Biodiversity Council

Submission to the Australian Agricultural Sustainability Framework

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About The Biodiversity Council

The Biodiversity Council brings together leading experts including Indigenous knowledge holders to promote evidence-based solutions to Australia's biodiversity crisis. The Council was founded by 11 universities with the support of Australian philanthropists.

Introduction

The Biodiversity Council welcomes the opportunity to provide feedback on the Australian Agricultural Sustainability Framework (AASF).

We recognise the significant value provided by agriculture to the Australian economy (making up 10.8% of goods and services exports in 2023-24),[1] employment (2.2% of national employment in 2023-24)[2] and ensuring that Australia is one of the most food secure nations in the world.[3] Agricultural production is dependent on the natural environment and has significant impacts upon it, accounting for 55% of Australia's land use and 74% of water consumption.[4]

Agriculture has been a major driver of biodiversity loss in Australia – as it has been worldwide.[5] Such losses in Australia have occurred as a result of extensive historical land clearing,[6] ongoing land clearing and land degradation,[7] widespread livestock grazing,[8] the impacts of feral animals,[9] and other (often related) drivers of decline. However, those managing agricultural land also have the opportunity to promote and steward biodiversity, and many already do. Encouraging and supporting these good practices is key to demonstrating genuine sustainability in agriculture.

Attempts to develop a sustainability framework for agricultural landscapes is a welcome initiative. The Australian Agricultural Sustainability Framework represents a unique opportunity to support a transition to biodiverse agricultural systems, thereby securing premium market access and responding to consumer preferences

Supporting primary producers to enhance on-farm biodiversity is a critical step in addressing Australia's extinction crisis. Across Australia's diverse agricultural regions, there are context-specific management interventions that can support on-farm biodiversity without compromising agricultural yields. Discussions that we have had with primary producers highlight the desire for a certification like the Australian Farm Biodiversity Certification Standard to be rolled out across the agricultural sector to support premium market access. If done well, the AASF may support this ambition.

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[1] https://www.agriculture.gov.au/abares/products/insights/snapshot-of-australian-agriculture
[2] Ibid.
[3] https://daff.ent.sirsidynix.net.au/client/en_AU/search/asset/1030201/1
[4] https://www.agriculture.gov.au/abares/products/insights/snapshot-of-australian-agriculture
[5] Intergovernmental Science-policy Platform on Biodiversity and Ecosystem Services (IPBES). 2019. IPBES Global Assessment Summary for Policymakers. United Nations.
[6] Walker, J., F. Bullen, and B. G. Williams. 1993. Ecohydrological changes in the Murray-Darling Basin. I. The number of trees cleared over two centuries. *Journal of Applied Ecology* **30**:265-273.
[7] Bradshaw, C. J. 2012. Little left to lose: deforestation and forest degradation in Australia since European colonization. *Journal of Plant Ecology* **5**:109-120
WWF Australia. 2023. Trees scorecard 2023. WWF Australia, Sydney, Australia.
[8] Williams, J., and R. J. Price. 2011. Impacts of red meat production on biodiversity in Australia: a review and comparison with alternative protein production industries. *Animal Production Science* **50**:723-747.
[9] Woinarski, J. C., A. A. Burbidge, and P. L. Harrison. 2015. Ongoing unraveling of a continental fauna: Decline and extinction of Australian mammals since European settlement. *Proceedings of the National Academy of Sciences of the USA* **112**:4531-4540.

Our understanding

The AASF has been developed in response to pressure on the Australian agriculture industry to demonstrate its sustainability. This pressure has arisen from global environmental, social, and governance (ESG) requirements, consumer awareness and regulatory expectations.

The AASF has been developed by the National Farmers' Federation (NFF), with support from the Australian Government's Department of Agriculture, Fisheries and Forestry (DAFF) to:

> *assist with industry-wide consistency, align with existing global standards, and seek to amplify understanding about the unique characteristics of Australian agriculture…*
>
> [and] *strengthen our position with a strategic whole-of-Australian agriculture sustainability narrative.*

The AASF is intended to be voluntary and flexible so that it can be tailored to the specific needs and circumstances of different stakeholders.

