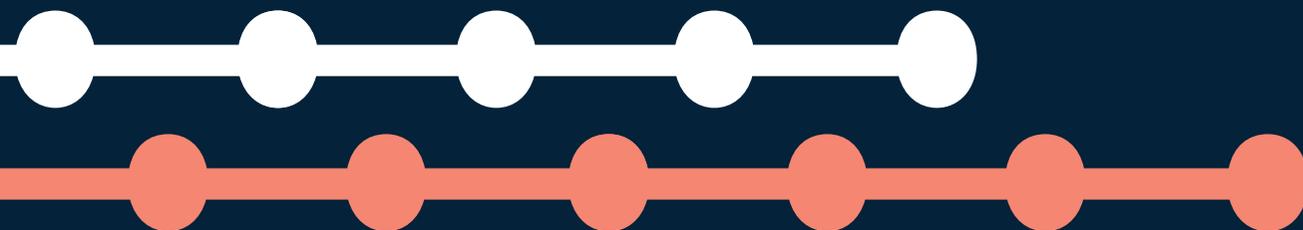


# REGIONAL DROUGHT RESILIENCE PLANNING PROGRAM

## Global Literature Review

# Key Drivers Report

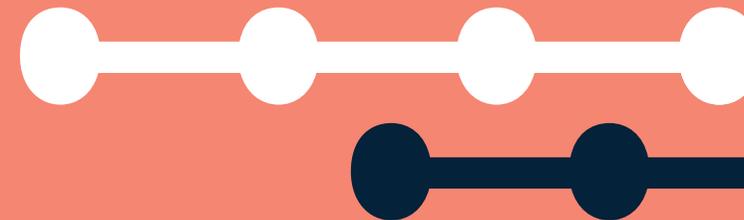


Prepared for Department of Primary Industries and Regional Development

9 MAY 2022

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## Introduction

The Global Literature Review is a multiscale search for innovation and ideas that will support increased resilience to drought at three scales: community, business or regional scale.

Consultation with the Steering Committee project team members highlighted the purpose for the outcomes from the review. The review was tasked to develop a project pipeline of transformative ideas that reduce community and regional business vulnerability or build their resilience.

The ideas need to be:

- Scalable
- Suitable to be incorporated into an Investment framework that will speak to the Federal, State and Local Governments
- Able to be commercialised for regional investors (if not at proof of concept stage, define what would get the idea to proof of concept stage)

The project pipeline would inform the three Regional Drought Resilience Plans to provide drought resilience projects nested within the plans.

The overarching objective is that when implemented, the transformative projects need to build the resilience of the communities and regional businesses. Farming systems ideas were to be included, but the level of transformation is important. The scope was not to include incremental adaptive management ideas in this project, as they would be identified through the Drought Hub nodes.

## Definition of Transformation

We developed a working definition of transformation to assist the research to determine if an idea was to be included or not prioritised for research. The idea needed to meet one of several of the following criteria:

- Challenges business as usual (BAU)
- Not incremental change (5 or 10% improvement = incremental)
- Growth not consolidation (yardstick minimum x 2 – turnover)
- Creates new value
- Changes the market/system
- Reframes a problem to an opportunity

Using this definition eliminated some of the areas that were discovered in the community consultation process. Those ideas could still emerge through the Regional Planning community engagement processes and become prioritised in the Regional Plans, but they weren't included in this project unless they met the Transformation hurdle.



## Multiple Scale Approach

The search occurred at multiple scales. We have conducted online searches, online interviews, and targeted local, regional, state and national contacts in each of the areas identified. We interviewed key networks and contacts within the regions because the level of innovation is high within the regions, and in many cases there are existing projects that can be leveraged to support increasing resilience.

After we identified the problems at this level in each subject area, we then conducted national or in some cases global online searches to supplement what the home-grown innovation was telling us about useful interventions or solutions in each area.

