



Managing Climate Extremes in the Mallee and Wimmera

Diversification, innovation & risk management
= Rural resilience

Is all we need is Hope



Grain Farming in Medium to Low Rainfall Environments

- Climate Challenge – Two Responses
- Mitigation & Adaptation
- Three Choices
- Diversification Innovation & Risk Management

Increasing resilience of triple bottom line


Profitability, Environment and Community

- Is all that is needed Hope?





Why Region Not Sectoral

- Need both Incremental and Transformational choices to be made
 - Farmers are Multi Industry
 - Family Farms still are dominate ownership/capital structure
 - Climate is experienced at a location as weather
 - Climate extremes equally impacting on Ecosystems and Soils
 - People are social beings and a sense of place is important to empower change
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Agricultural Innovation - A National Approach to Grow Australia's Future

Summary report
March 2019

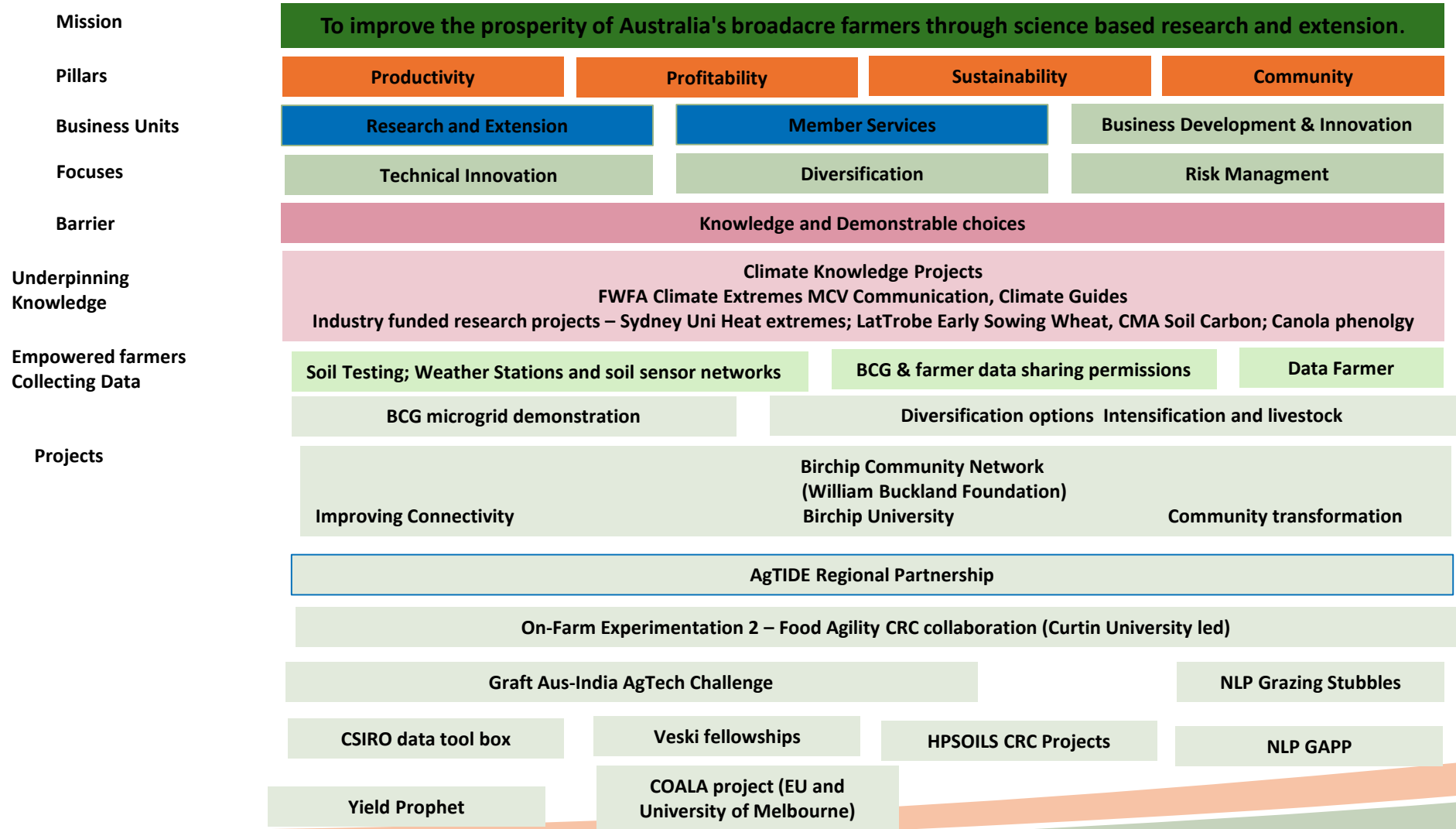
1. Strengthening ecosystem leadership, cohesion and culture: Stronger ecosystem leadership and cohesion across Australian agricultural innovation will generate greater and more diverse outcomes, driving our global competitiveness through clear strategic direction and increased collaboration
2. Funding and investment: Growing and improving the balance of investments will help the Australian agricultural innovation system to deliver both incremental and transformational innovation by addressing cross-commodity challenges, and targeting economic, environmental and social outcomes
3. World-class innovation practices: Establishing world-class innovation practices through collaboration, entrepreneurship and ambition will be critical in order to maximise opportunities from investment in agricultural innovation
4. Strengthening regions: In the future, regions will play a greater role in Australian agricultural innovation, to fully realise its benefits and maximise our innovation uptake
5. Next generation innovation platform: Improving the foundations of Australian agricultural innovation, including data, physical infrastructure and the regulatory environment, will support the transformation of our agricultural sector into the future