The AASF aspires to an outcomes-based approach with sustainability claims backed by credible data, in part to enhance the credibility of sustainability claims when communicating with financial institutions, governments and international markets.

The consultation paper for the AASF has four chapters:

1. Governance, Strategy and Operations
2. Framework Enhancement – Materiality Assessment Recommendations
3. Data Ecosystem
4. AASF Sustainability Indicators

Key points and recommendations relating to the AASF overall and the first three chapters are outlined below.

Please note that we have not commented on Chapter 4 'AASF Sustainability Indicators' because it only includes indicators and metrics/measures relating to water use, food safety and biosecurity, rather than biodiversity.

The Biodiversity Council would like to be consulted as the indicators, metrics and/or measures relating to biodiversity are designed and developed (particularly for principles P4 and P5).

Key points

1. **Overall**

Approaches that report on environmental impacts, like the Taskforce for Nature-related Financial Disclosures, are intended to facilitate a shift in the mindset and behaviour of companies and financial institutions to drive improvement in global biodiversity. However, disclosing risks and impacts on nature is only one part of the solution. To drive change, businesses (including farm businesses), require targeted advice and support that meets their specific needs. This isn't simply about 'flexibility' in metrics and reporting, but a more strategic and integrated approach to sustainability.

The AASF should be positioned in a broader conception of sustainable farming practices that consider environmental impacts, individual and community wellbeing, First Nations rights and cultural heritage, climate resilience and profitability.

2. **Governance, Strategy and Operations**

The consultation paper seeks input on the future entity that will have custody of the AASF.

The AASF is an initiative, in part, of the NFF. The NFF is an important organization, but it is the peak lobby group advocating nationally on behalf of farmers. Farmers are the potential beneficiaries of the AASF (through greater market access) therefore a perception of conflict of interest may arise with the NFF, as the peak body for farming interests, managing the AASF as a 'trusted approach to sustainability across Australian agriculture' for external stakeholders.

For the AASF to be truly credible, data collection (and associated reporting) on biodiversity, biodiversity metrics (and indeed almost all other measures of sustainability) ideally needs to be independent of all beneficiaries. This means that the NFF is a stakeholder rather than the body overseeing the AASF.

Recommendation 1: *The Biodiversity Council recommends that the Future Entity be independent of the NFF, whether than be a 'Commonwealth Corporate Entity', 'a program of work delivered by another entity', or an 'independent entity' as described in the Table on page 10 of the Consultation Paper.*

3. **Framework Enhancement – Materiality Assessment Recommendations**

In early 2024 NFF commissioned ERM to complete the first double materiality assessment for the AASF. The findings of this assessment are being used to test the AASF.

The consultation paper seeks feedback on proposed amendments to the AASF arising from the materiality assessment.

The Biodiversity Council's position is that the AASF should provide a platform to recognise and reward primary producers who are already implementing biodiversity-relevant best management practices and whose on-farm biodiversity is above that of the regional average. In order to support this goal, the criteria underpinning principles P4 'Ecosystem preservation' and P5 'Biodiversity Protection' should be amended.

There are two new criteria proposed for P4 Ecosystem preservation:

- Natural habitat and ecosystem conversion, and deforestation, are avoided or minimised, and
- Land degradation is avoided or minimised.

Both criteria are essential components of the amended Framework. However, to align with national and international goals and commitments, and avoid contributing to ongoing biodiversity and land condition decline, they should be amended to remove "or minimised". The inclusion of "or minimised" within the proposed descriptions invites too much ambiguity regarding these necessary criteria.

Addressing on-going deforestation and habitat conversion across Australia, including in its agricultural lands, is critical to prevent continued biodiversity loss. An appropriate baseline date of deforestation and habitat conversion must be determined; farms that continue to convert natural habitat or conduct deforestation (considering regrowth control requirements for some farming systems) beyond this date would then not be able to be certified under the AASF. This component of the AASF is especially relevant given the European Union's Deforestation Regulation.

Developing suitable criteria for biodiversity is challenging.