## Identifying the Drivers and areas of Transformation

We conducted a online search of mega trends which would potentially impact the three areas. Four sources have been referenced in this report:

1. **CSIRO Megatrends Shaping Australian Agriculture 2020**
2. **Project Management Institute**
3. **Batterman Consulting**
4. **Gro 2022 Watchlist**

Table 1 then demonstrates how we turned those megatrends into transformative research areas ([see page 10](#)).

# 1. CSIRO Megatrends Shaping Australian Agriculture 2020

## **Growth juggernaut:** Three billion empowered consumers

- Rapid growth in emerging economies, particularly in Asia, will lift incomes, expectations, and economic capacity. An expanded and empowered middle class will demand higher volumes and quality of food and fibre, including more diverse diets and more protein – with rising expectations for health, provenance, sustainability, and ethics.

## **Fractal politics:** Beware the dance of giants

- Deep shifts in economic, military and cultural power will continue to reshape the world, as the rise of multiple global powers erodes previous certainties, notwithstanding increasing global integration.
- International trade and relations – along with food and fibre markets, supply chains and relationships – will all become more complex as nations assert their sovereignty, often in pursuit of populist appeal rather than mutual economic gains.

## **More from less:** The permanent race for advantage

- Relentless innovation drives improved productivity, and more efficient use of materials, energy, water, land and labour. Maintaining profitable and competitive food and fibre enterprises will require ongoing innovation and change.
- But the benefits of change will not be shared evenly, often exacerbating existing pressures on rural industries and regional communities. Improved productivity may benefit consumers (through lower prices) more than producers. Regional population will continue to drift from farms and smaller towns to larger regional centres and capital cities.

## **Cascading planetary risks:** Coming, ready or not

- Accelerating changes in earth systems at all scales – from global to microbial – are creating multiple risks and challenges, and some opportunities.
- Agriculture is already impacted, and adapting. Climate and commodity prices will become more volatile, while emerging markets for carbon and ecosystem services could transform landscapes and business models.

## **Disruptive technologies:** Opportunities for the brave

- Exponential advances in digital technology, automation, genetics, and synthetics will disrupt and change how food and fibre products are made, marketed, and delivered. Production systems, supply chains, and customer engagement will become more agile and interconnected, requiring new skills and partnerships, and creating risks and opportunities for agricultural producers and regional communities.

## **Disruptive technologies:** Opportunities for the brave

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## **Positioning for the future:** Will the lucky country surf or sink?

- Australia is indeed lucky: a 'lifestyle superpower' with competitive industries, vibrant communities, and unique landscapes and environmental assets. But unearned advantage risks complacency, and each generation needs to create the luck – and advantages – it will pass on to the next generation. Will Australia choose to surf or sink?



## 2. Global Megatrends 2022, Project Management Institute

PMI actively monitors the technological dynamics, demographic shifts and complexities of globalization that are reshaping our world, six megatrends stand out based on their impact and the implications for projects across the world:

1. Digital Disruption
2. Climate Crisis
3. Demographic Shifts
4. Economic Shifts
5. Labor Shortages
6. Civil, Civic and Equality Movements

With COVID-19 and the threat of future pandemics, more will be required of us to meet the challenges of long-standing flaws and inequities that have been exposed, such as unequal vaccine distribution and supply chain turmoil.

## 3. The 4 most important megatrends for companies in 2022, Batterman Consulting

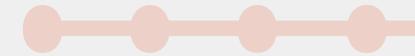
The megatrends of the coming years are coming at us like avalanches in slow motion. They will turn entire industries upside down and influence all areas of life. They last for several decades, unlike trends that only have an impact for a few years. Each megatrend has a formative influence on our society and the economy, and companies in particular should respond to them and adapt their strategies accordingly.

### The digital future

The digital transformation is in full swing. New technologies are now influencing all areas of social and economic life. They are changing the way we inform ourselves, how we communicate, how we consume and how we live. Any information can be accessed anytime, anywhere. This rapid progress offers fundamental advantages for companies. By quickly grasping global markets, they can better tailor products to customer needs and constantly adapt and optimize business models.

