



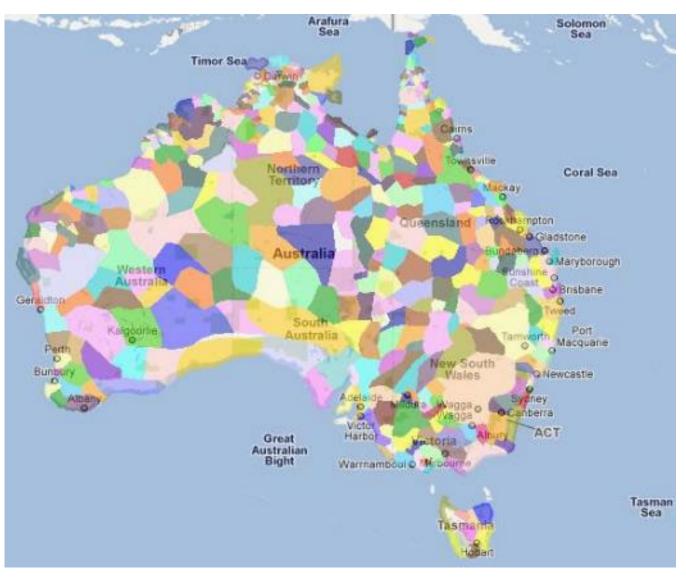
This program/project received funding from the Australian Government's Future Drought Fund.

Enhancing drought resilience

Professor David Phelps



Acknowledgement of Country



Source: http://www.australianhistory.org/aboriginal-culture









What is the TNQ Drought Hub?

- The TNQ Drought Hub is hosted by JCU
- It is supported by the Australian Government's Future Drought Fund, JCU and many industry partners
- Our goal is to build drought resilience for agricultural industries and their communities by:
 - Adding value to existing activities and events
 - Looking for regional solutions to regional issues









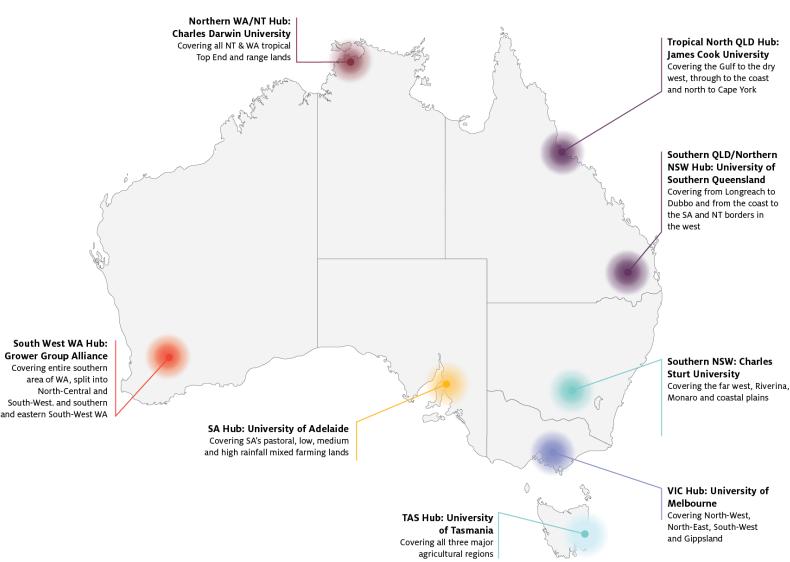






Eight hubs across Australia

- Each in a major climatic and agriculture zone
- All linked with a regional university
- Each hub has several nodes reaching across their region
- Currently the hubs and nodes cover over 40 locations and involve 143 partners





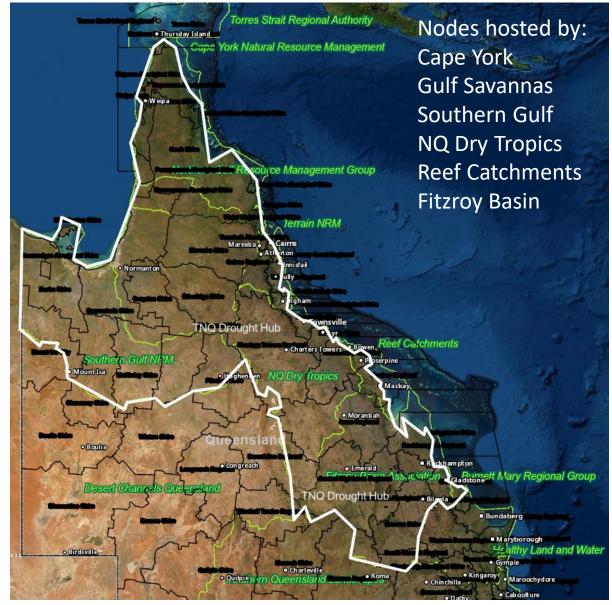




TNQ Hub footprint covers half the State

- Approximately 850,000 sq km (45% Qld land mass)
- Our area covers northern Queensland in partnership with six Natural Resource Management Groups
- Diverse landscapes, industries and culture
- Significant land area under Aboriginal and Torres
 Strait Islander management
- Agreement to make best use of key strengths between northern hubs













TNQ Hub Programs

- Transformational Agricultural Systems
- Innovation and Commercialisation
- Building Human Capacity
- Sustainable Aboriginal and Torres
 - Straight Islander Enterprises
- Coordination and Outreach
- Plus:
 - Soil coordination
 - Innovation hub 'sprint'











