

Submission to DAFF Agriculture and Land Sectoral Plan

Prepared by Caleb Connor on behalf of the Drought Resilience Adoption and Innovation Hub – Tasmania, 3 Jan 2024

The Tasmanian Drought Resilience Adoption and Innovation Hub (TAS Farm Innovation Hub) is one of eight established across Australia by the Commonwealth Future Drought Fund. The hub helps Tasmanian farmers, and those who support them, build relationships, access essential information, and build critical skills and knowledge to prepare for drought and climate change.

Context

In 2023 a project titled *Understanding environmental market opportunities: supporting a stakeholder dialogue* was funded by the hub. The project brought stakeholders across agriculture, forestry, conservation, and research together to discuss opportunities, challenges, and areas for collaboration in the management of natural capital.

The project identified that there is a deeply skilled and networked community of advocates in Tasmania that have been working in natural capital for many years. These leaders are all connected to developments taking place in markets overseas, and they are driving change within their sectors to quantify and reduce impacts on climate and nature.

This group prioritised a number of possible initiatives to enable more farmers and land managers around Tasmania to utilise natural capital accounting within their business:

- Creating a natural capital playbook for producers around Tasmania,
- Accelerating sector-wide reporting on natural capital,
- Building conviction in natural capital accounting practices,
- Designing a plan for a state-wide baseline of natural capital data for farmers,
- Developing blueprints for cost sharing and de-risking of investment into natural capital accounting practices.

The conclusions of this project are relevant to this discussion paper, and the submission draws on the insights and perspectives shared as part of that dialogue, as well as targeted discussions with the following key contributors:

- Dr Anthony O'Grady, Senior Research Officer, CSIRO
- Rayne van den Berg, Natural Capital & Sustainability Reporting Champion
- Marcus James, Farmer, Junction Farm
- Peter Voller, Chair, Cradle Coast NRM

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Response to the Draft Paper

The Land and Agriculture sectors in Australia are faced with a significant challenge to respond to the pressures on productivity, farm performance, and landscape health imposed by climate change. Meeting ambitious goals to grow national farmgate value, in the context of commitments to reach net-zero and halt biodiversity loss, will require collaboration and innovation over significant geographic distances and between different sectors and different sectors of community, industry and government.

Through multiple community and stakeholder engagement activities, we have found that farmers and landscape managers in Tasmania are well positioned to evaluate and advance a national agenda of decarbonisation and regeneration of natural capital, while prioritising growth of farmgate value. To do this will require strategic and targeted investment through regionally based networks.

The risks and opportunities posed to Tasmanian industries by climate change are just as substantial as those faced elsewhere – our export-oriented agricultural industries are exposed to international markets, and to the impact of a less predictable and more extreme future climate for producing food and fibre.

We acknowledge the need for change and consider many in our sector to be prepared to participate. Tasmania has the advantage of a strongly networked community of farmers and land managers, a trusted community of supporting organisations with a mandate to support farming landscape resilience, and a strong tradition of innovative farmers with long connections to their land driving the sector forward.

These social and capacity attributes provide a platform for a nation-leading response to emissions reduction in the land sector, and the potential to demonstrate preferred technologies and practices are workable for regional communities to adopt more broadly.

Working alongside the Department of Agriculture, Fisheries and Forestry to build climate resilience for Tasmanian farm businesses and communities is well within the mandate of the TAS Farm Innovation Hub. Our contributors and stakeholders look forward to collaborating on the implementation of future policy initiatives within the state.

Feedback from Contributors

The discussion paper does not go far enough to communicate *why* the attention of farmers and land managers is required today, or to reflect the urgent need to respond to climate change in the near term. We highlight a range of opportunities to strengthen this response, structured to reflect the primary sections of the discussion paper:

The need for higher ambition

- **A more compelling and multidimensional business case for change must be communicated.** Feedback from farmers in our networks is that that they are accustomed to upgrades or downgrades in their farm businesses of well over 50% year to year given seasonal variability. The ABARES modelling, while aligned with the need for change and mitigating farmgate losses, is not sufficient alone.

While climate change will negatively affect many farming businesses, there are many opportunities associated with better management of natural capital that reduces

emissions, contributes to biodiversity, and comes with benefits to the bottom line of many businesses.

- **The impact of the Sectoral Plan on Ag2030 is not clearly articulated in the discussion paper.** There are many points of intersection between the future impacts of climate change, the agenda for industry transformation communicated by the Land and Agriculture Sectoral Plan, and the major Australian industry commitment to grow farmgate value to \$100B by 2030. The response to climate change must be an integrated one. Where the national agricultural growth agenda is impacted by both climate change and our industry response to climate change, this should be more thoroughly explored and serve as the communication needed to get attention and drive action around the country.

Building on existing effort and knowledge

- **There can be no success by focusing on a land and agriculture plan in isolation.** While we acknowledge that many of the Government's sectoral plans are still in development, it is not clear from the discussion paper how the Land and Agriculture Sectoral Plan intersects with or is coordinated alongside plans for other sectors within the economy.

This need for coordination is of considerable relevance to the land and agriculture plan. Strategies that focus on soil carbon sequestration within agricultural landscapes to deliver economy-wide decarbonisation outcomes are not reliable if they do not integrate with plans for more sustained emissions abatement elsewhere. Good coordination will communicate the role of strategies like building soil carbon to deliver short and medium-term emissions outcomes, alongside many other complementary productivity outcomes, while other decarbonisation strategies taking place elsewhere in the economy have the time to scale to deliver larger and more sustained impact.

