

c/o Mr Brent Finlay
Chair Consultative Committee
Future Drought Fund
Department of Agriculture, Water and the Environment
CANBERRA, ACT 2601

By email: droughtresilience@agriculture.gov.au

6 December 2023

Dear Future Drought Fund Consultative Committee,

RE: Consultation draft - Future Drought Fund Investment Strategy 2024 to 2028

Thank you for the opportunity to provide a submission to the Federal Government's consultation on the *draft Future Drought Fund Investment Strategy* and the *draft Future Drought Fund Drought Resilience Funding Plan 2024 to 2028*.

We are a collective of farmers, agriculturists, landcarers and not-for-profits working on a collaborative project driven by the Open Food Network to identify opportunities for the Federal Government to support regenerative agriculture as a climate response. We are working alongside organisations such as Soils for Life, the Mulloon Institute, the Australian Holistic Management Cooperative, Regen Farmers Mutual and Sustainable Table.

The creation of the Future Drought Fund (FDF) in 2019 was a significant step forward in providing secure, continuous funding for investments that support Australian farmers and regional communities to prepare for and become more resilient to the impacts of droughts. This review of the Funding Plan and Investment Strategy is an excellent opportunity to ensure that the investments made by the FDF are resulting in on-ground impact in terms of building tangible drought resilience across Australian landscapes, providing value for money, and are in the public good.

Investing in the long-term prosperity of Australian agricultural landscapes is an important way we can collectively work to address climate change. As the *Draft Drought Resilience Funding Plan* acknowledges, climate change and drought are intrinsically linked, and climate change disproportionately impacts the agriculture sector, landscapes

and regional communities. What is less acknowledged is that agriculture can also impact climate in a positive way.

Since the implementation of the FDF, there has been a noticeable increase in the frequency and severity of droughts and the compounding impacts of natural disasters (fires, floods, cyclones). These impacts have been, in many cases, made worse by the measurable decline in soil health, water cycle management, and biodiversity across Australian farming landscapes.

Increasing drought and climate resilience across Australia is undoubtedly a complex and long-term endeavour, however, it is essential to elevate the solutions that exist within agriculture that allow for greater preparedness and recovery from drought rather than framing it as a problem to be solved. This includes developing increased knowledge and dissemination, about the [small or local water cycle](#) and the role it plays in mitigating against drought patterns.

There is a growing evidence base (accompanying this submission) showing that certain food, fibre, and landscape management practices can increase the health of farming landscapes and the health of the people they support across Australia. Ensuring that the FDF supports initiatives that show transformative landscape management practices that will draw down carbon, improve soil health, and increase biodiversity while also running profitable agricultural enterprises that provide food is essential.

Our submission focuses on the funding principles contained within the Funding Plan and how to refine them further to ensure the FDF supports those managing landscapes to address climate change and build drought resilience more effectively.

In summary, these are:

1. Ensuring multiple challenges are tackled together
2. Funding needs to address the root cause of the problem
3. Working better together
4. Measuring what matters
5. Committing to long-term funding

Ensuring multiple challenges are tackled together

The inclusion of climate resilience as a core part of the draft FDF strategy and funding plan is an important step forward. Australian agricultural landscapes and the people and

communities who depend on them are concurrently dealing with challenges related to climate change, drought, biodiversity loss, soil loss, biosecurity, market access, rural mental health, and regional economic resilience.

A response to this multiplicity and complexity could be teaching the principles of managing holistically - that is taking the complexity of farm and business life and distilling it into manageable decisions that lead towards positive outcomes for businesses, ecosystems and people.

[Holistic Management](#) is one such teaching framework. It starts with a systems approach to understanding ecosystems, proceeds by a personal goal and context, and finishes with a decision making tool to make working through the complexity much easier.

Acknowledging the legislative constraints of the FDF, the funding principles within the investment strategy should be further strengthened to ensure that FDF-funded initiatives work to improve our capacity to manage these multiple challenges together and actively encourage a more systems-focused approach to achieving drought resilience.

