







OVERVIEW

Research, development and extension (R,D,E) are critical drivers of economic growth, innovation, sustainability and progress.

In Northern Australia, R,D,E remains key to developing industry and economic resilience and social wellbeing.

R,D,E supports traditional and emerging sectors to adapt and become more resilient to a changing world and contemporary opportunities.

The Cooperative Research Centre for Developing Northern Australia (CRCNA) has significantly contributed to furthering sustainable development aspirations through industry and regional-led development since 2017.

The CRCNA's term ends in 2027, and funding is fully allocated across research themes where the north has the most potential for growth.

The CRCNA is building on its progress, networks and impacts to transition to a new, fit-for-purpose Centre for Developing Northern Australia (CDNA).

BUILDING CAPACITY



A dedicated research, development, and place-based planning entity that operates right across the northern jurisdictions is critical to build and provide essential data, information, and local expertise to underpin Northern Australian development priorities and aspirations for long-term sustainable and inclusive growth.

The CRCNA investment model has doubled the \$75 million of Australian Government funds into over \$155 million of industry-led research and development projects.

With 650 jobs created through 107 projects, the CRCNA is expected to leverage over half a billion dollars (\$580 million) back into the Northern Australian economy over its 10-year operating remit.

This is laying a solid foundation for the new CDNA to address knowledge-based barriers to realise northern and tropical development opportunities.

The CDNA harnesses the learnings and innovations built in the north, is based on

inclusivity, and is responsive to the particular opportunities and challenges across more than half of Australia's continent.

The CDNA works with key development partners such as: First Nations communities, jurisdictional governments, regional organisations, local government, industry sectors, research bodies (NAUA, NARU), to utilise their individual strengths and build meaningful collaborations for maximum impact.

Cohesion across development partners is critical to ensure fragmentation of efforts is reduced, capacity built and development activities reflect regional aspirations.

HOW WE DELIVER FOR THE NORTH









DEVELOPMENT FOCUS

The CDNA's mission is to strengthen capacity and increase real-world opportunities for those living and doing business in Northern Australia.

It goes beyond commissioning research, it's innovation and actively delivering sustainable solutions along the supply chain by confronting challenges and barriers to development head on.

Research and extension

Support businesses where the north has the greatest opportunities:

- Agriculture
- Aquaculture
- Tourism
- Energy
- Environmental services
- Tropical health.

First Nations enterprise

Targeted industry support, business development and entrepreneurialism to drive First Nations enterprises and activate the Indigenous estate.

Focus areas are drawn from priority needs identified by government, stakeholders and known policy gaps in northern development.

Despite existing initiatives for the north, there remains significant opportunities and challenges that require attention by the CDNA, post CRCNA, to address these matters long-term for greater economic resilience.

Reducing costs

Develop modern services and new technologies that enhance protections for biosecurity, disaster mitigations, environmental services and monitoring, as well as supply chain and workforce efficiencies.

-> Transition to Net Zero future

Establish innovations for sustainable development, and metrics for environmental compliance and accounting, whilst also building resilience in the face of escalating climate changes.



CREATING POSITIVE CHANGE

The CDNA continues to progress priority areas identified by the Australian Government's Northern Australia Action Plan 2024-2029, National Science and Research priorities, industry and community needs, and known policy gaps in northern development.

FUNCTIONS

The CDNA is critical to continuing the efforts of the CRCNA in reducing fragmentation across the development landscape. This ensures collaboration occurs with research providers and end users for utilisation and lasting impacts around the region.

The CDNA remit includes:

- Brokering industry-focused research and development activities, providing a source of delivery and coordination for government in the north
- Extension, adoption, and commercialisation for genuine uptake and outcomes
- Capacity building to underpin long-term sustainability of development
- Partnership facilitation for development challenges to meet place-based aspirations.

GOVERNANCE

Guided by government priorities and accountable to the Ministerial Forum on Northern Australia, the CDNA will be governed by an Independent Chair with an expertise-based board firmly entrenched in solid economic, social and environmental connections with Northern Australia.

The current CRCNA operating model is a low cost, high return approach that continues to be the most competitive and fit-for-purpose delivery model for northern based research and development.

A multi-revenue funding model provides diversified investments into sustainable development:

- Australian Government funding for research, development and extension activities
- Co-investment from research partners
- Facilitation brokering agreements
- Commercial returns on research investments.

The CDNA remit commits to delivering results beyond academic research through commercialsation, extension and adoption practices for real-world outcomes.

PLACE-BASED GROWTH



ACHIEVING RESILIENCE

To meet the aspirations of a sustainable, inclusive and resilient economy for Northern Australia, key development priorities need to be underpinned by well-targeted, applicable research, development and extension.

Significant investment in research, development planning, capacity building, and extension is fundamental to maximising the impact of Northern Australia's long-term sustainability, prosperity, security, resilience, and well-being.

The physical and social challenges to achieving these outcomes are substantial and dynamic – some are longstanding, such as the costs associated with distance and remoteness, and others newer and evolving, such as those associated with escalating climate change and threats to national security.

