongoing process of revising and monitoring plans and assessments
		Standardised, updated, and integrated databases for action planning, monitoring, and evaluation purposes

	Collaboration	Cross-sector collaboration (alignment of aims) and partnership among organisations
		MOUs and MOAs with neighbouring communities and agencies within the broader region
		Knowledge and information transfer and best practice sharing (inter and intra city)
	R&D	Innovation and technology update
		Research (funds, facilities) on risks and academy-society collaborations
	Regulations / enforcements	Availability and enforcement of legislation (policing, crime, building code, environmental law, business law, etc.)
		Management of informal settlements
	Education and training	Behavioural issues and demand management
		Education (from elementary or secondary school, training, communication
		Drills and exercises
		Capacity building and enhancing awareness, dissemination of statistical data, and assessment results
		Incentives for encouraging mitigation and adaptation (including self-mobilising, self-organisation, etc.)

Dimension	Subdimension	Criteria
Built environment / Infrastructure	Robustness and redundancy	Redundancy of critical infrastructure - facilities, stocks, ecosystem
		Robustness and fortification of critical infrastructure - vital assets
		Spatial distribution of critical infrastructure (measure against cascading effects)
		Location of critical infrastructure and facilities
		Consolidation of critical utilities
		Collaboration between utility providers
		Multi-functionality of spaces and facilities
		Shelter and relief facilities and services
	Efficiency	Regular monitoring, maintenance, and upgrade of critical infrastructure
		Retrofit, renewal, and refurbishment of the built environment
		Promotion of efficient infrastructure
	ICT	Diverse and reliable information and communication technology (ICT) networks
		Emergency communication infrastructure (before, during, after disaster)
	Transport	Capacity, safety, reliability, interestedness (connectivity) and efficiency of transportation
		Inclusive and multi-modal transport networks and facilities
	Land use and urban design	Accessibility of basic needs and services over time (flood, water, shelter, energy, health)
		Accessibility of basic needs and services over time (education)
		Site selection and avoiding risk and habitat areas (floodplain, flood prone, exposed coastal zone)
		Urban form (compact, dispersed, etc, SVF, aspect ratio)
		Mixed-use development
		Street connectivity
		Density of development
		Public spaces and communal facilities
		Green and blue infrastructure
		Amount (per cent) of impervious surfaces
		Aesthetics, visual qualities
		Landscape-based passive cooling
		Passive lighting
		Passive heating
		Passive cooling

2.1.3. Some FDF programs overlap or compete with other programs

Interim finding 1: The intent of the Future Drought Fund is sound, but it is too early to assess its impact

The Future Drought Fund (FDF) continues the shift in drought policy in Australia from in-drought assistance to building resilience to drought before drought occurs. It is too early to assess the impact of the Fund and its programs.

Most FDF programs have a sound justification and align with the FDF's objectives. However, some programs appear to be supporting activities which may be better delivered through other avenues.

Applying the ecosystem metaphor, the FDF program created a number of new 'species' in the Australian innovation and agriculture ecosystem in terms of hubs, plans, and programs. That there is a need for drought support and the inherent capability of the delivery organisations means the program will produce outcomes and impact aligned with expectations. However, introducing a new intervention into an existing ecosystem, especially at the scale and immediacy of the Future Drought Fund implementation, competes with established networks and creates confusion, competitive shielding, and lack of trust (Uzzi, 1997). There can also be inefficiency through duplication of effort from a lack of understanding of existing networks and roles and the position of the program or policy by both the emerging actor and the existing system.

Similar behaviour has been seen in previous wide-scale interventions. The National Innovation Science Agenda injected $1.1 billion into the Australian innovation ecosystem, resulting in the establishment of over 70 innovation hubs across Australia in five years at a rate of up to 5 per month (Renando, 2020). The new hubs created new networks while also displacing established actors and created conflict in regions competing for scarce resources. Mapping at state, sector, and impact level are ongoing to understand the ecosystem and inform policy decisions.

Another example of policy displacement can be seen in state-based investments into regional innovation such as the Queensland Advance Regional Innovation Program (ARIP). Unlike other state-wide regional innovation programs that focused on direct incubator or program support such as Western Australia's Regional New Industries Fund's Groundswell program (Department of Primary Industries and Regional Development, Western Australia, 2020) or the New South Wales Accelerating Regional Innovation Fund (Regional NSW, 2022), Queensland's ARIP established new intermediaries to execute on community-defined innovation outcomes. While commendable in the design for a systems-level change, the lack of clarity around delivery and governance relative to other established actors resulted in friction from a lack of confidence and resentment (Nous Group, 2022).

Proposal 2.1.3-01: Embed a policy mapping initiative into the FDF program

It is proposed that a policy mapping initiative be embedded into the FDF and greater emphasis be applied to network mapping. The FDF program overall is wide-reaching, creates new entities and initiatives in existing frameworks, and in the case of the Regional Drought Plans provides a means to aggregate, consolidate, and align existing programs and policies. An available and accessible map of current policies and programs will support identifying gaps and opportunities for future FDF funding strategies.

2.2. Problems with program design and delivery have likely impacted outcomes

Interim finding 2: Future Drought Fund design and delivery problems will continue to constrain progress unless addressed

While the suite of Future Drought Fund (FDF) programs will likely improve drought resilience, problems with the design and delivery of the FDF and its programs will continue to constrain progress, including:

- a lack of strategy to integrate and sequence programs
- too many disconnected and relatively small programs creating confusion and administrative costs
- barriers to knowledge sharing across the FDF.

The findings align with the experience in delivering the program.

