



SW WA Drought Adoption & Innovation Hub Consortia Forum

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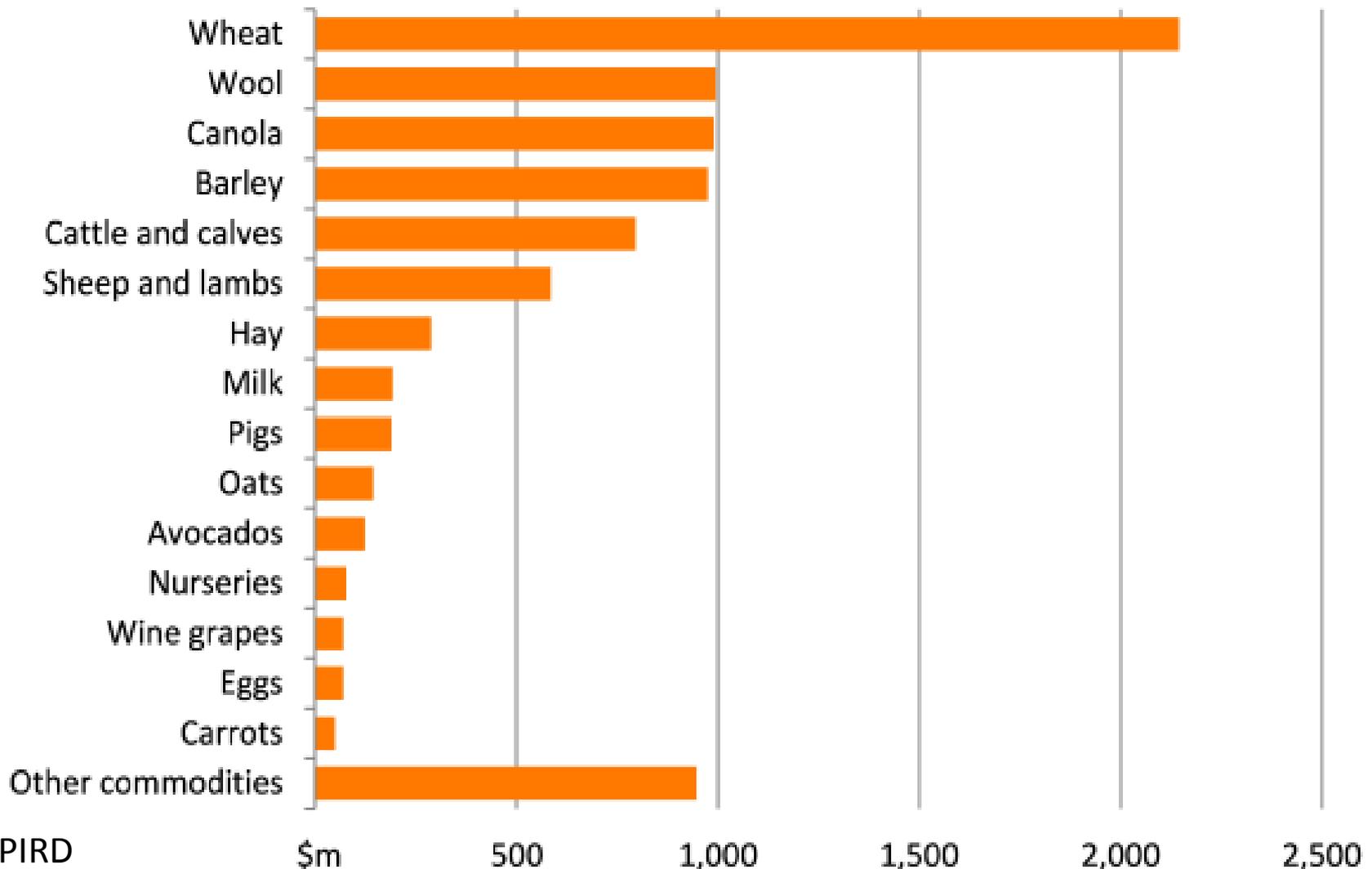


