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# Submission

## Consultation draft: Future Drought Fund Investment Strategy 2024 to 2028

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1 December 2023

**Citation:** Lade SJ (2023) *Submission: Consultation draft: Future Drought Fund Investment Strategy 2024 to 2028*. Australian National University, Canberra. 1 December 2023.

**Acknowledgements:** I acknowledge and celebrate the First Australians on whose traditional lands I work, the Ngunnawal and Ngambri peoples, and pay my respect to their elders past and present.

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TEQSA Provider ID: PRV12002 (Australian University)

CRICOS Provider Code: 00120C

# Contents

Contents .....	3
Introduction .....	4
Innovation and transformation .....	4
Background.....	4
Recommendations.....	4
Place-based action and partnerships.....	5
Background.....	5
Recommendations.....	5
Agricultural landscapes management.....	6
Background.....	6
Recommendation.....	6
Information, skills and capacity building .....	6
Background.....	6
Recommendation.....	7
References .....	7

# Introduction

Thank you for the opportunity to provide feedback on the *Consultation draft* of the *Future Drought Fund Investment Strategy 2024 to 2028*. This Investment Strategy was developed in response to the *Productivity Commission's Review of Part 3 of the Future Drought Fund Act*. My submission is structured by the Investment Strategy's streams, with a specific focus on transformation.

I am an expert working in the field of social-ecological resilience. My Future Fellowship, funded by the Australian Research Council, aims to produce novel tools to manage the resilience of water resources. I am affiliated with the Institute for Water Futures at the Australian National University, which is a member of the Southern NSW Drought Resilience Innovation and Adoption Hub.

## Innovation and transformation

### Background

I begin with stream 6.4, since this investment stream addresses transformation most directly.

I am glad that the Future Drought Fund (FDF) has accepted the Productivity Commission's recommendation 3.1 to make "support for transformational actions a higher priority". This goal is ambitious and important, but challenging. Transformations can fundamentally alter "the dynamics or relationships of major structures such as authority, power, and resources, the rules, practices, and processes that reflect and reproduce those structures, the norms, values, and beliefs underpinning the structures and processes, and the way these shape relationships between people, and between people and the planet" (Moore et al., 2023).

Effective transformations often (Lade et al. 2017):

- Require a combination of incremental and structural change;
- Require a combination of external support and leadership from actors internal to the system;
- Are uncomfortable, in that they involve goals and decisions that are often counter to the status quo;
- Lead to change across multiple levels of society.

### Recommendations

1. Transformation requires both transformative innovation and incremental change. To balance the FDF's previous focus on "tried and tested practices", its

next phase **should prioritise transformative innovation across all investment streams** (Discussion questions 12 and 13).

2. The Long-term Trials of Drought Resilient Farming Practices program is **too narrow in scope** to support transformational change. The proposed Drought Resilience Innovation Challenges are more appropriate for this objective (Discussion question 13).
3. Possible Drought Resilience Innovation Challenges (Discussion question 14) include: Food systems (van Kerkhoff et al. 2023); energy systems; livelihood diversity, since diversity is critical to resilience (see section *Agricultural landscapes management*); water supply (for example developing its redundancy; see section *Agricultural landscapes management*).
4. Drought Resilience Innovation Challenges should be strongly grounded in place-based action and partnerships, potentially including speculative futures approaches (see recommendation 6 below).

## Place-based action and partnerships

### Background

Action and partnerships for navigate towards resilient futures often display one (or more) of three types of futures thinking (van Kerkhoff 2023):

- Predictive, in which action is based on a forecast most likely future state.
- Anticipatory, in which action is based on a range of plausible futures that incorporate uncertainties and interactions between variables of interest.
- Speculative, in which action is based on what futures may be possible.

### Recommendations

5. Prioritisation of **transformation should occur across all FDF activities** , not only the ‘Innovation and Transformation’ stream. For example, partnerships through Hubs should include activities in support of transformation.
6. To envision possibly uncomfortable transformations that are counter to the status quo (see ‘Innovation and Transformation’ above), partnerships and fora are needed where government, industry and communities can engage in **speculative futures thinking** . Regional Drought Resilience Plans are closer aligned with anticipatory futures thinking.

# Agricultural landscapes management

## Background

Optimising for resilience against specific threats or hazards can undermine resilience generally (Walker 2020). While drought and climate change have been identified as the threats against which FDF should support resilience-building, there is substantial uncertainty in how these hazards impact agricultural systems, natural systems and communities: which regions will be affected, and how severely; what physical and social infrastructure will be affected, and how severely; how land and ecosystems will be affected, and how severely. Therefore ‘**general resilience**’ remains important against an identified general hazard such as drought.

Characteristics that promote general resilience include **diversity, redundancy, connectivity, inclusivity and equity, and adaptive learning** (Rockström 2023). The investment stream ‘Place-based action and partnerships’ addresses connectivity, in the sense of social connectivity, and inclusivity. ‘Information, skills and capacity building’ addresses adaptive learning. **Diversity**, in particular a diversity of options to respond to change (Lade et al. 2019; Walker et al. 2022), and **redundancy** are important features of resilience that are underemphasised in the current Investment Strategy. For example, **diversity** of crops can support continuous feed production under a variety of conditions and **redundancy** of local water supplies can guard against infrastructure failures.

## Recommendation

7. FDF should fund initiatives in this and other investment streams that explicitly support building diversity and redundancy. For example, the Long-Term Trials of Drought Resilience Framing Practices Grants (LTT) appear to focus relatively narrowly on “productivity losses” (DAFF, n.d.). If the LTT grants are continued, a broader view of resilience than “productivity losses” should be prioritised.

# Information, skills and capacity building

## Background

Change agents that can advocate for transformations within their organisations and navigate windows of opportunity are crucial for achieving transformation (Olsson et al. 2006; Moore et al. 2023).

## Recommendation

8. The FDF should initiate programmes that build capacity to lead transformational change.

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