GROWER GROUP ALLIANCE
Together we grow

South-West WA
Drought Resilience Adoption and Innovation Hub

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South-West WA Drought Resilience Adoption and Innovation Hub

Priority projects

List updated 23 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.

Workshops have been held with members of the four Regional Advisory Committees to agree on priority projects to be developed for the Future Drought Fund bid. The intended outcomes of the workshops 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 project ideas identified by the situation analyses and added new ideas for potential projects. All ideas were discussed, and areas of duplication were identified.

The RAC members then prioritised 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 situational analyses and priority project documents are draft, 'living' documents and may be refined in the light of further information and changing contexts.

South-West

Drought Lever	Priority theme and (3 or 4) sub-ideas	
Agricultural Practices - Agronomy	• Development of best practice guidelines for managing extreme heat (bringing together aspects of tree canopy structure, evaporative cooling, netting types, irrigation, nutrition, spray-on protectants and other stress reduction products) • Investigation of protected cropping options to manage water and heat stress, including ROI across a number of industries • Situation analysis of various climate scenarios and potential production impacts for crops, biodiversity and possible adaption strategies • Increasing floral resources for apiarists through partnerships with biodiversity plantings • More efficient management of nitrogen including emissions values	Perennial fruit Veg bees

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Agricultural Practices - Livestock	• Extension around how to develop drought resilient shelterbelts and blocks • Extension and Adoption program for various livestock feeding strategies including: economic analysis of feeding strategies, benchmarking and feeding strategies for confinement feeding, drought planning - plan what to do if the season breaks late. • Extension of Pastures from Space program, and existing commodity specific programs to other industries (ie EverGraze, Sheeplinks, FutureSheep project, Rumin8) • Model impacts of climate change on feed grain supply and quality and impacts on intensive livestock production • Issue of feed gap changes and production systems that consider: containment feedlots, forage conservation, forage shrubs,	Sheep Beef Dairy Pig Chicken
	pasture species mixes for higher rainfall areas and across a range of soil types • Examine and consider role of alternative production systems, including the use of shedding systems in WA dairy industry, winter calving, stocking rates with an autumn calving cow with calf at foot • Economics of imported forage vs on-farm forage, including the value of silage over hay, timing of silage cutting, and grain feeding systems when hay is finished • Develop perennial + legume-based pasture compositions for different regions and time of sowing trials to survive summer and various grazing pressures and extend 'shoulders' (autumn and spring) of pasture supply	
Business management	• Improve business capability and benchmarking required for environmental sustainability practices across all industries • Weather, soil and other sensor data capture on-farm and how best to use for decision making • Developing demonstration sites for digital agriculture and data use	Veg Dairy Hort Beef sheep
Carbon footprint	• An education and adoption program for data capture, carbon accounting and sequestration	Dairy Sheep Beef Veg Perennial fruit
Water Management	• Investigate the economics and production impacts of water supply, water quality and potential issues in future climates, including encouraging water testing, stock impacts, use of marginally saline water for irrigation, efficiency of irrigation systems • Improved water capture and conservation options, including dams, roaded catchments, technology options, catchment of surface irrigation water • Improve recycling or reuse options of wastewater from intensive industries	Dairy Sheep Beef Veg Perennial fruit Pigs Chicken Grapes