- **Program sequencing and integration:** There was confusion about program integration and relationships in the market, between program teams, and within individual program teams. Given the size of the Australian regional and agriculture ecosystems, many stakeholders were involved in multiple FDF initiatives. The burden fell on individual providers and participants to develop tools to communicate the distinction and potential integration between programs. Additional communication material to clearly articulate program relationships would have improved efficiencies and impact.
- **Greater and earlier centralised support:** Several factors increased complexity of the FDF, including the rapid onboarding, the fact that new actors were being created in established ecosystems, the large number of new initiatives, and differences within initiatives (eg., variances between drought hubs and regional drought plan regions). The establishment of greater centralised support and leadership for shared functions such as knowledge sharing and evaluation would have improved early efficiency and effectiveness.
- **Lack of long-term confidence and impact:** The stated FDF intent of long-term impact is constrained by short-term commitment. The financial and social cost of establishment would not expect to see a return on investment within the allocated two-to-three year period. The lack of long-term commitment creates additional stakeholder uncertainty and reduces the ability to secure and develop capability and capacity. This then creates a self-fulfilling prophesy of a lack of short-term return on investment and lack of evidence of progress towards long-term outcomes.
- **A need for standardised collaborative structures:** The investment into collaborative and knowledge sharing structured should be in line with the complexity of the program.

Proposal 2.2-01: Invest in program-wide network capacity

It is proposed that investments are made into centralised network structures to increase efficiency and effectiveness of individual initiatives, including:
- investments into centralised administrative functions to support shared data management and evaluation,
- longer-term assurance to attract and retain resources and develop capability and capacity, and
- investment into systems infrastructure to support the network, including policy and actor mapping, knowledge sharing, and evaluation frameworks.

2.3. The Funding Plan is not a plan

Interim finding 3: The Funding Plan does not provide clear guidance on planning, strategic sequencing and prioritisation of programs

The vision, aim, strategic priorities and objectives of the Drought Resilience Funding Plan 2020 to 2024 are broadly appropriate and consistent with the Future Drought Fund Act 2019 (Cth) and the National Drought Agreement.

> However, the Funding Plan does not identify priorities or guide decisions about the mix of programs. Instead, the Funding Plan includes detailed lists of a wide range of the types of activities that could possibly be funded. The absence of an overall strategy has likely contributed to a lack of appropriate sequencing and integration of programs.
>
> Many of the funding principles are ambiguous, could be strengthened and/or are not being applied in practice. It is also unclear whether they are intended to be applied across the suite of Future Drought Fund programs or apply to each arrangement and grant.

Findings from other reviews such as the *Review of Australian Government Drought Response* can be considered for shared and persistent challenges around program alignment, data management, and evaluation (National Drought and North Queensland Flood Response and Recovery Agency, 2020). Reflections on program deliver align with the findings in the Interim Report:

- **Clarity on alignment and integration with other drought plans and policy:** This feedback agrees with the Interim Report statement that "The Funding Plan does not articulate how the FDF fits into the broader agriculture policy landscape and how it aligns with other drought and climate change policies and programs" (p51). The lack of clarity created competitive tension during roll out as new actors and initiatives were introduced, and it was left to the new actor to convey their position to incumbents. A policy mapping process is recommended to inform future decision making and provide clarity to other stakeholders.
- **Clarity on principles:** Principles are statements which inform the decision-making process. As noted in the Interim Report, the current principles lack clarity, are significant in number, and are written in a way that are not conducive to being top-of-mind. The principles could be simplified, consolidated, and communication tools such as diagrams provided to encourage greater adoption and application in individual program decision making processes. Below is an example of simplification. Additional clarity and consolidation could be performed in consultation:
  - Principle 1: Alignment - Vision, Aim, Strategy
  - Principle 2: Public good
  - Principle 3: Preparation (not in-drought assistance)
  - Principle 4: Additive and integration (not duplication or replacement)
  - Principle 5: Compliance with government guidelines
  - Principle 6: Stage - Increment, transition, transform
  - Principle 7: Level - Firm, region, nation
  - Principle 8: Customer-led design
  - Principle 9: Efficient delivery
  - Principle 10: Inclusive impact
  - Principle 11: Collaborative and integrated
  - Principle 12: Transparent process
  - Principle 13: Co-investment
  - Principle 14: Outcomes - Long-term and sustainable
  - Principle 15: Outcomes – qualitative and quantitative
  - Principle 16: Long-term dependencies
  - Principle 17: Knowledge sharing

Proposal 2.3-01: Policy mapping exercise

It is proposed that a policy mapping exercise be conducted to map drought policies by geography (national, state and territory, region 9 NRM, LGA), sector (industry bodies), and areas of impact (Indigenous, Climate).

Proposal 2.3-02: Principle clarity

It is proposed that the FDF principles be reviewed, simplified, and consolidated, and that communication tools be developed to better share and embed the principles in the FDF program decision-making process.

3. The next steps for the Future Drought Fund

3.1. More explicit recognition of climate change

Interim recommendation 1: Building resilience to climate change should be more explicitly recognised as an objective

> The scope of the Future Drought Fund should be clarified to explicitly recognise building resilience to climate change.

Information request 1: expanding scope to climate change

> Explicitly recognising climate change resilience as a priority for the Future Drought Fund could increase the types of activities eligible for funding. The Commission is seeking views on this proposed change, including:
> - given the limited resources available to the Fund, what climate change resilience activities should and should not be funded?
> - whether changes are needed to the governance arrangements of the Fund.

The scope of the FDF program is important to mobilise collective impact on a specific shared challenge, in this case drought. Expanding the program from drought to climate expands the potential audience while also increases similarities and cross-over with other private and public sector programs in the market. If the scope is to be expanded, a mapping process should be undertaken to review current climate policies and programs and avoid replicating the ambiguity experienced with drought-related policies and programs.