But companies that use data not only for marketing purposes but also for internal processes will emerge from the pandemic even stronger. It is essential to know which internal processes would be worth digitizing and, above all, which data is required in which quality in order to be able to realize digitization. The necessary data is usually already available, but the necessary know-how, time or technology to make use of the data is often lacking.

In addition to benefits, increasing digitization also brings some challenges, especially in the area of data protection. Companies often find it difficult to cope with the flood of information and its processing. They have large amounts of data, but their protection is not always fully guaranteed. There are still many points of attack, which is why companies should protect themselves against hacker attacks through professional risk management.



## Connectivity

We live in a network in which everyone is connected to everyone and everything, always and everywhere. This network society fundamentally changes the conditions for entrepreneurial success and demands new competencies from companies as well as individuals. Aspects such as basic human needs as well as cultural and social aspects are becoming increasingly relevant for business models and for the design of products and services. To fully exploit the potential of this megatrend, companies need a good understanding of digital transformation.

Companies and employees can benefit from this megatrend in various ways. For example, employees can work on projects from any location using cloud-based solutions and choose their place of residence independently of the company's location. At the same time, digital connectivity can reduce a company's process costs and thus increase efficiency.

## Orientation east

Another megatrend for 2022 is the eastern orientation of the global economy. Asia, primarily China, will move even more into focus. In the coming years, enormous economic growth is forecast for China, India and the Middle East. Consequently, there will be an increase in global trade, and likewise the purchasing power of the global middle class will rise. This development has been influenced, among other things, by the shift in education funding. Originally, Japan, the UK, Germany and the US were the leading promoters of education and research. In the future, China will overtake the largest funders.

## Neo-Ecology

Purchasing decisions, action ethics or corporate strategies: The neo-economy megatrend is establishing new values that reach into every area of our everyday lives. Environmental awareness and sustainability are increasingly evolving from an individual lifestyle to a social movement and a major economic factor. No other megatrend triggers such heated debates as the issue of sustainable consumption, resource conservation and energy supply.

The neo-ecology of the future is geared toward the new way of consuming. It is becoming increasingly clear that the economy is undergoing a fundamental transformation: Instead of growth and profit maximization, tomorrow's economy will focus on the intelligent and sustainable use of resources and on the comprehensive common good.

Resource scarcity also plays an important role in this trend. In the coming years, a worldwide population growth is predicted which will intensify the competition for limited resources such as oil, gas and water. Above all, water scarcity plays a decisive role here. This not only has a serious impact on the food industry and on energy procurement, but also affects the daily lives of many people. Companies are increasingly responding to this change by optimizing their supply chains and expanding their risk management.



## 4. Gro 2022 Watchlist for Agriculture

### Food Inflation Will Continue

- Rising US food prices have global impact, given the outsize role of the US in worldwide food and agricultural markets.
- Consumer budgets will remain under pressure from increased grocery bills, either from higher produce and protein prices or as packaged food manufacturers seek to pass on higher input costs to maintain margins.
- The risk of further food price inflation has prompted some countries such as [Russia](#) and Argentina, to restrict exports in order to maintain domestic supplies.

### Wheat Supplies Will Remain Tight

Global demand for commodities is expected to remain robust in 2022 and underpin prices as the world economy continues to recover.

- For wheat, the global supply and demand balance is the tightest it has been in many years, and wheat futures prices rose by double-digit percentages in 2021. [Stocks-to-use](#) for major wheat exporting countries combined is at a 13-year low.
- [Devastating drought](#) in Canada and the US northern Plains sharply reduced spring wheat supplies. Yields in Russia were also impacted by dry weather.

Some countries have enacted trade restrictions on wheat and other commodities in an effort to quell domestic food price inflation.