**Western
Australia-
A lot to
be proud
of**

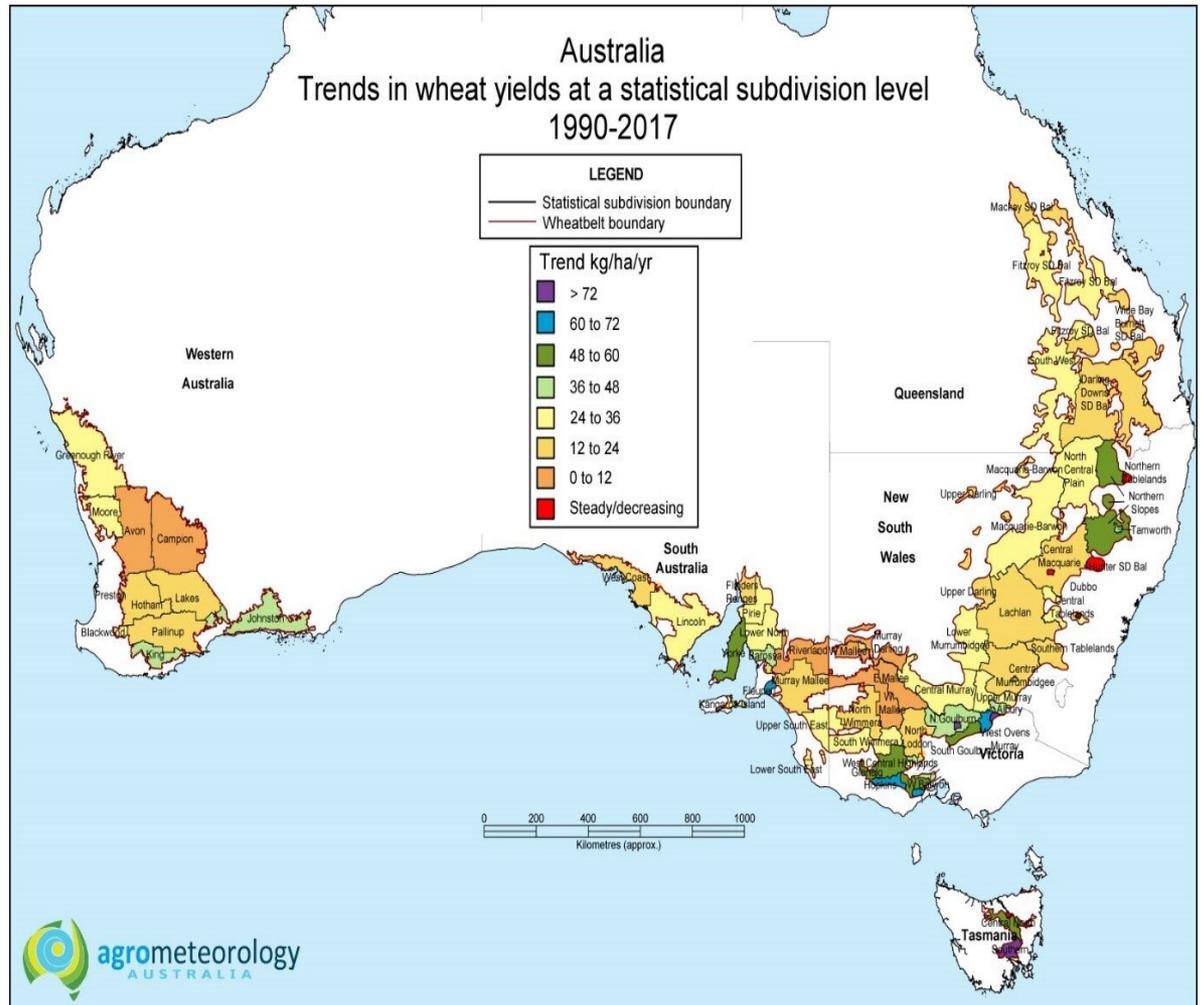
- The state has a world-class agriculture sector that helps to underpin regional communities
 - It is a major exporter in its own right
 - There is a highly educated workforce, with good academic and research institutions
 - It has a history of entrepreneurship, starting with the mining Industry
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Western Australia- A great success story

Exporting over \$7b annually or over 80% of what's produced



Wheat yield is still increasing BUT-It's getting harder!