It is proposed that the program has already expanded to climate in some areas to meet the needs of the market, for example positioning drought leadership as adapting to climate variability, support for established climate-focused agriculture technology, and a broad focus on mental health for regional resilience. It is proposed that the emphasis on drought resilience or climate events be maintained as a differentiator while legitimising the integration and complexity of the topic. It will be necessary to establish clear boundaries and interfaces between the different domains of drought, agriculture, climate, innovation, regional, and resilience policy (Figure 2).

The positioning of climate will also need to be clearly articulated. For example, climate change, climate impact, and climate variability all have different connotation and will engage audiences differently.
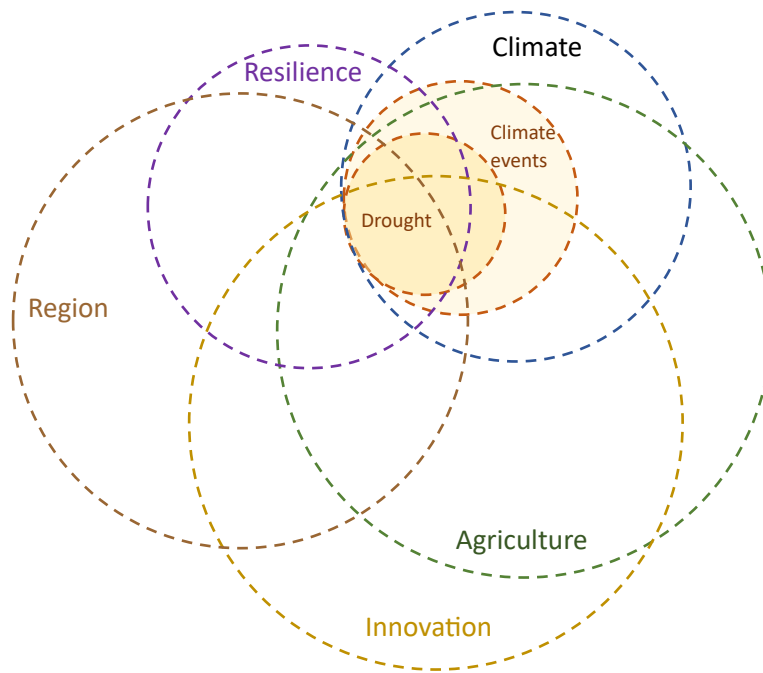
Figure 2 Intersecting ecosystem domains

Proposal 3.1-01: Maintain focus on drought and allow related topics with clear justification

It is proposed that the FDF maintains a focus on drought, acknowledging and legitimising the complex nature of the topic. Define interface points, map related initiatives, and allow flexibility for expansion as needed.

3.2. Prioritising objectives

3.2.1. Prioritising environmental actions that also improve economic resilience

Information request 2: Greater economic and environmental benefits and program integration

The Commission is seeking views on whether and how the Future Drought Fund can achieve greater environmental and economic resilience through more investment in natural resource management activities.

The Commission is also seeking views on:
- how existing programs could be adjusted, and what activities should be funded, to achieve mutually reinforcing environmental and economic benefits
- how these outcomes – and the causal links between actions and improved resilience – could be best measured
- how Future Drought Fund activities should interact with the National Landcare Program and other natural resource management programs.

As noted previously, the social, environmental, and economic dimensions can be expanded and clarified to include subdimensions and indicators to identify target impacts. For example, whether the activity would be expected to result in a greater connection with the local economy, inward investment, income equality, or population qualifications. This could be done pre- and post-activity, acknowledging the need to manage the administrative burden. This can also be done retrospectively as a desktop analysis on the portfolio of program activities.

Below are example from non-FDF program research including a network graph of enabling and inhibiting contributing factors to resilience across dimensions of social, individual, economic, and institutional (Figure 3) and detailed instances for the sub dimension of economic security dimensions (Figure 4) (Renando, 2020). These are examples from prior research, but a similar methodology is being applied for the analysis for the SQNNSW drought hub MEL.
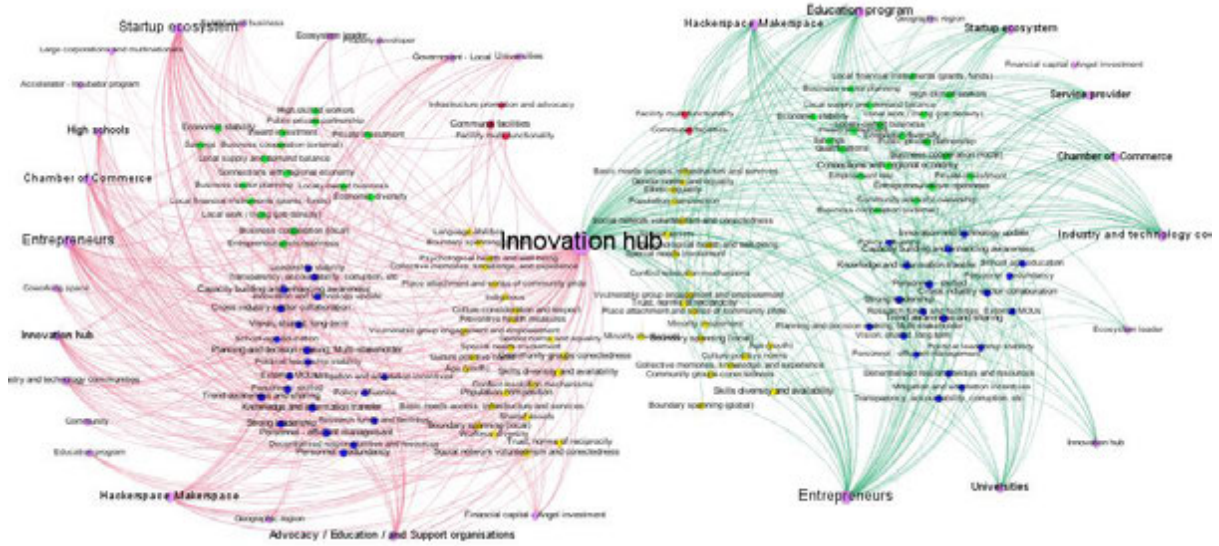