### La Niña to Threaten South American Soy and Corn Crops

The La Niña global weather pattern is back for a second year, which could have big ramifications for 2022 crops around the world. In South America, drier than normal weather could once again reduce harvests of soybeans and corn.

### US Farmers Will Plant More Acres

The outlook for global crop balances by the end of 2022 will depend to a large extent on the number of acres US producers dedicate to each crop this spring.

- [Competition among crops](#) will be very strong. [Corn](#) and [wheat](#) futures prices were both up over 20% in 2021. Oat futures prices were up 89% in the year, and cotton prices rose 44%. [Soybean prices](#), in contrast, lagged the group, up just 2%.

Meanwhile, production costs are rising. Supply disruptions and high energy costs have sent [fertilizer prices surging](#), and that could stymie farmer interest in [input-heavy crops like corn](#).



## Vegetable Oil Demand Growth to Outpace Production Gains

Vegetable and edible oils will continue to be [key to food inflation in 2022](#) after a tumultuous 2021 that saw some of the [highest prices](#) in 10 years. Demand is expected to continue to grow due to the ubiquitous need for vegetable oils in both food and fuel.

- [Palm oil](#) and soybean oil led the rally, with futures prices for both finishing last year with gains topping 30%.
- Supply disruptions hit [palm oil in Malaysia](#) and Indonesia, and [sunflower oil](#) in the Black Sea, leading to the first overall decline in global vegetable oil production in five years and the lowest stocks-to-use ratio in 10 years.
- Vegetable oils are ubiquitous in packaged food formulations and are likely to represent an ongoing source of upward pressure to cost of goods sold.

## Biofuel Growth Will Continue Apace

The “food vs. fuel debate” for vegetable oils will intensify in 2022 as both production and demand for biofuels increases, especially in the US.

- Global industrial use for the four major vegetable oils — palm, soybean, rapeseed, and sunflower oils — is [expected to increase by 2.4% in 2022](#), mainly to produce biofuels, according to USDA projections.
- [In the US](#), plans for renewable diesel production would more than double capacity this year to 2 billion gallons (6.8 million tonnes), with most of the feedstock from soybean oil.

## China Import Growth Will Slow

China fueled much of the increased demand for world food supplies in recent years. Now, with the country’s hog population [fully recovered](#) from the impact of African swine fever (ASF) in 2018, China has less need to import pork, but will continue to need large quantities of feed grains as its hog herd matures and the hog industry becomes more industrialized.

China’s feed grain demand will remain high, although the [growth in feed grain imports](#) will slow as the hog population stabilizes.

## Relief Is in Store for Protein Prices

Protein prices have been some of the biggest contributors to rising food prices, but Gro expects some relief in coming months. US [beef prices](#) rose 18% in 2021 while [poultry prices](#) surged 36%.

## Steep Coffee and Sugar Prices Will Persist

Soft commodities have seen some of the largest price increases this past year. [Coffee is one of the biggest gainers](#), up 63%.

- [Brazil’s next coffee harvest](#) is expected to come in sharply lower after intense drought early this season, followed by unexpected frosts in June and July, killed many young trees and left mature trees struggling to recover. The weak crop outlook has kept global coffee prices hovering around 10-year highs.
- Brazil’s largest sugar producing region, South-Central Brazil, is suffering from a second year of [record setting drought](#). Last year’s sugarcane crop was down 13%, sending [sugar prices](#) to multi-year highs.



