

FOREST RESEARCH, DEVELOPMENT AND DISSEMINATION



CONTEXT

Ongoing well-directed scientific research into Australian forests, the threats facing them, and their uses, services and values is a fundamentally important part of ecologically sustainable forest management. Likewise, ongoing research and development programs are critical to maintaining the ability of Australia's forest industries to be internationally competitive in the production of innovative and sustainable forest and wood products. Australia's forest research capability has and continues to contribute to improved environmental management and livelihoods from forests and tree growing in many developing countries. Dissemination of the findings of research and development activities, using mechanisms appropriate to the intended users, is vital to facilitate its adoption and achieve the intended social, economic and environmental outcomes and impacts. As forest and wood products research and development provides both public and private benefits, it should be adequately funded by both government and the private sector.

FORESTRY AUSTRALIA ADVOCATES THE FOLLOWING:

- Significantly increased investment in research and development is needed to support the implementation and continuous improvement of ecologically sustainable forest management in Australia, and further innovation in forest industries producing a broad range of renewable products.
- In responding to the impacts of climate change, the implementation of effective adaptive forest management across all land tenures should be informed by well-resourced and clearly targeted research and monitoring programs.
- Australia needs to strengthen and maintain a robust national forest research capability, which should be funded through federal and state government budgets, tax incentives, and additional investment by forest growers and wood processors.
- State governments need to invest more in research directed at maintaining the ecological values of the public forest estate, including research on endangered and threatened species in formally protected and conservation areas.
- Australia needs a holistic national strategy for forest and wood products research bringing together universities, industry bodies, CSIRO, federal and state governments, research institutions, professional foresters, private landholders, and forestry and forest product companies to identify strategic research and capability needs and build a case for additional investment.
- Greater efforts are needed to disseminate balanced information from Australian forest research on sustainable forest management and tree growing as well as the use of innovative wood products to reduce greenhouse gas emissions.
- Australia should continue to invest in international forestry research projects, recognising both Australia's diverse forest science expertise and the benefit of such collaborations in contributing to the improvement in governance and management of forestry and agroforestry in many parts of the world.

SUPPORTING NOTES

A scientific understanding of the characteristics and functions of Australian forest ecosystems, including long-term ecological research, is necessary to ensure they are managed in an ecologically sustainable manner. Australia's forest management practices and its forest industries are built on a very strong foundation of forest and wood products research and development (R&D). For many decades, governments, universities and the forest and wood products sector in Australia invested significantly in fundamental and applied forestry and forest products R&D, and the transfer of new technologies to end users.

At the global level, the United Nations Forests Instrument calls on all countries to "Strengthen the contribution of science and research in advancing sustainable forest management by incorporating scientific expertise into policies and programs". Australia's 1992 National Forest Policy Statement recognised that an enhanced, better coordinated and better focussed research and development effort was essential to meeting the national vision and goals for Australian forests and forest industries.

Since the mid 1990s, investment from industry and governments for forest and wood products research has declined. University research has become fragmented and less visible in broader and more mixed discipline faculties. Discontinuation of CSIRO's Forestry and Forest Products Division, the Forestry CRC, the Land and Water Resources R&D Corporation and the Joint Venture Agroforestry Program (JVAP) are examples of this declining support.

Currently Australia's forest sector R&D capacity is somewhat fragmented and lacks a contemporary holistic national strategy that identifies gaps and priorities for future investment across the sector. In addition, there is no co-ordinated approach for disseminating research findings or a single repository for the research reports prepared as a result of public funding.

The Commonwealth Government currently funds two major forestry R&D bodies. Forest and Wood Products Australia (FWPA) which invests levy revenue matching government contributions and voluntary contributions in R&D and marketing projects relevant to the priorities of its commercial grower and wood processing members. The National Institute for Forest Products Innovation (NIFPI), was created in 2016 and

POSITION STATEMENT

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established research centres in Tasmania, South Australia and Victoria. In 2023, the Commonwealth Government renamed it as Australian Forest and Wood Innovations (AFWI) and announced funding until 2026-27. AFWI will be administered from the University of Tasmania in Launceston with two other regional research centres to be established.

While these investments are welcome, it is unclear whether there is adequate existing research capability to effectively progress priority research topics and public good issues beyond commercial forestry. A national and coordinated multi-stakeholder, multi-disciplinary strategy is required to maximise outcomes from research and development investments. A holistic national strategy should identify existing research and development capability, categories of future research needs and priorities for investment. Coordination across initiatives will be critical to realising this.

Previous coordination efforts were under the auspices of the Standing Committee on Forestry, which included the Forestry and Forest Products Committee and the Research Priorities Coordinating Committee, and brought together State forest agencies, CSIRO and other domain experts. A similar Commonwealth and State Forum for all public forest estates could greatly aid in resolving some of the current lack of sectoral coordination.

Forestry Australia strongly supports restoring and revitalising Australia's research, development and dissemination capacity in forestry and forest products, supported by professional education and training in forest science and management. Importantly, such research needs to cover research related to both the commercial use of forests and plantations as well as biodiversity conservation across State forests and formally protected and conserved areas.

Such initiatives should encompass all forestry and related disciplines, including:

- public and private, native and plantation forests, and trees on farms recognising the contribution of private tree growers
- forestry innovation in the tropics and drier regions
- small-scale harvesting and on-farm processing, especially for high-value and niche products
- new timber and cellulose-based products, including all aspects of the use of wood in the emerging bioeconomy
- impacts and adaptation to changing climate, including monitoring and maintaining optimal forest health and

improving knowledge of the genetic diversity of Australian tree germplasm

- potential for a wide range of newly established forests to produce both carbon credits and commercial wood products
- forest fire behaviour
- social, economic and environmental research related to forests.

Programs to disseminate research knowledge and transfer new technologies must be given adequate attention and support, particularly for farmers and other private landholders to support their role in sustainable forestry in Australia. Such programs need to incorporate a wide range of outreach and communication tools and present complex scientific findings in a manner appropriate for the intended audiences. Efforts may also be required to present balanced scientific information relevant to aspects of sustainable forest management.

Australia has a long and proud history of investing in international forestry research, both through bilateral and multilateral mechanisms, particularly in the Asia-Pacific region but also in Africa and South America. CSIRO, the Australian Centre for International Agricultural Research (ACIAR), the Australia Pacific Climate Partnership and university forestry faculties have all contributed to the development of this internationally leading research capacity in forestry and forest products, that has been strongly linked to the professional education of forest scientists and practitioners. These efforts have benefited both the partner countries and Australia, including through enabling wider collaboration on future challenges facing forest managers.

Australia's international forestry research projects have enabled Australian forest scientists to collaborate with scientists in the partner countries to build capacity and address local forest research needs. In some research areas, such as management of pests and diseases, funding from ACIAR projects has enabled the retention of specialist Australian research capability that would have otherwise been lost and has enhanced Australia's and neighbouring countries' biosecurity systems.

Australia should recognise the benefits of maintaining a robust national forest research capability can extend well beyond providing support to the domestic forestry and wood products sector. It can make a valuable contribution through knowledge exports and providing a valuable vehicle for international development assistance.

Further reading

Forest & Wood Products Australia 2020, Strategic Plan 2020 – 2025. Accessed June 2023. <https://fwpa.com.au/about/corporate-documents/strategic-plan/>

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