Figure 3 Non-FDF example of a social network graph with roles and community resilience indicators as nodes, node colour by community resilience dimension and edge colour by relationship type (enabling or inhibiting)

Non-FDF example of research
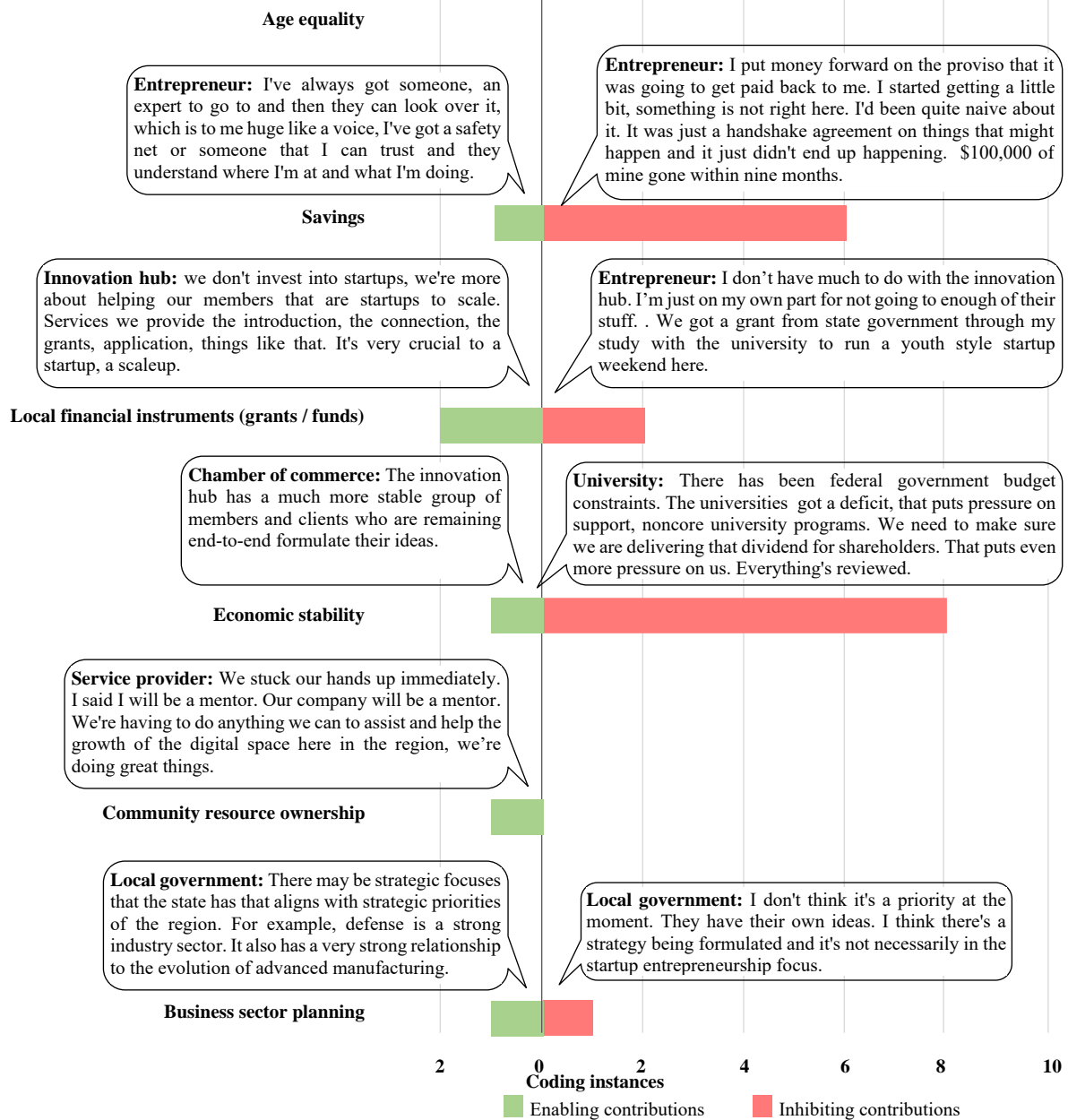
Figure 4 Example from non-Future Drought Fund research of enabling and inhibiting contributions of the innovation hub to the Economic Security subdimension indicators of community resilience

Proposal 3.2.1-01: Maintain focus on drought and allow related topics with clear justification

It is proposed that greater detail be applied to mapping FDF program initiatives to community resilience indicators, a standardised set of indicators and method be applied across programs, and the collection and management of the monitoring be adequately supported.

3.2.2.   Identifying the FDF's role in fostering social resilience

The Commission is seeking views on how the Future Drought Fund can best support social resilience, considering the roles that state, territory and local governments play.
The Commission is also seeking views on:
- whether existing programs (outside the Better Prepared Communities theme) could be adjusted to better achieve flow on benefits for social resilience, and if so how
- how social resilience outcomes can be best measured.

The Initial Findings Report highlights the need for addressing social impact ("A perennial criticism of past in-drought assistance was the dearth of support for regional communities") as well as questions about the role of government in supporting social resilience ("Most of the research describes the importance of social resilience rather than identifying how governments can foster it."). Relating to the previous commentary on the role of government in addressing market failure versus system change, the Impact Report emphasises the argument for government investment into social support of health and social services as compared to broader social resilience.