**TABLE 1: Trends, Drivers and Transformative idea areas to target**

TRENDS – MEGA OR SHORTER RUN TRENDS	RELEVANCE	IMPACT (ON REGION)	OPPORTUNITY (UPSIDE) OR THREAT (DOWNSIDE RISK)	WHAT IS THE DRIVER	WHAT ARE TRANSFORMATIVE IDEAS TO HELP BUILD RESILIENCE IN THE REGIONS RELATIVE TO THIS DRIVER + WHAT GEOGRAPHICAL AREAS ARE OF INTEREST
<i>Supply and Demand Shocks</i>	<ul style="list-style-type: none"> <li>• Inflationary pressure food, tight supply commodities, countries restricting exports (quotas), high input costs (fert also about high energy costs), Machinery costs</li> </ul>	<ul style="list-style-type: none"> <li>• Higher commodity prices and low interest rates driving up land values</li> <li>• Confidence in ag industry and capital growth resulting in increase in sectoral wealth</li> <li>• Input price impact – look for greater efficiencies and precision, substitution effect of inputs</li> </ul>	Opportunity	<ul style="list-style-type: none"> <li>• Supply chain disruptions</li> </ul>	<ol style="list-style-type: none"> <li>1. Low input cropping options</li> <li>2. Agtech – precision technology to improve yields from lower inputs</li> <li>3. Localisation of supply chain eg. Fert production</li> <li>4. Capital in farming – will it create more investment up and down supply chain? Flow through to regional economy?</li> <li>5. Regional manufacture machinery</li> </ol>
<i>Food trends</i>	<ul style="list-style-type: none"> <li>• Vegetable oil demand (pressure to decrease palm oil usage)</li> <li>• Food for fuel – biofuel production globally</li> <li>• Health trends – plant protein demand</li> <li>• Localisation of food supply chains</li> <li>• Growth in Aquaculture production (fish stocks worldwide under pressure)</li> <li>• Intensification of horticulture</li> </ul>	<ul style="list-style-type: none"> <li>• Support for canola in rotation</li> <li>• Other crop options</li> <li>• Plant protein crop options</li> <li>• Demand for farmers markets and localised food chains</li> <li>• Onshoring meat production</li> <li>• Aquaculture industry growth</li> </ul>	Opportunity	<ul style="list-style-type: none"> <li>• Vegetable oil demand</li> <li>• Plant protein demand</li> <li>• Food security and resilience of supply chain</li> <li>• Aquaculture</li> <li>• Product demand</li> </ul>	<ol style="list-style-type: none"> <li>6. Crop options for this region – vegetable oil or plant protein</li> <li>7. Local food or beverage manufacturing or marketing to build food supply chain resilience</li> <li>8. Onshoring of meat value adding and processing</li> <li>9. Aquaculture industry supply chain development examples (processing and input production)</li> <li>10. Horticulture industry major innovations and future opportunities</li> </ol>



**TABLE 1: Trends, Drivers and Transformative idea areas to target (Cont.)**

TRENDS – MEGA OR SHORTER RUN TRENDS	RELEVANCE	IMPACT (ON REGION)	OPPORTUNITY (UPSIDE) OR THREAT (DOWNSIDE RISK)	WHAT IS THE DRIVER	WHAT ARE TRANSFORMATIVE IDEAS TO HELP BUILD RESILIENCE IN THE REGIONS RELATIVE TO THIS DRIVER + WHAT GEOGRAPHICAL AREAS ARE OF INTEREST
<i>Global Demographic shifts</i>	<ul style="list-style-type: none"> <li>• Growth 60+ cohort</li> <li>• Return to the regions trend (holiday locations)</li> <li>• Ongoing eastern orientation economy – rising middle class</li> </ul>	<ul style="list-style-type: none"> <li>• Connected cyber seniors, available pool of talent</li> <li>• Housing market entry strategies for urban/ coastal communities – Geraldton and Dongara, Kalbarri?</li> <li>• Export market development opportunities, including education and tourism</li> </ul>	Opportunity	<ul style="list-style-type: none"> <li>• Aging population</li> <li>• Move to the regions</li> <li>• Rise and rise of the eastern economy</li> </ul>	<ol style="list-style-type: none"> <li>11. Where and why is the return to the regions trend strongest and how can this be enhanced – lifestyle x connectivity</li> <li>12. Research community efforts or campaigns to engage 60+ cohort as key talent to build labour market resilience</li> <li>13. Housing market entry strategies to build housing market resilience</li> <li>14. Tourism strategies that support building resilience</li> </ol>
<i>Climate crisis</i>	<ul style="list-style-type: none"> <li>• Change in weather patterns</li> <li>• Shift or increase in vulnerability of farming systems or communities</li> <li>• Growth Blue Economy</li> </ul>	<ul style="list-style-type: none"> <li>• Need for increasing adaptive responses</li> <li>• Eco-system services, natural capital market, carbon market opportunities</li> </ul>	Opportunity and threat	<ul style="list-style-type: none"> <li>• Net zero transition + decarbonising economy</li> <li>• Growth Blue Economy</li> </ul>	<ol style="list-style-type: none"> <li>15. Carbon market opportunities that build regional resilience</li> <li>16. Market for eco-system services or natural capital market opportunities that support increasing resilience</li> <li>17. Carbon accounting and systems for small businesses to support decarbonisation</li> <li>18. Blue economy opportunities that support increase in ocean system resilience</li> <li>19. Farming systems options to build resilience (link to Drought Hub work)</li> <li>20. Native vege cover, cover over summer in cropping systems</li> </ol>