- **Farmers and land managers across the board need support to keep up with changes taking place within supply chains.** Other sectors are much further ahead than land and agriculture, and capital managers in particular have been retooling to capitalise on net-zero commitments and global pledges around biodiversity.

The industry in Tasmania is capable of empowering every farmer with data, whether this is carbon, biodiversity, or whatever else will be required from upstream or downstream supply chain actors in the future. The sector is deeply networked and the talent and expertise to identify the right data and to get it into the hands of farmers already exists.

The high-resolution data required sits within public research groups like CSIRO, landscape managers like NRMs, or within state government departments. The industry in Tasmania could be an example for the rest of Australia on the impact of democratising a data toolkit for farmers and land managers to respond to a net-zero world.

Opportunities to reduce emissions

- **Farmers have an opportunity to improve the efficiency of use (and thereby reduce) emissions-intensive inputs for agriculture.** This can be supported by investing in extension programs with a focus on practices that restore soil health, manage fertiliser use and water use, and improve understanding of these tools driving financial and environmental impact for the farm enterprise and the community. These opportunities need to be considered in conjunction with efforts to support and enable change, as suggested below.

There is scope for significant impact in the Tasmanian context. In several farming sectors there is scope to reduce the use of nitrogen, phosphorous and potassium fertilisers. These products have high embedded emissions and resource demands, are transported long distances (more emissions), and are a potential pollutant of freshwater and terrestrial ecosystems. Investing in programs that can reduce reliance on high levels of fertilisers, and building greater understanding of natural nutrient and pasture management cycles, is a viable way for farmers to cut emissions right now in industries such as dairy and intensive horticulture.

- **Retain native vegetation, and explore options for on-farm sequestration of carbon through revegetation and farm forestry.** Like other agricultural regions, Tasmania has the opportunity to increase adoption of farming practices that integrate a forestry enterprise into grazing systems. Especially given existing knowledge and expertise within the state in major research institutions, forestry bodies, and universities. There is potential to learn from silvopastoral and agroforestry systems from other temperate farming areas. This would build capacity and establish carbon friendly farming and grazing systems suited to the Tasmanian climate.
- **Drive uptake of technology that allows farmers to make real-times decisions about fuel and resource usage, monitor and report on emissions, and advise on stock and flow of on-farm natural capital.** We note there are many innovative agtech programs emerging that facilitate better management of an increasingly complex array of data that farmers have to manage. Platforms like Agronomeye and Datafarming all provide easy access to powerful and integrated datasets that add value for farmers. If understood and adopted appropriately by farmers, these platforms can contribute to decisions that reduce emissions while maintaining productivity.
- **Employ a natural capital approach to valuing and planning for use of productive, agricultural land in close proximity to transport and processing hubs.** The tools to understand the value of our catchment-level natural assets exist, and approaches to make decisions about the true costs and trade-offs of development plans can be integrated into the planning and land use strategies at a regional level.
- **Continue to build capacity in emission reduction from enteric methane.** This includes supporting the progress of emerging technologies and solutions such as supplements derived from asparagopsis.
- **Reduce food waste, and ensure production is planned to be utilised under a range of commercial scenarios.** There is potential to work more closely with intensive agrifood supply chains which rely on contract growing of crops. Cases where crops are grown and then not harvested or utilised results in high level emissions and wastage of resources. Potentially accounting for the embedded carbon in horticultural crops is a means to ensure that such resources are not wasted or discarded when they could be fed into alternative food supply chains or conversion systems.

Supporting and enabling change

- **The highest priority is to build the capability of the land and agriculture sectors to understand, respond to, and capitalise on change in the future.** Section 5.2 of the Discussion Paper outlines that *Building Capacity* is an opportunity to support and enable change. We emphasise this as a key area for prioritisation and investment.

The challenges presented by a less predictable climate and more complicated requirements for market access present a 'megachange' for farmers. This group already inundated with day-to-day decisions to make for their success of their business. Building the capacity of this community to respond to considerable change should be a major area of investment to deliver on the goals of the sectoral plan.

This will require solving challenges related to the centralisation of the information, upskilling and resourcing extension networks, and to properly support trusted partners and advocates within local industry groups to empower their members.

Setting out an ambitious toolkit of solutions is absolutely necessary. But undoubtedly one of the most meaningful investments into adoption and resilience will be to build the capacity of farmers to absorb and succeed in the face whatever changes are coming their way.

- **Rapidly democratising access to natural capital data at scale to help all farmers participate in landscape regeneration and emissions reduction.** As noted earlier, other sectors are much further ahead than land and agriculture, and capital managers in particular have been retooling to capitalise on net-zero commitments and global pledges around biodiversity. Farmers and land managers across the board will need support to respond to these changes taking place within supply chains. Large, well-capitalised corporate enterprises are well positioned to adopt the necessary practice changes and to respond to an increasing demand from supply chains for data about their production. An unfortunate consequence will be that investment capital focused on mitigating emissions and nature-related risk will flow to large farms and corporate actors. This will affect the family and mixed-farming nature of sectors like Tasmania's, which will be less able to respond at pace and often at significant cost.

The TAS Farm Innovation Hub thanks the Department for the opportunity to bring together our contributors and to deliver this submission to shape the development of the Agriculture and Land Sector Plan. We look forward to deeper collaboration in this space in the future.

Yours sincerely,

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Sandra Knowles
Director, TAS Farm Innovation Hub