The Impact Report raises questions as to how the Better Prepared Communities themed initiatives in the FDF Program (Drought Resilience Leaders, Networks to Build Drought Resilience, Helping Regional Communities Prepare for Drought Initiative) are positioned in relation to other regional development policies with similar objectives, including:

- **The Growing Regions Fund:** $500,000 and $15 million to local government entities and not-for-profit organisations, for capital works projects that deliver community and economic infrastructure projects across regional and rural Australia.
- **Strong and Resilient Communities Program:** grant funding to organisations for one-off, time limited projects that support vulnerable and disadvantaged people participate socially and economically through local community-driven solutions to improve the social and economic participation of four target groups: young people aged 12 to 18 years who are, or are at risk of being disengaged, marginalised or having limited engagement with education/training; people with disabilities and/or mental health issues; vulnerable women who may be socially isolated; and unemployed people who face individual barriers to employment to engage with existing employment/training services.
- **Investing in Our Communities Program and Priority Community Infrastructure Program:** Closed and non-competitive grant of up to $5 million for the construction, upgrade or extension of infrastructure that provides economic and social benefits to the community.

Compared to the non-FDF programs above, the programs in the Better Prepared Communities theme are distinct in their:

- **Integrated approach**
  The integrated approach of individual leadership development, networked mentoring support, and funded grant programs. The combined nature of the program provides a similar structure as innovation-focused accelerator programs that invest in the individual entrepreneur, provide mentoring and access to new networks, and funding to develop projects aligned with the participant's passions. Participants involved in more than one program identified stronger ratings in the value of peer networks and leadership in drought resilience.

The results from the DRL demonstrate increased impact as a result of engagement across multiple program streams. The diagram below (Figure 5) from the DRL MEL report highlights the connected network effect from the multiple programs.
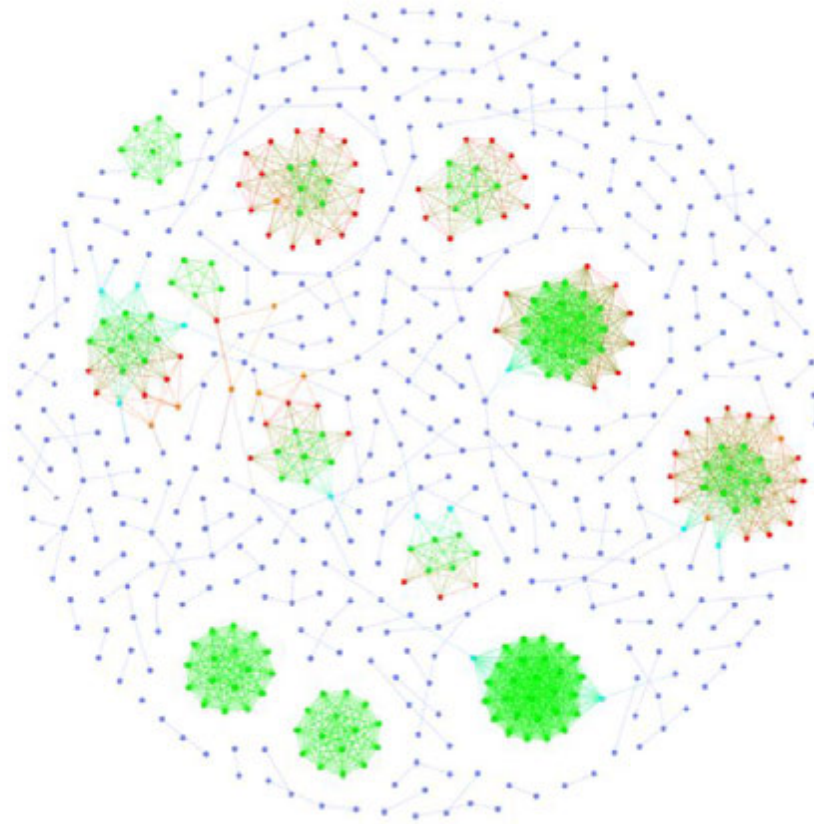

Figure 5 FDF DRLP network connections between participants in regional groupings (Green = Leadership; Blue = Mentoring; Red = Grants; Cyan = Leadership + Mentoring; Orange = Grants + Mentoring)

- **National connection**
  Phase one of the DRL program created a national network of leaders aligned to a common purpose with over 3,000 direct connections. Figure 6 below from the DRL MEL shows the geographic distribution of the network.

  This national network is a social capital asset that can be leveraged. Like any capital asset, failure to maintain the asset will see a loss of investment and have an unintended

consequence of creating challenges for future attempts at similar programs.

18 months

Figure 6 Geographic network established as a result of the DRL

- **Progress towards collective impact**
  Leadership development is more than just a transfer of skills. It is a progress towards personal, professional, career, community, and collective impact. Leadership development is also provided in community for shared learning and the strengthening of network leadership in addition to individual leadership.

  As part of the DRL, participants were asked their expected impact at program application and their actual impact at program completion. Their responses were coded to identify the impact as relating to them personally (eg., speaking, confidence), professionally (eg., leading teams, working with others), professionally (eg., industry sector leadership, advancing roles), community (eg., investment attraction, local resilience) and collective impact on a specific topic (eg., mental health awareness, advocating for regenerative farming).