**TABLE 1: Trends, Drivers and Transformative idea areas to target (Cont.)**

TRENDS – MEGA OR SHORTER RUN TRENDS	RELEVANCE	IMPACT (ON REGION)	OPPORTUNITY (UPSIDE) OR THREAT (DOWNSIDE RISK)	WHAT IS THE DRIVER	WHAT ARE TRANSFORMATIVE IDEAS TO HELP BUILD RESILIENCE IN THE REGIONS RELATIVE TO THIS DRIVER + WHAT GEOGRAPHICAL AREAS ARE OF INTEREST
<i>Resource scarcity</i>	<ul style="list-style-type: none"> <li>Resource Scarcity – oil, gas, water, labour</li> </ul>	<ul style="list-style-type: none"> <li>Underpinning inputs for the regions economy</li> <li>Workforce availability is a key constraint</li> </ul>	Opportunities and threats	<ul style="list-style-type: none"> <li>Water and energy key drivers of quality of future</li> </ul>	21. Mid west Green hydrogen industry 22. Other renewable energy development opportunities that build resilience eg. Hydro project Great Southern 23. Solar or wind farm project opportunities and on farm renewable energy project ideas 24. Water source, efficiencies (treatment, capture, reuse – including desal), storage/ distribution and new technology ideas
<i>Digital Transformation</i>	<ul style="list-style-type: none"> <li>Acceleration of level of digital applications</li> </ul>	Connectivity - the new highway and data is the new currency	Opportunity and threat	<ul style="list-style-type: none"> <li>Connectivity</li> <li>Digitisation of regional industries and business</li> <li>Digital divide</li> </ul>	25. Better use of data to drive decision making and efficiencies in industry and blockchain applications – how will this support building resilience 26. Fit for purpose connectivity options and infrastructure opportunities 27. Automation and EV's in ag – ideas for acceleration 28. #Agtech and #Foodtech



