

## South-West WA Drought Resilience Adoption and Innovation Hub

### Priority projects for the Wheatbelt

List updated 1 September 2022

#### Background

The Situational analyses for the Hub's four agro-ecological zones: Southern Rangelands, Mid West & Gascoyne Coastal, Wheatbelt and South West were developed to document baseline knowledge of drought-related agricultural initiatives that have occurred in recent years and to identify 'gaps' where new opportunities could enhance outcomes in a hotter, drier climate.

Regional Advisory Committees (RACs) have been appointed for each of the four agro-ecological zones in the area covered by the Hub. They are skills-based representatives of agricultural industries. Through their knowledge and expertise, they will provide guidance to the Hub on priority issues impacting the drought and climate resilience of farming systems, their industries and communities.

The workshop was held with members of the Wheatbelt Regional Advisory Committee (RAC) to agree on priority projects to be developed for the Future Drought Fund bid.

The intended outcomes of the workshop were that:

- Priority projects meet FDF guidelines
- Regional and industry need is clearly described
- Targeted consultation and scientific rigour underpins each project

#### Process

RAC members reviewed the project ideas identified by the Situation Analysis. They also added new ideas for potential projects across the eight themes as categorised within the Situational Analysis. All ideas were discussed and areas of duplication identified.

The RAC members then prioritised the project ideas based on the (a) likelihood of the building climate change and drought resilience; (b) addressing regional need; and (c) feasibility of implementation.

The Top 20 ideas across all themes are shown below. Further prioritisation by producers is ongoing as the suite of ideas to be developed into projects as part of a funding bid. RAC members and Node Leads will provide the Top 20 ideas to growers for this purpose.

The situational analyses and project topic lists are draft, 'living' documents and may be refined in the light of further information and changing contexts.

#### Summary

The ideas presented were wide ranging across the drought levers: Best Practice Livestock Management, Business Management, Crop Genetics, Digital Agriculture, New Technologies, Soil Management, And Water Security.

Some of the priority projects identified include improving knowledge and tools available to farmers regarding livestock best practice, whole systems approaches to managing drought, develop grower



business skills through workshops and study tours, improved genetics and diversity of wheatbelt production systems, improving soil management practices, develop landscape and farm water planning and considering future water quality issues.

Idea	Drought Lever
Decreasing ewe and lamb mortality	Best Practice Livestock Management
Look for genuine synergies between crop and livestock enterprises of a farm. (eg. Hay conservation to fill feed gaps in livestock system while at the same time providing a break crop option for the cropping phase)	Best Practice Livestock Management
Year-round water and feed supply	Best Practice Livestock Management
Better understand farmer business attitudes towards managing drought	Business Management
identify triggers for transformation for farm businesses (re climate change and adaptation)	Business Management
Expanding farm business planning beyond production to incorporate Natural Capital Accounting, biodiversity etc.	Business Management
Increased financial, business and climate risk management literacy	Business Management
Showcasing examples of businesses that are performing well in dry years	Business Management
Genetics - seed selection and use (eg. long coleoptile varieties; range of other traits; bush foods, alternative crops)	Crop Genetics
Building industry digital capacity and literacy	Digital Agriculture
Identify how Internet of Things (IoTs) can be used to better manage seasonal variability and create production efficiencies in a drying climate	Digital Agriculture
Remote sensing (eg. pasture growth, crop performance, animal movement, phenology, water)	Digital Agriculture
Diversification of Farming Systems (eg. native species, bushfoods, carbon, off-farm enterprises, trees, etc.)	New Technologies
Machinery development (deep sowing, seeding systems across the farm, moisture retention)	New Technologies
Maintaining the soil resource - wind and water erosion	Soil Management
Soil amelioration practices to enhance WUE (and enable access to deeper subsoil water)	Soil Management
Access to and availability of scheme water (currently connected farms)	Water Security
Farm and landscape water planning	Water Security
Utilisation (and preservation) of summer rainfall (eg transition to episodic summer rainfall system)	Water Security
Water quality	Water Security