  The results from the DRL program MEL are shown in Figure 7. On application, 22% of the participants identified a collective impact outcome. On program completion 3 months later, 5% of participants had realised impact in these areas during the program delivery timeframe. This is significant in the complexity and effort involved in realising wider collective impact outcomes.
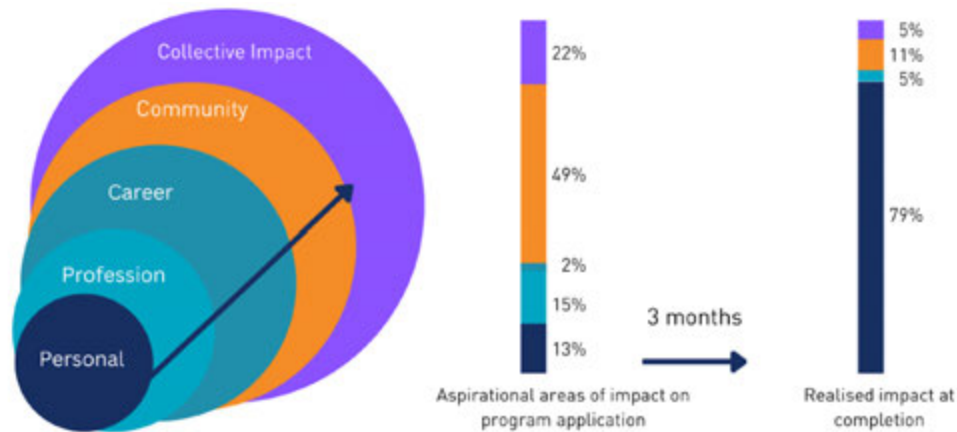
Figure 7 DRLDP participant application goals and actual impact

The information sought in the Interim Report is the extent that existing programs (outside the Better Prepared Communities theme) could be adjusted to better achieve flow on benefits for social resilience, if so how, and how social resilience outcomes can be best measured.

Considering the DRL outcomes above, the FDF provided a platform for a national network focused on the dedicated topic of drought. The approach integrated individual leadership development, boundary-spanning value networks through mentoring, and focused local impact. The value of the associated grant program was as much about building network strength through shared activity as it was the actual project itself. Replicating these outcomes in other programs focused on individual projects would need to replicate the network effect and individual leadership development to coincide with individual project funding.

Proposal 3.2.2-01: Apply a long-term systems perspective to drought social resilience

It is proposed that continued support for the FDF initiatives in the Better Prepared Communities theme emphasise systems change through the establishment of a national network using the three integrated components of individual leadership development, peer-network development, and projects to build local capacity in project delivery.

3.2.3.   There are opportunities to strengthen the theory of change

Information request 4: Theory and change and program logic alignment and improvement

The Commission is seeking views on:
- the extent to which the suite of programs, as well as individual program design and program monitoring, evaluation and learning plans, align with the theory of change and program logic
- how the program theory, and its use, can be improved to better guide investment, prioritisation, program design and monitoring, evaluation and learning in the next Funding Plan period

As previously noted, the Theory of Change can be expanded to include greater detail around individual indicators.

Proposal 3.2.3-01: Include greater detail in resilience indicators in the Theory of Change

It is proposed that greater detail for resilience dimensions be included in the FDF Theory of Change.

3.2.4. Improving opportunities for learning and knowledge sharing

Interim recommendation 2: Establishing a drought and climate change resilience knowledge management system

> The Australian Government should establish a drought and climate change resilience knowledge management system to facilitate sharing of Future Drought Fund and other drought and climate change resilience knowledge.

In addition to a central hub for knowledge sharing, additional support can be provided in coordinating data collection and network mapping efforts. Currently, hub knowledge brokers are self-organising, developing bespoke approaches, and auditing existing partner platforms and data repositories to determine fit for purpose approaches. Greater coordination and national leadership can be provided to ensure the efforts are efficient, effective, legitimised, and aligned across the FDF framework.

Proposal 3.2.4-01: Provide support and alignment on national network mapping and data collection

> It is proposed that support for a national network mapping approach and data collection across FDF initiatives.

3.2.5. Improving the funding principles

Information request 5: Next Funding Plan

> The Commission is seeking views on its suggestions for the next Funding Plan. These suggestions include that:
> - the Funding Plan should explain how the Future Drought Fund (FDF) and its programs align with the National Drought Agreement and other relevant policies
> - the objectives and strategic priorities should be clarified, particularly those related to social resilience
> - the principles should be revised to provide clear guidance on which principles should be met by the suite of FDF programs and which principles should apply to each arrangement and grant
> - the Funding Plan should be accompanied by an investment plan that identifies priorities for funding and eligible activities, the sequencing of programs, and how the different programs work together.

The response to the simplification and accessibility of the principles is noted previously in this response.

The absence of better prepared communities is noted in the New Funding Plan (p. 71). As noted previously in this report, the absence of the Better Prepared Communities stream is seen as an unfortunate loss of past investment and opportunity for a national connectivity and network strength.

4. Is the monitoring, evaluation and learning approach fit for purpose?

The development and implementation of a comprehensive monitoring, evaluation and learning (MEL) system was hampered by the quick roll-out of programs, and a lack of dedicated resource capability.

Monitoring and evaluation activities have largely focused on individual programs, with little work done to understand the overall progress of the Fund. Program-level indicators tend to focus on inputs and outputs rather than outcomes, and hence provide limited understanding of how programs are contributing to drought resilience.

Information request 6: Monitoring, evaluation and learning (MEL) clarity

The Commission has identified challenges with the implementation of Fund and program monitoring, evaluation and learning (MEL). We are seeking further views on:
- the clarity of MEL requirements for, and guidance provided to, program implementers
- what mechanisms might better integrate monitoring, evaluation and reporting with learning
- any other specific, practical changes that would improve how MEL is conducted across the Fund.