4.4 Recommendation 4: Strengthening regions

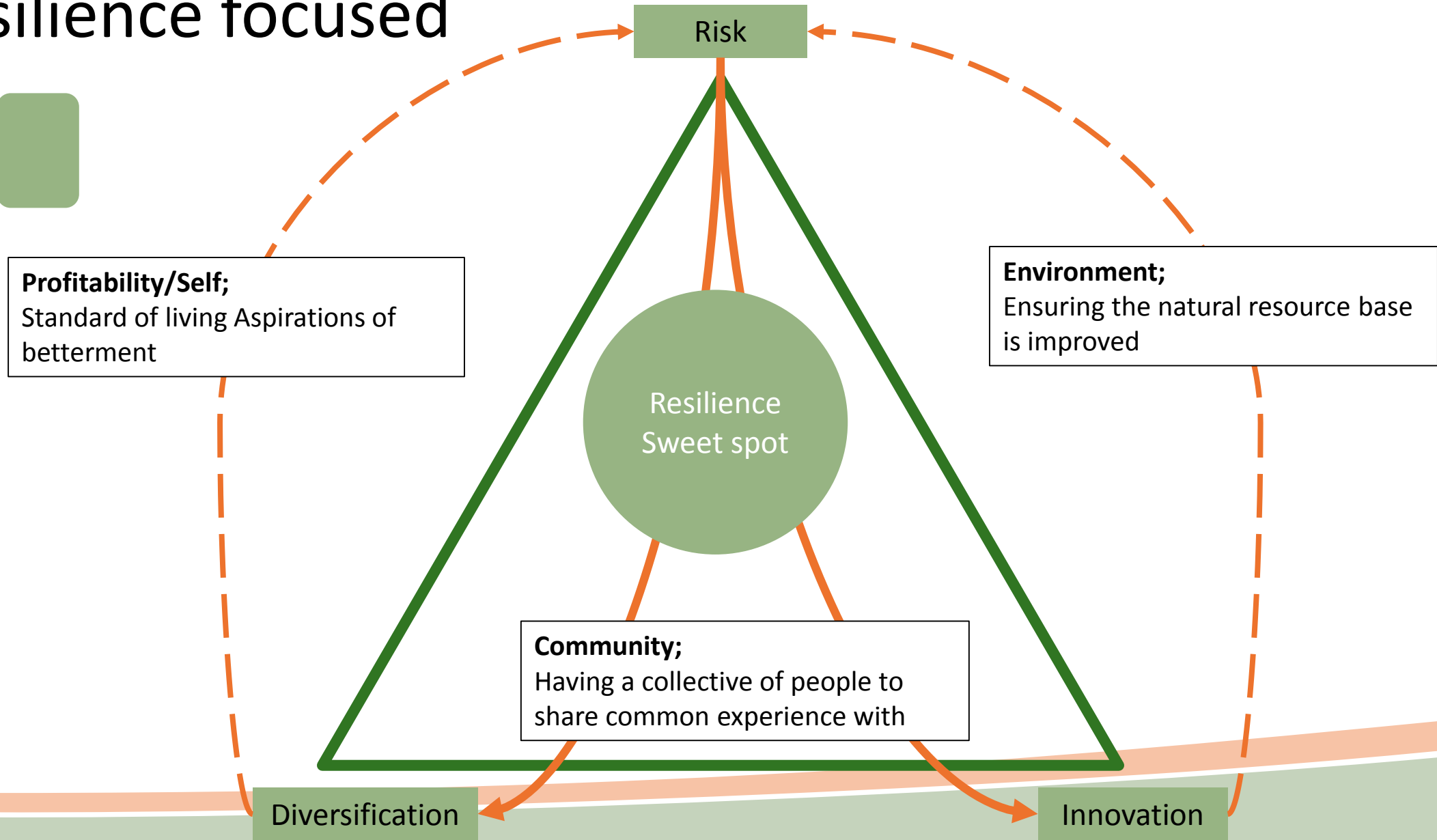
Strategic recommendations	Details
4.1. Strengthen the extension and adoption of innovation by enhancing farming systems groups	<ul style="list-style-type: none"> Existing farming systems groups can offer tailored support and demonstration of innovation for their region, including mixed farming systems, which will demonstrate the benefits and increase rates of adoption. Trusted groups are shown to be the most effective at creating change on <u>farm</u>
4.2. Create an avenue for agricultural innovation system participants to contribute to national priority setting	<ul style="list-style-type: none"> This could be achieved <u>through</u> providing formal roles for farming systems groups and end users to contribute to the development of national priorities for the agricultural innovation system
4.3. Create communities of regions with similar characteristics to network both locally and internationally	<ul style="list-style-type: none"> This could be achieved <u>through</u> connecting agriculture leaders in Australian regions with leaders from global regions to discuss common issues that are prevalent within their regions. Through connecting agricultural leaders, common problems can be discussed <u>in order to</u> create innovation demand as well as share potential solutions to increase the speed of uptake Communities could be <u>connected</u> through a multi-channel approach, where farmers could connect digitally, face-to-face through conferences, or leverage innovation precincts