Funding needs to address the root cause of the problem

The initial tranche of FDF funding focused on data and information sharing, building technical capabilities, establishing the Drought Hubs, enabling access to commercial advice, and supporting communities to develop drought preparedness strategies. As the *Productivity Commission* review outlined, while overall, the Fund has successfully established a range of new programs and partnerships, issues were identified with how the programs were implemented and questions around whether the programs were supporting the drought resilience of farmers and communities over the long term.

In light of this, the funding principles within the investment strategy should be strengthened to require a root-cause analysis before FDF funding is allocated. This root-cause analysis would guide investment decisions as part of the plan and ensure that funds are more appropriately utilised to support measures that will help reduce the severity and frequency of drought.

We also support the *Productivity Commission's* recommendation to ensure that a more significant share of funding goes to programs that benefit natural capital (the soil, air,

water, plants, and animals). Improving soil health, managing the small water cycle, and increasing biodiversity will help build the drought resiliency of Australian farming landscapes.

As well as addressing the root cause, the investment strategy needs to be agile enough to respond to emerging contexts and opportunities and be able to identify when programs are not on track to actually deliver on addressing the root causes. It needs to be evident from the plan or investment strategy how this (or any) evaluation will be made on the effectiveness of the programs or how investment decisions will be informed by early program monitoring.

There has been a paradigm shift in our scientific understanding of the role of vegetation and soil management in influencing precipitation. As well as anthropogenic climate change at a global scale, our land management influences the severity and frequency of drought at a regional scale. This is a fundamental shift in our understanding of the root cause of drought and requires a concomitant shift in policy and programmatic response.

Luckily it is possible to develop a better understanding of how to manage our land to decrease the frequency and severity of drought, using the principles of Holistic Management, a framework for managing complexity.

This framework provides for making decisions that ensure ecological, social, and financial needs are met, both in the short and long term. It first seeks to set a vision for a positive future as well as understand the root causes of problems faced. It then offers a suite of planning procedures that include planned grazing, land planning, financial planning, and ecological monitoring. Farmers managing land in this way report positive social, economic, and ecological outcomes.

Working better together

Cooperation between stakeholders across food and farming systems is critical to delivering a sustainable agricultural future in Australia. Collaboration is also needed to help farmers and the broader food system withstand shocks and build resilience.

We support the proposal within the investment strategy to better encourage collaboration and avoid duplication within FDF-funded programs. The co-design

principles within the implementation strategy should include a requirement for grantees to be explicit about how their program will ensure deeper collaboration and cooperation.

The stakeholders involved in the co-design process as part of the broader investment implementation strategy also need to be broadened to ensure the strategy accurately maps needs across the country and is not biased. This group should include people working on the ground, such as farmers and other land managers, First Nations people, as well as those representing Natural Resource Management organisations and industry groups.

Encouraging and actively supporting communities of practice appears to be a key feature of those people who are successful at managing their land with the holistic lens of improving ecology, healthy businesses and fulfilled home lives. An example of this experience is the [8 Families group](#). They meet every six weeks, rotating around all farms across the year. Their agenda focuses on actively challenging their decision-making to ensure they achieve positively in the three “ecology, business, life” outcomes.

There are also examples of peer-to-peer learning communities of practice within the [cropping space](#), the outcomes of which are to achieve large-scale practice change by supporting and building the capacity of a growing cohort of Australian croppers who are seeking to build soil health and drought resilience.

We measure what matters

As part of the investment strategy, initiatives funded by the FDF should be guided by true-cost-to-nature accounting and linked to a tangible outcome. The investment strategy should be updated to include a clear link between investments made by the FDF and the verification of outcomes.

Commit to long-term funding

Longer-term funding means that farmers and land managers can confidently plan and invest for the future, supporting a transition to regenerative farming systems. Long-term commitments will provide much-needed clarity and stability for all stakeholders, particularly those undertaking on-ground work.