Information request 7: Monitoring, evaluation and learning (MEL) examples

While there have been challenges with implementing monitoring, evaluation and learning, the Commission is interested in examples of monitoring, evaluation and learning being conducted effectively to track and improve Fund and program performance and outcomes.
In particular we are interested in any practical examples from across the Fund and programs, of:
- program outcomes that are being monitored and measured, and how data is being collected and analysed to do so
- longer-term monitoring of outcomes and impact after the conclusion of a program, project or activity
- learning activities deliberately undertaken during the course of program or activity implementation, to identify any challenges and other insights, and use these to change and improve implementation
- how attribution and contribution has been addressed in monitoring or evaluation
- monitoring and evaluation of:
  - partnerships
  - environmental resilience outcomes at landscape / multi-property scale
  - social resilience outcomes
  - knowledge uptake by the wider sector; specifically, monitoring of how knowledge generated by the Fund has been applied by people beyond those directly participating in a Fund program or activity.

The response is specific to the MEL for the Drought Innovation Hubs. Activity is being assessed through an event register and event participant surveys standardised across hubs. An additional network survey provides input into the strength of the collaboration.

In addition, focused surveys are performed with key stakeholders and other interviewees based on snowball sampling with four main questions following an Appreciative Inquiry framework:

1. When considering your involvement with the hub, what has been the impact on your organisation? What contributed to that impact?
2. When considering your activities with the hub, what has been the impact you have seen in relation to drought resilience? What contributed to that impact?
3. Think ahead one to two years and the contribution of your involvement with the hub and your business? What would make that contribution the best that it could be? What would need to happen to make that happen?
4. Now think ahead one to two years and the contribution of the hub on what you know as drought resilience? What would make that contribution the best that it could be? What would need to happen to make that happen?

These questions are tailored to the domain and expand to include the activities and focus areas of the hub, including data and decision making, First Nations, wellbeing and workforce, productivity, carbon markets, and more.

The interview results and activity registers are used as input into the reporting templates and to perform social network analysis on resilience contributions aligned with indicators identified previously in this response.

Also noted in the Interim Report is commentary on the assessment of social impact and observation of leadership programs using participant self-reporting through surveys, participation rates, and network numbers.

Assessing social resilience is a challenge from many perspectives outlined in the original DRL MEL, including attribution of impact, a consideration as to whether the results would happen otherwise, a drop-off of impact following the intervention, and the time required for results to occur following the intervention. The intervention also developed individual leaders, and as such institutional or social resilience is more difficult to assess but not impossible.

One approach to consider include an ongoing network analysis to assess the strength of the network. This approach only has value to the extent that the network is maintained through continued facilitation and future interventions.

A second approach is ongoing alumni tracking. This can be done with individual surveys through treating alumni as a panel and/or through a dedicated alumni program.

5. Evaluation of individual FDF programs

5.1.1. Regional Drought Resilience Planning

Interim finding 8: Regional Drought Resilience Plans could be improved

The Regional Drought Resilience Plans can help communities prepare for drought. However, plans are often affected by poor integration and sequencing with other Future Drought Fund programs, lack of ownership over who is responsible for their delivery and minimal funding to implement the identified initiatives. There is a risk that plans will not lead to tangible outcomes and could result in confusion and consultation fatigue.

Information request 11: Regional Drought Resilience Planning program improvements

The Commission is seeking views on how the Regional Drought Resilience Planning program can be improved, including through better integration with other Future Drought Fund (FDF) programs, stronger governance and public reporting.
- The Commission is also seeking views on whether the Australian Government should reassess the value of the program and consider options for reallocating funds to other FDF activities.

A primary question with the RDRPs relates to accountability for implementation, ownership of outcomes, and alignment with other plans.

It is proposed that the Drought Hubs are an appropriate vehicle to be custodians of the plans.

It is also proposed that an open and accessible mapping process be provided to map drought policy for future plan maintenance and development.

5.2. Better Practices

5.2.1. Drought Resilience Adoption and Innovation Hubs

Interim finding 9: There is scope to improve the Drought Resilience Adoption and Innovation Hubs

The Drought Resilience Adoption and Innovation Hubs are in their early stages. It is likely that many Hubs are contributing to drought resilience, but it is too early to assess their effectiveness. There is scope to make improvements to better manage and assess Hub performance and overcome initial implementation issues around stakeholder engagement, integration with other Future Drought Fund programs and better targeting investment.

Interim recommendation 5: Improving the Drought Resilience Adoption and Innovation Hubs

Improving the Drought Resilience Adoption and Innovation Hubs Funding for the Drought Resilience Adoption and Innovation Hubs should be extended in the next Funding Plan. However, the Australian Government should:
- state what its expectations are for the Drought Resilience Adoption and Innovation Hubs program and individual Hubs
- commission a performance review of the Hubs during the next Funding Plan, with future funding contingent on demonstration of adequate performance and governance
- implement a monitoring, evaluation and learning (MEL) plan for the Hubs program as a whole and ensure individual Hub MEL plans align accordingly.

The Drought Innovation Hubs are somewhat of a misnomer in the Australian Innovation Ecosystem as they do not fit the standard depiction of an innovation hub in Australia in terms of supporting individual entrepreneurs as much as providing the collaboration and connection function. Examples

of other innovation hubs in Australia are noted on the map here:
https://your.startupstatus.co/map/#All#2#All#All#All#All#All#role.

The Drought Hubs are distinct in that they do not provide support for the typical startups or entrepreneurs, cover a wide regional remit, and come with a range of diverse and often unknown collaborative partners. This created a challenge on the hubs' first year as the ecosystem and the hubs themselves worked to identify the nature of their organisation at times at odds with their namesake. The Hubs were also challenged in the establishment of the large number of collaborative networks, initiating multiple work streams, and onboarding staff in a constrained workforce environment.