4.4. Build capability to better inform decision-making and increase the speed of innovation and adoption	<p>Multiple methods will be used to develop capability in these areas such as:</p> <ul style="list-style-type: none"> Optimising the use of existing online learning platforms; Enhancing farming systems groups as discussed in 4.1 to conduct workshops, and meet-ups that explore these topics, build capability and develop collaboration; and supporting the consistent use of <u>a centralised online forums</u> for regions to share experiences and knowledge <u>with each other</u>

Diversification; Innovation; Risk

2019



Resilience focused



Rural Resilience

- Rural resilience may be defined as the capacity of a rural region to adapt to changing external circumstances in such a way that a satisfactory standard of living is maintained
- A rural area's people, community and resources ability to cope with the area's inherent economic, ecological and cultural vulnerability. Wim Heijman¹, Geoffrey Hagelaar², Martijn van der Heide³
- For me Resilience is not the response. It is the investment in the preparation



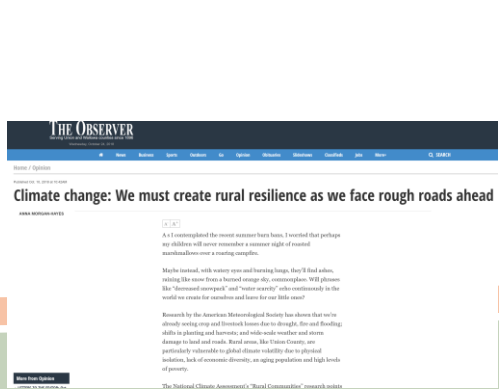
RENEWABLES | OPINION AND REVIEWS
How close can cities get to 100% renewable energy?
24 Oct 2018 David Elliott



Around the world, cities are beginning to think in terms of meeting their energy needs from renewable sources, to limit air pollution and climate change problems. Over 100 cities now claim to get at least 70% of their electricity from renewables, compared to 42 in 2015, and many more are aiming for high proportions, as part of a drive to "100% renewable". With cities responsible for over 70% of global carbon emissions from energy use, that is to be welcomed, but it's worth being a little clearer about what's meant by "100% renewable" cities.