**TABLE 1: Trends, Drivers and Transformative idea areas to target (Cont.)**

<b>TRENDS – MEGA OR SHORTER RUN TRENDS</b>	<b>RELEVANCE</b>	<b>IMPACT (ON REGION)</b>	<b>OPPORTUNITY (UPSIDE) OR THREAT (DOWNSIDE RISK)</b>	<b>WHAT IS THE DRIVER</b>	<b>WHAT ARE TRANSFORMATIVE IDEAS TO HELP BUILD RESILIENCE IN THE REGIONS RELATIVE TO THIS DRIVER + WHAT GEOGRAPHICAL AREAS ARE OF INTEREST</b>
<i>Neo-ecology</i>	<ul style="list-style-type: none"> <li>• Sustainability evolving to be a major econ factor (from social movement)</li> </ul>	<ul style="list-style-type: none"> <li>• Regen will evolve from a movement to an efficiency driver</li> </ul>	Opportunity	<ul style="list-style-type: none"> <li>• Sustainability credentials for trade + market access</li> <li>• Regen ag</li> </ul>	29. Sustainable use of resources in ag industry 30. Sustainability credentialling - opportunities
<i>Rise of the entrepreneur</i>	<ul style="list-style-type: none"> <li>• Pollinators and Harvest agristart program</li> </ul>	<ul style="list-style-type: none"> <li>• Opportunity to support start up culture and build great regional culture (optimistic, outward looking, opportunity focussed)</li> </ul>	Opportunity	<ul style="list-style-type: none"> <li>• Innovation</li> </ul>	31. Innovation economy and start up community ideas
<i>Equality and Justice movements</i>	<ul style="list-style-type: none"> <li>• South West Native Title settlement</li> <li>• Gender equity and changing role of women</li> </ul>	<ul style="list-style-type: none"> <li>• Opportunity to harness all talent</li> </ul>	Opportunity	<ul style="list-style-type: none"> <li>• Aboriginal Economic Development</li> <li>• Rise of Femeconomy and women in leadership roles</li> </ul>	32. Growth of Indigenous businesses to support growth industries eg. Seedling businesses 33. Role of women leading change in family farms
<i>Pandemics and biosecurity</i>				<ul style="list-style-type: none"> <li>• A less safe world more impacted by cataclysmic events</li> </ul>	34. Biosecurity – disease impact on production – how would you do biosecurity in areas more vulnerable to drought – how could you build resilience?
<i>Well being</i>		<ul style="list-style-type: none"> <li>• Well being of impacted communities</li> </ul>			35. Social capacity and capital as a buffering factors - community events and services critical for resilience

The 35 transformative areas identified from this process were then socialised with each region and priorities identified. 20 key areas of research were identified by the 3 regions as being priorities, and were grouped into 13 overall areas.



**TABLE 2: Research Groupings for Transformative Research areas**

<b>RESILIENT FARMING SYSTEMS</b>	Improving on farm water and feed options
	Building soil health
	Catchment management, rehydration, revegetation
	Drought tolerant crops and breeds + alternate crops
<b>MANAGING NATURAL CAPITAL</b>	Low input cropping options
	Carbon Farming (low rainfall) and Natural capital market opportunities
<b>IMPROVED RISK MANAGEMENT</b>	Other crop opportunities and associated products eg. bush tucker, honey bee production
	Farm Financial and Business planning
	Improving long range weather forecasting
<b>CAPTURING MORE VALUE FROM SUPPLY CHAIN</b>	Access to financial mechanisms during drought
	Aquaculture supply chain development and opportunities
	Increase level of value adding of commodities
<b>DIGITAL RESILIENCE</b>	On farm feedlotting
	Improving telecommunications infrastructure
	Improving digital skills, connectivity skills and data utilisation
<b>WATER RESILIENCE</b>	Improving tech capacity
	Water source, capture and storage
	Water technologies
<b>SUSTAINABILITY</b>	Water system efficiencies – treatment, capture, re-use, water linked to energy
	Sustainability credentialling as an opportunity
<b>RENEWABLE ENERGY</b>	Micro-grid capacity and EV's on farm
<b>WORKFORCE AND HOUSING SHORTAGES</b>	Labour or housing supply opportunities/innovation
	Retaining people in the regions
<b>COMMUNITY RESILIENCE</b>	Supporting community networks and mental health
	Innovation and the start-up economy
	Mining industry growth acceleration and potential linkages
<b>MINING AND AGRICULTURE INDUSTRY LINKAGES</b>	Horticulture
	Tourism
<b>DIVERSIFICATION OPPORTUNITIES</b>	
<b>BIOSECURITY</b>	Innovative options for managing pests, weeds, diseases that will build resilience or reduce vulnerability