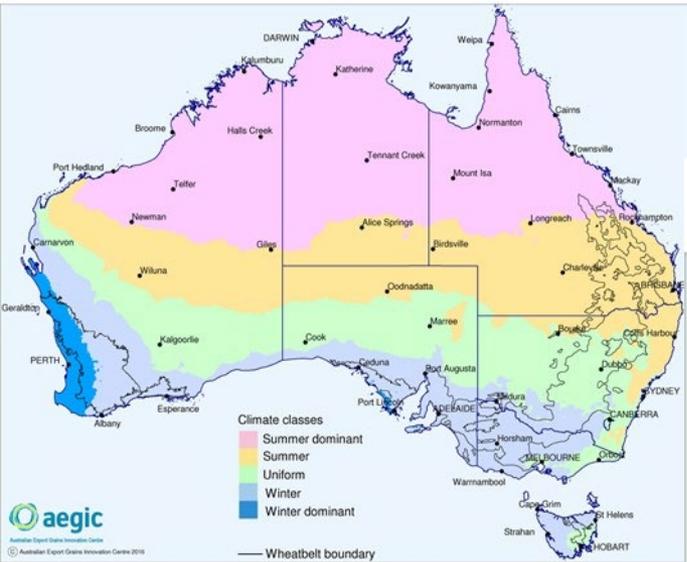


**But like
anywhere,
there are
also agri-
tech
challenges**

- Hotter, drier climates is making it harder to farm profitably, particularly given water issues
 - International competition is growing, as are the capabilities and capacities of competing countries targeting our hard-won Asian markets
 - We are not spending enough money on longer-term transformational research & our innovation capabilities are below many of our major trading partners
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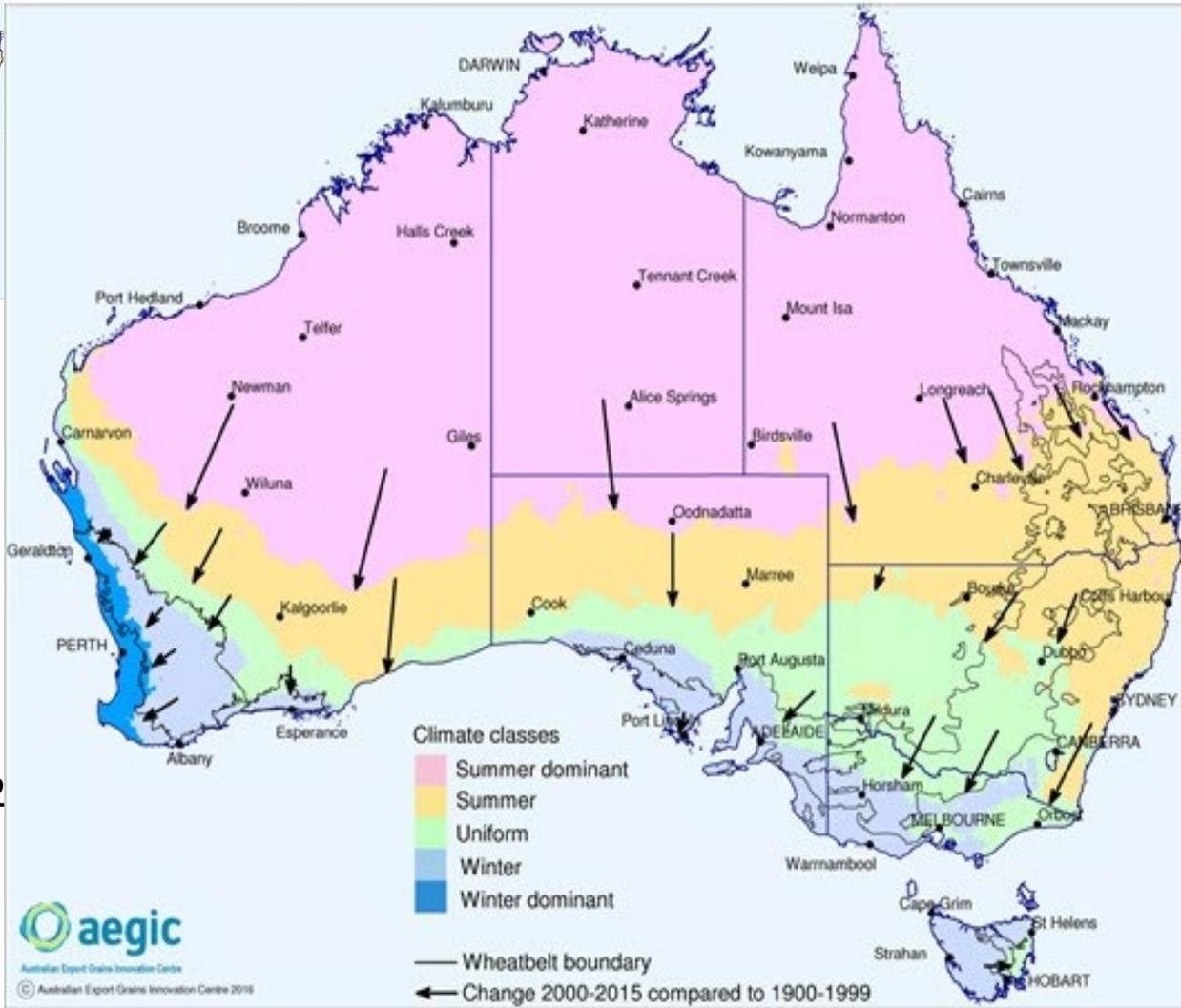
Australia Seasonal Rainfall Zones