Much of the current grant funding delivered by the FDF has been short-term (mainly two-year projects), with the Long Term Trial funding limited to four growing seasons. It is

noted that the investment strategy mentions a transition to funding longer-term programs, but more detail is needed as to what this means in terms of funding implementation. The lack of consistent funding across the agricultural sector has led to “grant fatigue”, with many landholders no longer engaging with funding opportunities as they arise.

As part of the long-term nature of the FDF, there is also a need for greater recognition at an investment level of the broader policy ecosystem surrounding the FDF plan, including the *National Drought Agreement*, which is due to expire in June 2024 and the review of the *Australian Government Drought Plan* (also 2024).

Consultation questions

- 1. Should a future iteration of the FBR program be more focused on specific learning areas or target particular cohorts of farmers (e.g., young farmers, remotely located farmers, smaller landholders and/or those operating on marginal land)?**

Training opportunities that focus on building ecological and climate literacy should be essential to the FBR program. Examples of training that builds competency in these areas include holistic management and RCS Farm Management training.

First Nations farmers and agricultural business owners should also be targeted as part of this funding.

- 2. How can First Nations communities be supported so that their knowledge and practices to care for country can be maintained for the benefit of their communities and land?**

Genuine engagement with First Nations communities has been largely absent during the design and implementation of the FDF to this point. Minimal funding has gone to support Aboriginal and Torres Strait Islander farmers and organisations to build drought resilience.

First Nations people must be involved in the development of an investment strategy for the FDF and the ongoing implementation and dispersal of FDF funds.

A consultative body made up of Aboriginal and Torres Strait Islander peoples should be created that is empowered to provide input into the strategy as well as the ongoing implementation, monitoring, evaluation and learning coming from FDF-funded programs.

The creation of a First Nations Research and Development Corporation (RDC) for First Nations agriculture and drought resilience could be one pathway forward.

3. Should transformational change and partnerships that facilitate it, be prioritised by the FDF? What incentives or programs would best support transformational change? Or should the FDF continue to also build incremental change – that eventually lead to transformation – and focus on the preconditions (knowledge, skills, and support etc) that enable individuals and communities to make transformational changes?

Absolutely. For any incremental change to be transformative, it must be linked to a transformational vision. A transformational vision of a farm that has high ecological function, a thriving, productive business run by happy and fulfilled people, needs a decision-making framework to ensure accountability to that vision, especially in times of extreme weather that may prompt reactionary and detrimental decisions.

As referenced earlier, communities of practice are an important tool in maintaining the kind of sustained attention to land condition that is needed to achieve the drought resilience being sought by the FDF. The education that underpins these communities has, by and large, come from two sources - Holistic Management training and Grazing for Profit training. A range of people can deliver this training with the community focused on building capacity to meet the growing demand. The following businesses are common entry points but are by no means the only ones:

- [RCS Australia](#)
- [Inside Outside Management](#)
- [Vanguard](#)
- [Soil and Food](#)

Transformational change only occurs when there is a good framework with which to structure decision-making. For any incremental change to be transformative, it must be linked to a transformational vision - which comes from the decision-making framework.

In the context of transformational change, there is a need to move beyond funded research projects to initiatives that address the root cause of drought. There are a number of practice change options that have been researched but need support to disseminate or put into action the findings.

We thank you again for the opportunity to provide a submission to this consultation. The Future Drought Fund is a significant initiative to ensure the continued prosperity of Australian agriculture and food systems. An investment strategy committed to collaboration and addressing the root cause of drought will help ensure that the people and stock that rely on Australian agricultural landscapes will thrive well into the future.

Should you require any additional information or details regarding our submission, we would welcome further discussion. Please contact [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED].