Fragmentation and duplication of investment reinforce development barriers.

Effective coordination of research and development together with place-based planning is essential to secure the required economies of scale with limited investment.

To successfully implement supporting measures requires good data and analysis and strong coordination across jurisdictions, sectors, and institutions.



SUSTAINABLE FUTURES



WORKING TOGETHER

Investment in the CDNA scales up the government's Northern Australia agenda to progress positive change that shapes and strengthens the vital role Northern Australia plays in Australia's prosperity.

The CRCNA has become a key initiative of the Northern Australia agenda, along with the Northern Australia Infrastructure Facility, the Indigenous Reference Group and the Office of Northern Australia.

The CDNA ensures research and development continues to be led from Northern Australia with a deep understanding of the unique operating environment, facilitating opportunities across jurisdictions and working in collaboration with a valuable and diverse stakeholder network.

The CDNA continues the important role of de-risking development pipelines in the lead-up to investment by ensuring proposals and enabling infrastructure created are reinforced by:

- robust scientific and economic assessment
- industry benefits
- inclusive place-based planning
- targeted skills and workforce development, and
- networks of associated small and medium enterprises.







CRCNA partnerships are benefiting communities by creating economic growth through industry development and diversification.

I M P A C T S

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107 projects

\$75 million federal investment

\$155 million in research

\$580 million leveraged back into the economy over 10 year operations

272 research partners

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650 jobs supported

10 new emerging industry developments

5 regions in economic transition supported

42 commercialisation outcomes with more to come!

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Leaders in northern development facilitation and research delivery

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Diverse and knowledgeable stakeholder network that delivers for impact \geq

Co-investment model for greater return on government funds

\$2.89 million in education program retaining talent in the north for over 55 students \geq

Science to solution approach for informed development

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Establishing new technologies, products and services to tackle unique industry issues

"Creating an environment of certainty and clear policy attracts investment, creates jobs and drives the economic prosperity of the region. The development eco-system starts with research."

Prof Allan DaleChief Scientist, CRCNA



HOW WE'RE MAKING **A DIFFERENCE**

When we apply research and development there's a lot more opportunity for our current and future generations to harness, creating a brighter future.





Tropical Oyster industry development

CRCNA investment: \$3.17 million Industry investment: \$6.32 million

Providing economic and social opportunities by:

- Demonstrating viability of a new industry and jobs for First Nations coastal regions.
- Offering a boutique premium product for high-value seafood markets.
- Application of this development model to other emerging commodities and place-based development across the north.
- Addressing barriers to food regulations and getting oysters to markets via considered supply chains.

Tiwi Islands place-based development

CRCNA investment: \$1.6 million Industry investment: \$3 million *Tiwi forestry project

Place-based focus that's working with various development projects leveraging natural assets and community economic aspirations, such as:

- Tiwi Islands Forestry adaption
- Oyster industry development
- Aboriginal fishing licenses, co-opt market access, eco-tourism
- · Cultural market systems creating cultural commerce for First Nations entrepreneurs.



Health service delivery: eye screening

CRCNA investment: \$800,000 Industry investment: \$1.63 million

Creating health parity and service delivery by:

- Providing telehealth eye screening to prevent avoidable blindness by training health care workers.
- Increasing the likelihood of early detection in remote communities.
- Patients have eyes scanned locally with assessment by specialists in metro hospitals and referrals and support managed.
- Adaption of this model is now applied in the Torres Strait, the Northern Territory and internationally in Vietnam with Fred Hollows Foundation.

Eye sight saved - a real story

A patient visited a remote clinic for an annual health check, including retinal imaging for diabetes management, due to low visual acuity. The patient was on a waitlist for cataract surgery, which may have affected their vision.

With the next optometrist visit two weeks away, retinal images were uploaded to the Remote-I portal and assessed by an ophthalmologist remotely. Within 24 hours, a retinal detachment was confirmed, leading to an urgent referral to a metropolitan hospital.

The patient was informed that waiting two weeks for the optometrist visit would have resulted in complete vision loss.



Cotton, Grains, Cattle (CGC) program

CRCNA investment: \$8 million Industry investment: \$20.24 million

Integrating tropical agriculture for industry resilience and innovation with:

- 30 industry and government partners delivering 6 projects across NQ, NT and WA development precincts.
- Coordinating farming systems with cropping and beef production.
- Creating technical skills and industry workforce development.
- Utilising climate resilient management techniques and creating circular farming economies.





Providing water for irrigation is not enough by itself to guarantee development, place-based industry collaboration is essential.

Making Water Work program

CRCNA investment: \$390,000 Industry investment: \$1.21 million

Creating next gen agriculture by diversifying and better managing water resources to meet market demands.

- Maximising new and existing water resources for a more circular economy and achieving environmental outcomes.
- Collaborative governance model applied to new water infrastructure at Rookwood Weir.
- Brings producers, industry, regulators and government together to improve and diversify ag production and meet market demands.
- Developing circular economies by leveraging sustainable water resources with positive environmental outcomes.