Based on rainfall data 1900-1999



Australia Seasonal Rainfall Zones

Based on rainfall data 2000-2015



AEGIC - Seasonal rainfall zones shift south across Australia since 2000

(Rainfall Seasonality)

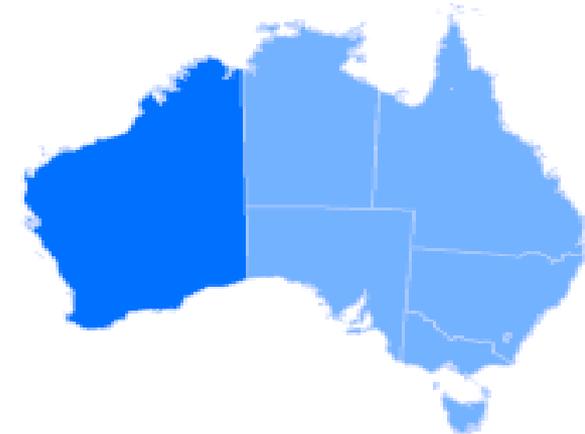
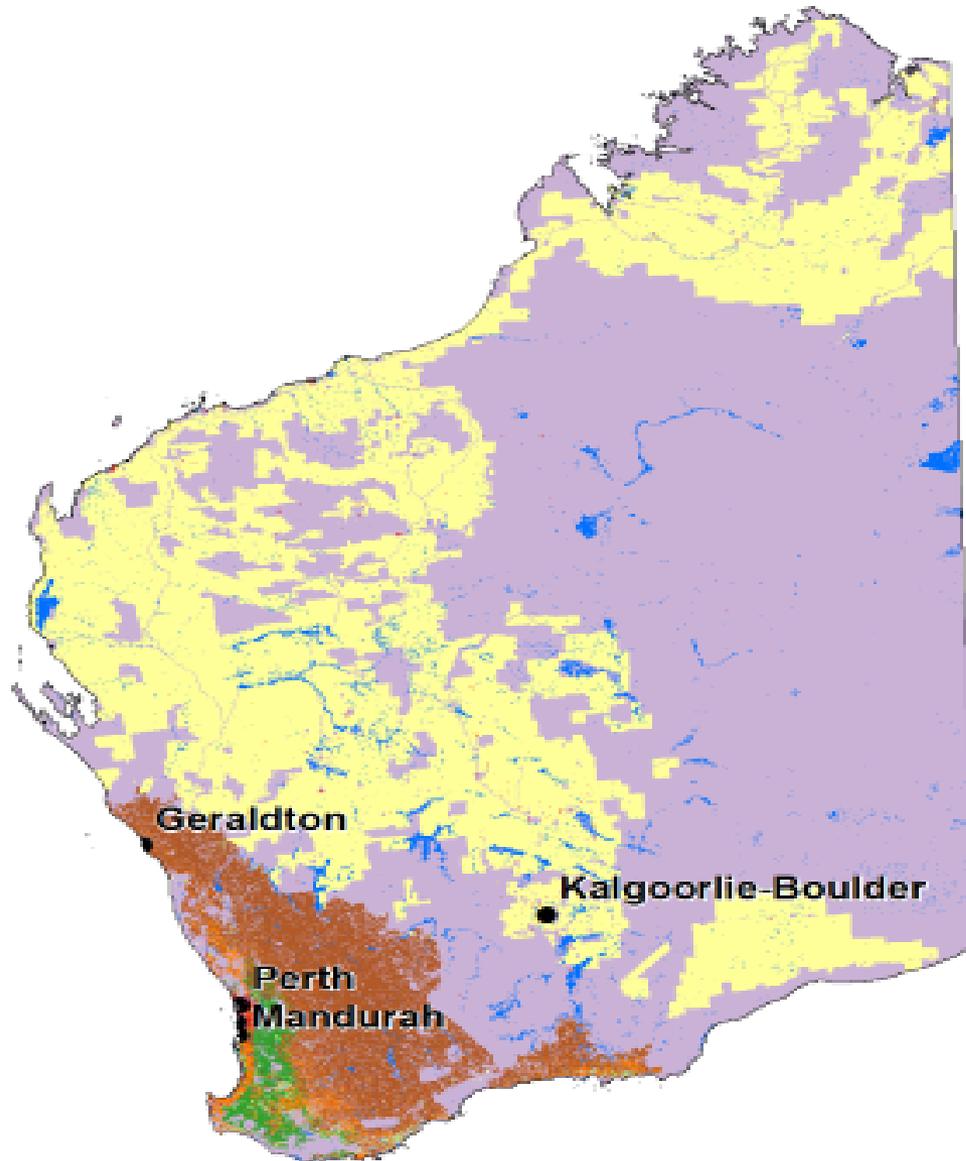
www.aegic.org.au/media/news/2



Australian Export Grains Innovation Centre
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Hotter, drier climates

How will land use change if significantly less water?



Broad land use

-  Nature conservation and minimal use
-  Grazing native vegetation
-  Production native forests
-  Plantation forests (commercial and other)
-  Modified pastures
-  Cropping
-  Horticulture
-  Intensive uses
-  Water



Australia: Not particularly good at Collaboration & Co-Operation

- A 2017 study of 7,000 Australian SMEs found an association between innovation, collaboration and productivity growth
- *Australia ranks very low amongst OECD countries when it comes to collaboration and co-operation, especially between Industry, Universities and Government*
- We tend to undertake too many short-term, fragmented projects within “siloes” instead of longer-term strategic partnerships

WHY?

Global Innovation Index Are we falling behind?

- Australia is currently ranked 23 globally, with many of our major trading partners, including in Asia, either ahead or catching up fast
- Australia is currently spending approx.\$25b annually on R & D, China and America over \$500b each annually
- By 2050, most of the world's largest economies will be Asian (China, India, Indonesia)

How do we facilitate collaborating more effectively?