The first step is to define what is meant by biodiversity. Meaningful targets can be set only once biodiversity is appropriately defined. The AASF should use the globally accepted plain language definition of biodiversity - the diversity within species, between species and of ecosystems.[10] This definition has three parts: genetic diversity (the diversity within species), species diversity and ecosystem diversity. Adding further complexity is the fact that biodiversity exhibits significant spatio-temporal variability, including ecosystem-specific differences in many elements of the biota. The AASF does not yet make it clear how different metrics (which are not discussed) will account for such between-ecosystem variations in biota. These differences matter because different species, assemblages and communities will vary in response to different agricultural management practices in different ecosystems. Simply adding values from different ecosystems, for example, would generate meaningless summary statistics. Overarching metrics, such as Potentially Disappeared Fraction of Species

[10] Intergovernmental Science-policy Platform on Biodiversity and Ecosystem Services (IPBES). 2019. IPBES Global Assessment Summary for Policymakers. United Nations.
Kunming-Montreal Global Biodiversity Framework 2022 https://www.cbd.int/gbf

or Mean Species Abundance (that are being used to incorporate biodiversity into life cycle assessments)[11] simply do not capture all elements of biodiversity that are valued.

A lack of robust long-term monitoring means that, for the vast majority of agricultural landscapes nationally, there are no meaningful biodiversity datasets that could populate a sustainability framework. In fact, this is true for the vast majority of measures for which the AASF is planning to report. This, in turn, risks the AASF lacking credibility with stakeholders, because underlying time series data to reflect true improvement in measures of biodiversity are lacking. The AASF could advocate for the funding of appropriate biodiversity data collection to measure progress against biodiversity targets (however appropriately defined).

The immense spatio-temporal variability in Australia's ecosystems means that defining what constitutes "a diverse range of beneficial flora and fauna" across different commodities and production scenarios is difficult and limits the ability to set appropriate biodiversity-relevant targets. To address this concern, we suggest that C9 be amended to "Ecosystem and commodity-specific best management practices that benefit flora and fauna are implemented". Here, 'best management practices' are defined as those that enhance biodiversity outcomes without compromising sustainable farm productivity and minimise the production of negative externalities (e.g. poor water quality outcomes). These include but are not limited to: improved fire management, shelterbelt planting with mixed native species, strategic native regrowth retention, and feral animal control. This criterion could be accompanied by a target to increase the adoption of best management practices that enhance context-specific biodiversity outcomes to an appropriate proportion of Australia's farms, prioritising our most threatened ecosystems that occur on agricultural land.

Refining the description of this criterion in this way has several advantages. First, it provides primary producers with a clear pathway to increasing their P5 outcomes: they must implement context-specific management practices that enhance their on-farm biodiversity. Second, it allows for better comparison between different farms and commodities as per the goal of the AASF to be a unified framework. Either a farm has implemented best management practices for its ecosystem type and production system or it has not. Primary producers who already meet best management requirements can immediately secure premium market access and it provides an incentive of adoption for those who do not. Third, it can leverage existing local knowledge within NRM organisations, Indigenous Land Councils and Landcare groups to define and support implementation of management activities that improve on-farm biodiversity. Fourth, by relying on practices that enhance biodiversity but do not compromise production, it minimises the risk of leakage (where reduced yields are compensated for by production elsewhere that may be more environmentally damaging). Finally, it allows the utilisation of an adaptive management approach, where accreditation

[11] Damiani, M., Sinkko, T., Caldeira, C., Tosches, D., Robuchon, M. and Sara, S. 2023. Critical review of methods and models for biodiversity impact assessment and their applicability in the LCA context, *Environmental Impact Assessment Review*, **101**: 107134 https://www.sciencedirect.com/science/article/pii/S0195925523001002

requirements evolve as best management practices are refined and developed. Long-term monitoring that assesses fauna and flora community condition and species richness and abundance alongside productivity measures could be established as best management practices are implemented, to demonstrate true improvements in biodiversity, enhancing credibility with stakeholders.

The amended description of C10 “Agricultural-related ecosystems are functioning and thriving” is important and should be accepted. However, it is noted that there is ambiguity regarding what “functioning and thriving” means. This should be explicitly set out in future iterations of the framework.