The Australian innovation ecosystem has expanded rapidly over the past decade, introducing over 500 hubs, spaces, precincts, parks, and investment programs (Figure 8). These programs have become specialised but often still operate in isolation in silos. The Drought Innovation Hubs provide a critical function in connecting, raising awareness, and collaboration for a shared purpose specific to the challenge of drought.
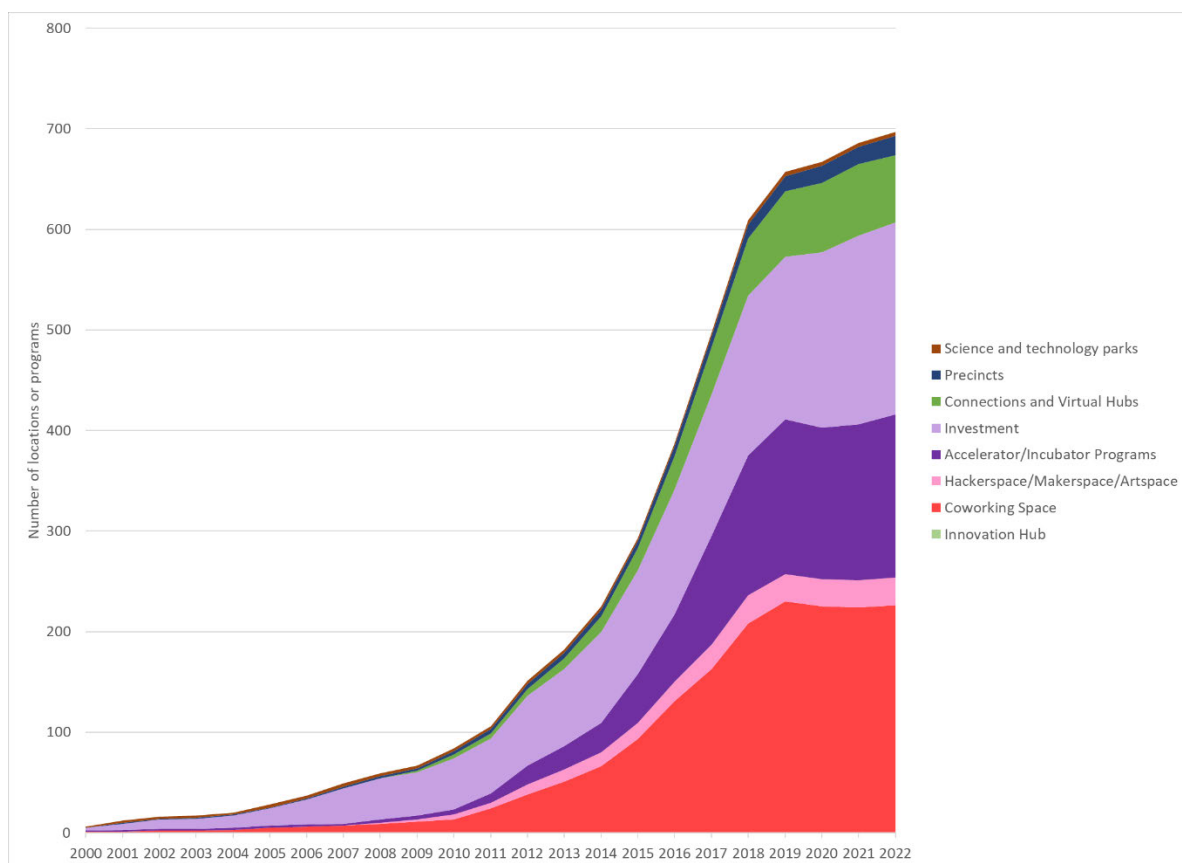

Figure 8 Hubs over time - Australian innovation ecosystem

It is only now that the hubs would be seen as delivering against their mandate. The hubs represent a new species in the Australian innovation ecosystem. The recommendations for a review and a consideration for ongoing support is supported.

5.3. Better Prepared Communities

Interim finding 10: There are issues with relevance, overlap and measurement of the Better Prepared Communities programs

While social resilience is important, the Future Drought Fund (FDF) may not be best placed to support all community resilience activities.

While program delivery partners have given positive feedback, the Better Prepared Communities theme has several challenges.

- The programs focusing on professional networking and information sharing may overlap with work being done (or that could be done) by Drought Resilience Adoption and Innovation Hubs or through implementation of regional development plans.
- While there has been some evidence of better integration and communication between the Helping Regional Communities Prepare for Drought program and other areas of the FDF, this may be insufficient to ensure activities targeting social resilience and community needs are efficiently implemented.
- There is no focus on longer-term outcomes for social resilience. The current emphasis on delivering activities and improving the quantum of social networks creates challenges in understanding the effectiveness of these programs.

Information request 13: Better Prepared Communities programs appropriateness

The Commission is seeking views on the appropriateness of programs delivered under the Better Prepared Communities programs (Networks to Build Drought Resilience, Drought Resilience Leaders and Helping Regional Communities Prepare for Drought).

The Commission is considering ways to better target the role of the Future Drought Fund (FDF).

The Commission is seeking views on the following three options:

- maintain current arrangements and improve integration with other areas of the Fund
- explicitly tie community grants to regional drought development plans
- focus the FDF on economic and environmental programs with social capital developed within these programs.

Please refer to the previous comments on the Better Prepared Communities programs. An approach is proposed to maintain support and improve integration.

The development of social capital including leadership and a national community network is a specialist function. This would not be expected to be catered for within the remit of the Innovation Hubs any more than social development would be expected from the number of innovation hubs or precincts across the Australian innovation ecosystem.

Integration of the leadership program with other grant programs including those outside the FDF framework is a strong consideration. Providing leadership development with the national FDF framework aligned to grant recipients would integrate other grant streams into a strong national network of like-minded leaders.

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