# Researching the Transformative areas

For each of these areas, we are researching and identifying the following information:

OPPORTUNITY	DESCRIBE THE OPPORTUNITY	EXAMPLE
<b>Is the option:</b>		<ul style="list-style-type: none"> <li>• Cropping Wildflowers to build natural capital</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Novel</b></li> </ul>	<ul style="list-style-type: none"> <li>• Idea is untested but conceptually feasible</li> </ul>	<ul style="list-style-type: none"> <li>• Idea is novel (NB Great Southern business commercially producing one variety)</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Feasible</b></li> </ul>	<ul style="list-style-type: none"> <li>• Developed idea, prototype in place, but not implemented commercially, no viability assessment</li> </ul>	
<ul style="list-style-type: none"> <li>• <b>Viable</b></li> </ul>	<ul style="list-style-type: none"> <li>• Examples of commercial application exist + can be reviewed</li> </ul>	
<b>What type of option is it?</b>	<ul style="list-style-type: none"> <li>• Policy R+D</li> </ul>	<ul style="list-style-type: none"> <li>• R+D and Adoption</li> </ul>
<b>These categories are linked to the initiatives able to be funded under the Drought Plan</b>	<ul style="list-style-type: none"> <li>• Adoption or Innovation Improving NRM (better soil, vegetation, water or biod man)</li> <li>• Tool / technology</li> <li>• Community on-ground action</li> </ul>	
<b>This would send project to other funders</b>	<ul style="list-style-type: none"> <li>• Infrastructure initiative (enabler)</li> <li>• Commercial options (may not be funded by drought funds, but could consider other funders)</li> </ul>	
<b>Scale of idea</b>	Local <ul style="list-style-type: none"> <li>• Sub \$1M</li> <li>• \$1 - \$5M</li> </ul>	<ul style="list-style-type: none"> <li>• Local \$1 - 5M</li> </ul>
	Sub Regional <ul style="list-style-type: none"> <li>• \$5 to \$20M</li> </ul>	
	Regional <ul style="list-style-type: none"> <li>• \$20 to \$50M</li> </ul>	
	Statewide <ul style="list-style-type: none"> <li>• &gt;\$50M</li> </ul>	



OPPORTUNITY	DESCRIBE THE OPPORTUNITY	EXAMPLE
<b>Dependencies / Intervention req'd</b>	All the things that have to be in place for this idea to work, or barriers, eg: <ul style="list-style-type: none"> <li>• Funding required and matching funds</li> <li>• Approvals/compliance</li> <li>• Barriers to commercialisation</li> <li>• Skills/capacity</li> <li>• Enablers (infrastructure/labour supply)</li> <li>• Market opportunity</li> </ul>	<ul style="list-style-type: none"> <li>• Pilot prototype project to test seed harvesting capacity Identify size of product market.</li> <li>• Identify cost/benefit of investment. Identify which stream of funding is most applicable.</li> </ul>
<b>Impact + how does it build resilience or reduce vulnerability</b>	<ul style="list-style-type: none"> <li>• Reduce costs</li> <li>• Increases income</li> <li>• Creates economic diversification</li> <li>• Decreases or manages risk</li> <li>• +ve on impact social resilience factors (UWA eg. connection, trusted information, increases sense of community, promotes equity)</li> <li>• Builds skills or knowledge</li> <li>• Creates a positive narrative</li> </ul>	<ul style="list-style-type: none"> <li>• Economic diversification</li> <li>• Manages landholder financial risk during drought</li> <li>• Builds natural capital and resilience in natural environment (public benefit)</li> <li>• Builds seed supply chain capacity in region</li> </ul>
<b>Where and how the project would be implemented</b>	<ul style="list-style-type: none"> <li>• Project Plan Costings</li> </ul>	<ul style="list-style-type: none"> <li>• Insert if known</li> </ul>