This criterion can utilise indicators and metrics that are being developed by the Nature Positive Initiative to ensure alignment with globally-relevant State of Nature metrics. Indicators include ecosystem extent, ecosystem condition (at both site and landscape scales), extinction risk and priority species population abundance which are paired with appropriate metrics. It could also reflect methodologies used in the Australian Farm Biodiversity Standard to compare on-farm vegetation condition against regional baselines. The metrics should apply a higher weighting to farms with greater proportions of threatened ecological communities. The application of the criterion could also be supported by the Ecological Knowledge System that is being developed by CSIRO to service the Nature Repair Market. This would provide greater clarity to farms who may be engaging with both the Market and the Sustainability Framework.

Recommendation 2: *The Biodiversity Council recommends that changes be made to the criteria under Principles P4 and P5 as outlined in Table 1, below.*

Table 1: Recommended changes to the criteria under Principles P4 and P5

Principle	Draft criteria from consultation paper	Biodiversity Council's recommended changes
P4. Ecosystem preservation Ecosystem conversion and degradation is avoided or minimised	C7. Land under productive agricultural management delivers beneficial ecosystem environmental services.	n/a
	C8. Natural waterways are preserved and improved.	n/a
	NEW. Natural habitat and ecosystem conversion, and deforestation, are avoided or minimised.	Natural habitat and ecosystem conversion, and deforestation, are avoided.
	NEW. Land degradation is avoided or minimised.	Land degradation is avoided.
P5. Biodiversity Protection Biodiverse ecological communities are protected and enhanced	C9. Agricultural activities support a diverse range of beneficial flora and fauna species.	Ecosystem and commodity-specific best management practices that benefit flora and fauna are implemented.
	C10. Agricultural-related ecosystems are functioning and thriving.	*No changes to the criterion but requires further definition.*

4. Data Ecosystem

A review of Australia's 'agricultural sustainable data ecosystem' undertaken by CSIRO has "identified that there are multiple processes, methods, standards and datasets being used by an extensive set of stakeholders who have a wide range of requirements of the AASF". To meet the complex needs of stakeholders "efficiently and effectively," "a set of structures need to be designed and implemented". This includes:

- a catalogue of appropriate methods
- a catalogue of datasets
- data maintenance process (relating to metrics, methods and datasets)
- governance
- digital platform for stakeholders to interact with the AASF

- stakeholder forums.

The Biodiversity Council is concerned about the development of a new data system entity focussed on agricultural sustainability. The problems identified by CSIRO reflect the broader issues around environmental data in Australia. The Samuel Review[12] of the *Environment Protection and Biodiversity Conservation Act 1999* found that:

> Decision-makers, proponents and the community do not have access to the best available data, information and science.
>
> The collection of data and information is fragmented, disparate, and there are fundamental information gaps.
>
> There is no clear, authoritative source of environmental information that people can rely on.

The review recommended

> A Custodian for the national environmental information supply chain assigned by the Commonwealth with responsibility for national level leadership and coordination.

To respond to this recommendation the Australian Government made a commitment in the 2023-24 Federal Budget to create the Environment Information Australia 'to provide an authoritative source of high-quality environmental information'.[13]

It is unclear how the 'data ecosystem entity' proposed under the AASF will relate to Environment Information Australia. Will the AASF data ecosystem entity undertake its own data gathering, analysis and reporting? Without proper governance, there is potential for a single, standalone agency to fragment other data gathering exercises, exacerbating the problems with environmental information identified in the Samuel Review. The absence of environmental data custodians as 'data ecosystem stakeholders' in the Consultation Paper suggests that this is a real risk.

Recommendation 3: *The Biodiversity Council recommends that the AASF identify the primary data custodians for each theme in the AASF and clarify how the data ecosystem entity will work with the data custodians to undertake data gathering, analysis and reporting.*

[12] Samuel, G 2020, *Independent Review of the EPBC Act – Final Report*, Department of Agriculture, Water and the Environment, Canberra, October. CC BY 4.0.

[13] Commonwealth of Australia, Budget Measures: Budget Paper No. 2 2023-24, p. 77. https://parlinfo.aph.gov.au/parlInfo/search/display/display.w3p;query=Id%3A%22legislation%2Fems%2Fr7193_ems_4261b009-1f33-4874-8347-c9ab4b4d8a65%22