For rural communities, the growing appetite of cities for their resources may be perceived as a threat. Rural areas very often do not meet their own needs with locally produced energy, so how could they consider supplying other territories?

CLER, Energy Cities and Resilient Action Climate



THE OBSERVER
Climate change: We must create rural resilience as we face rough roads ahead
JAMIE MCKINNON WRITES

As I contemplated the recent summer heat here, I recalled that perhaps my children will never remember a summer night of crusted waterbombs over a smoggy landscape.

Multiple national, with water over and heating being, they'll find lakes, adding like some from a heated range of, contemporary. Will phrases like "renewable energy" and "water energy" refer consistently to the world as a means for the modern and here for our little ones?

Research by the American Meteorological Society has shown that water already being very and drought losses due to drought, for out flooding, ability to planting and farmers, and will-odd weather and storm damage to land and roads. Road across, the Vines County, are particularly vulnerable to global climate stability due to physical isolation, lack of economic diversity, an aging population and high levels of poverty.

The National Climate Authority, "Rural Communities", research notes



OCTOBER 22 2018 - 4:38PM
Kellie Mar's photo of Blaxland deputy Rawbone up for national award
B.C Lewis Local News



Portrait of a Lady depicting Emily Rawbone of Blaxland Rural Fire Brigade has won the 2018 Resilient Australia Photography Award for NSW.

Under a blaze of fire at a fire ground last year Blaxland Rural Fire Brigade volunteer and photographer Kellie Mar witnessed a powerful steely-eyed look in her deputy captain's face. It was the face of resilience.

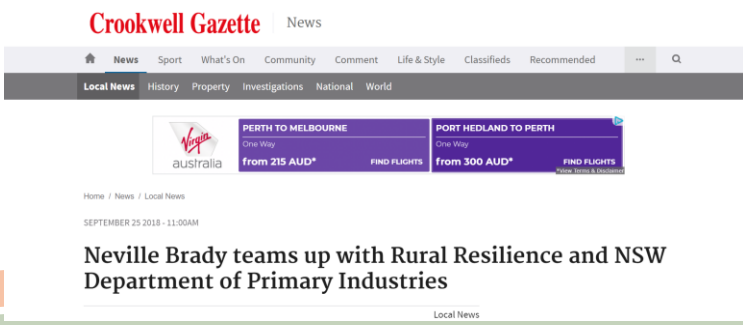
"To me resilience is a quieter thing, it's a stoicism that in the face of adversity you get that set jaw, that look in the eyes, that strength."



RURAL News
Farmers push key reforms at drought summit
Matt Coughton



Travis and Brian
TASCO Petroleum



Crookwell Gazette News

Home / News / Local News
SEPTEMBER 25 2018 - 11:00AM

Neville Brady teams up with Rural Resilience and NSW Department of Primary Industries

Local News

Resilience and Hope



Hope locates itself in the premises that we don't know what will happen and that in the spaciousness of uncertainty is room to act. When you recognise uncertainty, you recognise that you may be able to influence the outcomes – you alone or you in concert with a few dozen or several million others.

Hope is an embrace of the unknown and the unknowable, an alternative to the certainty of both optimists and pessimists. Optimists think it will all be fine without our involvement; pessimists adopt the opposite position; both excuse themselves from acting.

It is the belief that what we do matters even though how and when it may matter, who and what it may impact, are not things we can know beforehand. We may not, in fact, know them afterwards either, but they matter all the same, and history is full of people whose influence was most powerful after they were gone.

Rebecca Solnit

- <https://www.theguardian.com/books/2016/jul/15/rebecca-solnit-hope-in-the-dark-new-essay-embrace-unknown>