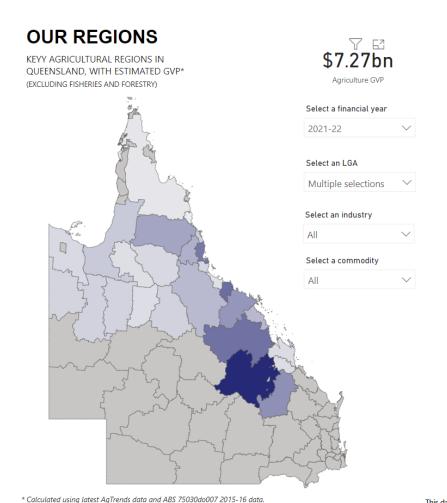


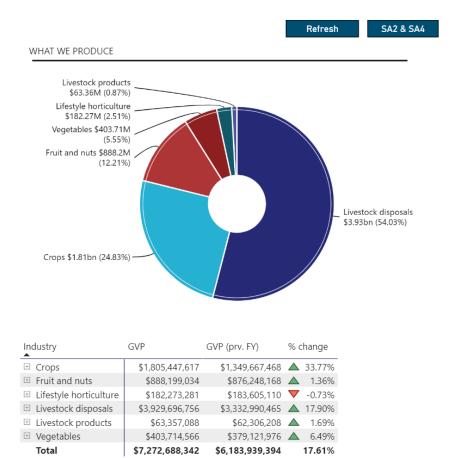




Agriculture is a key economic driver







 \$7.27 billion in agricultural production

- One-third of Queensland's ag workforce (20,600 fte)
- Ag tech can play a crucial role in resilience for businesses and towns
- Livestock: largest GVP and land use footprint
- Cropping (including sugar cane): 25% GVP
- Horticulture: 20% GVP

This dashboard has been compiled by the Department of Agriculture and Fisheries. © State of Queensland, 2021.





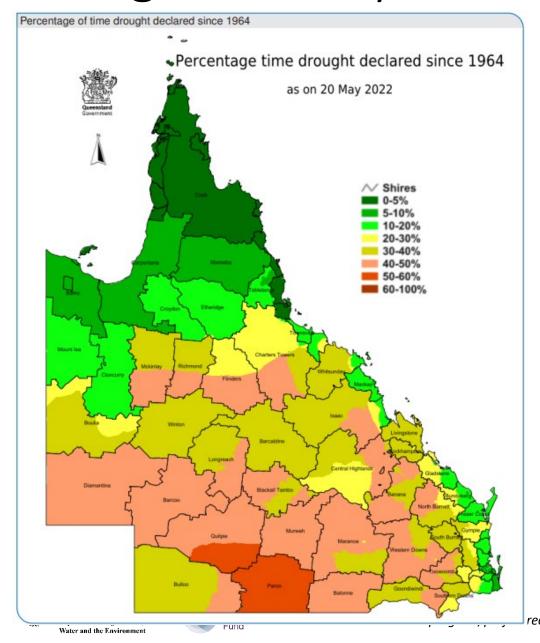


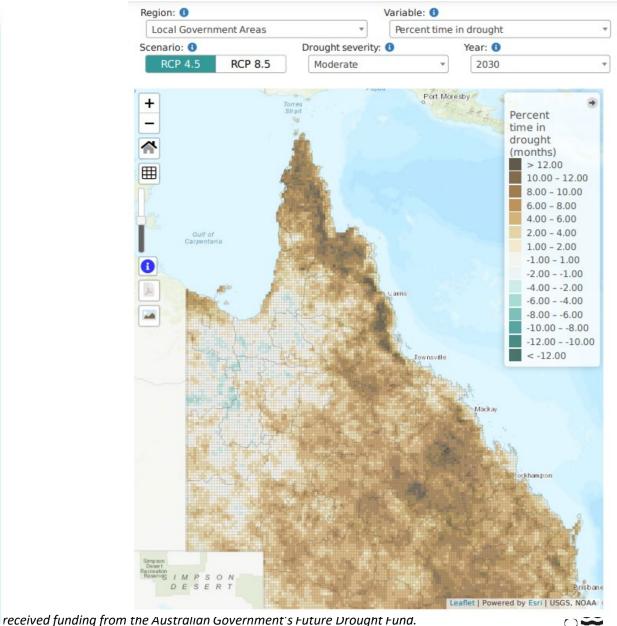




Drought: history and future









Globally, drought remains poorly defined

- BoM define drought as a prolonged, abnormally dry period when the amount of available water is insufficient to meet normal use
- In Queensland, drought is generally accepted as the 'lowest 10% of rainfall years'
- Meteorological drought is the starting point for all other forms of drought:
 - Hydrological drought
 - Industrial drought
 - Agricultural drought









What is resilience?

- Resilience in lay terms, is 'becoming stronger, better and readier'
- Resilience is adapting, re-shaping and transforming to a new 'reality'
- Resilience needs to be built across individual farms and businesses, their towns and communities, and their regions
- Resilience both relies on and drives innovation
- It is essential that it 'includes the ambitions of a community to adapt and transform, progressing towards socially desired goals and values'

















Resilience is needed at three scales:

- Individual property, farm and agribusiness e.g.
 - maximising the health of the natural resource base
 - optimising production efficiency
- Town and community e.g.
 - supporting human capacity in leadership
 - economic diversification
- Regional e.g.
 - capturing place-based advantages
 - enhancing internal and external socioeconomic networks













Questions?









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For more information

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