Yours sincerely,

[REDACTED]

Regenerative Agriculture Advocacy Project, an initiative coordinated through the [Open Food Network](#)

REGENERATIVE AGRICULTURE CAN DRIVE EMISSIONS REDUCTION AND CARBON SEQUESTRATION: A SNAPSHOT OF EVIDENCE

Prepared By

The agro-ecology and regenerative agriculture knowledge commons outlines the scientific evidence for regenerative agriculture as a central tool in the reduction of climate change. Below is a snapshot of that evidence.

1. Regenerative Cropping

The average soil organic carbon potential for regenerative cropping in Australian cropland (in a high sequestration scenario) is 1.16 tc/ha/year (over 659,834 ha) which equates to 80 tonnes of carbon per hectare at 20 years (1). Regenerative cropping increases mineral associated organic soil carbon (more stable carbon) by 33 to 54% (2). Conventional cropping (even with use of individual conservation practices such as no-till and cover crops) continues to cause soil loss which is not well accounted for but could see yield drops of up to 30% by 2060 (3, 4).



Photo: Woodstock Flour

Credit: Georgie James

2. Regenerative Grazing

Regenerative grazing results in at least 13% more soil carbon sequestered than conventional grazing to 1 metre depth (5). Regenerative grazing is often confused with conventional rotational grazing and its carbon potential therefore misrepresented. By maintaining more green vegetation cover for longer than conventional systems, its role in enhancing methane sinks is also underappreciated (6). Two large Queensland beef enterprises - Moora Plains and Rexton that are part of the nation's first project accurately measuring soil carbon, at scale, were issued with a combined 151,312 Australian Carbon Credit Units in June this year. Overseen by Carbonlink, 10.6t of CO₂-e was sequestered in soil for every one tonne of livestock grazed on Rexton over five years and 12t for every tonne of livestock grazed on Moora Plains, after accounting for all emissions including methane (7).

Case study - First at-scale soil carbon projects show overwhelming benefit for grazing industries.



Credit: Rebecca Gorman

3. Trees on farms

Just a 10% increase in tree cover on Australian farms could sequester 563 Mg carbon (8). There is potential for a much, much higher increase than this under regenerative farming because it enables increased vegetation cover in a way that enhances, rather than compromises, production. Regenerative grazing enables spontaneous/natural emergence and growth of paddock trees across the landscape - restoring our grassy woodlands (9). Managed agroforestry enables food and/or timber crops from trees while also increasing yield from livestock (10). Regional vegetation cover also drives the small water cycle, increasing rainfall which further increases biomass and therefore carbon sequestration potential of the landscape (11,12).

4. Reducing reliance on energy intensive inputs

Regenerative agriculture significantly reduces reliance on energy intensive - and increasingly expensive - fertiliser, pesticide and diesel inputs. Globally, 5% of global energy use is associated with the production of agricultural inputs (13). Total indirect energy use in cropping (for example energy used in the production of inputs) is 43% of total energy use in this system (14). For cereal cropping, fertiliser alone contributes to 27% of the total energy use (15). The agriculture sector has the opportunity to reduce emissions associated with the use of inputs on farms, but also drive a reduction in emissions associated with the production of those inputs.

More information from the Global Alliance for the Future of Food.

5. Driving food systems emissions reduction

The study on Cropland Footprints of Australian Dietary Choices finds that about one third of annual cropping in Australia goes to the production of discretionary foods (junk food with negligible nutritional value) (16). Another review has found that ultra processed foods could be responsible for up to a third of diet related emissions (17). A third of crops are harvested and transported for animal feed, with associated emissions (18). Regenerative grazing and “circular” feed from waste sources have large potential in reducing emissions associated with animal feed. 10% of total global emissions are associated with food waste, with up to a third of food produced not reaching people’s mouths (19). Choices about what we grow, what we eat and what we export have a very large impact on agriculture and land-use emissions, as well as emissions in other parts of the economy. Goals and incentives structured around the nutritional and economic value of the food produced in Australia, rather than volume, can be very powerful in driving total emissions reduction.



Photo: Pukawidgee Farm

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