Strengthening Collaboration

Some International Examples

Policy Development and Culture Israel

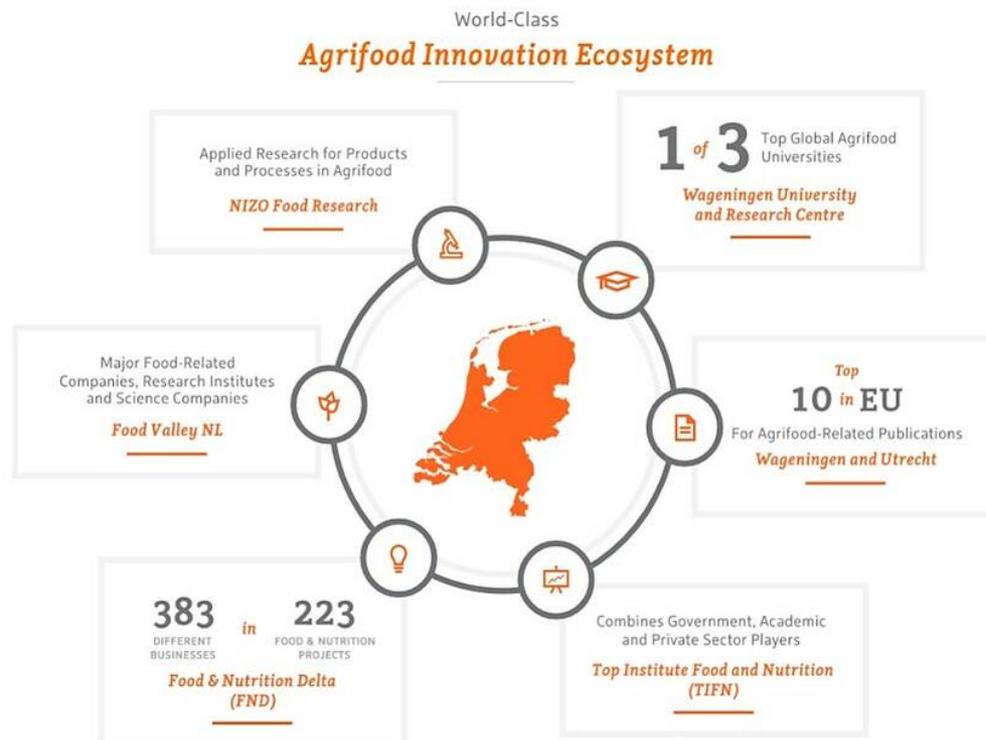
- **Policy Leadership:** Office of Chief Scientist (now Israeli Innovation Authority) drives the Innovation policy & strategies
- **Government funding: Over 4% GDP-** acts as a catalyst for start-ups & bridges the gap between academia and the private sector
- **Attitude:** Innovation equals “survival”; give things a Go! Collaboration equals strength. Strive for success or “learned” failure
- **Strong entrepreneurial culture;** role models, mentors, a sense of “community” and international connections

Israeli-International Connections

Clustering & over 300 multi-national R & D centres



The Dutch Agri
Ecosystem-
underpinned by
the food valley
with the
globally ranked
number 1
agricultural
University



Networked Collaborations

Kiwinet- National Commercialisation Network



Some WA Drought Hub Collaboration Principles

Strong cross-functional collaboration to leverage impact and increase adoption

More world class innovation, for mutual benefit

Open and transparent procedures and behaviours

Define what “success” look like for each project & how to achieve

Regular, public knowledge exchange (including science and innovation forums)



Some Next Steps for Us

- Recruiting Staff
- Establish Hub Priorities
- Principles of Engagement
- Stakeholder Workshops
- Preparing for Federal Innovation Grants
- Initial projects
- Science to Practice Forum



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|----------|---|----------|--|
| 1 | South-West WA Hub
Merredin Dryland Research Institute | 6 | Bunbury node |
| 2 | Esperance node | 7 | Northam node
Northam Research Station |
| 3 | Katanning node
Katanning Research Station | 8 | Geraldton node |
| 4 | Albany node | 9 | Carnarvon node
Carnarvon Research Station |
| 5 | Manjimup node
Manjimup Research Station | | |

In Summary

Strengthen collaboration and co-operation to succeed in an increasingly competitive world

Build on Western Australia's advantages

Utilise and leverage the Grower Group Alliance (GGA) "hub & spoke" model to facilitate greater innovation with a range of stakeholders from the "ground up"!

