



SOUTHERN NSW Innovation Hub

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New tools help growers decipher extreme weather forecasts for drought preparedness

Advisors across multiple farming industries are now able to help farmers better understand long term weather data and climate variability through a project led by the Southern NSW Drought Resilience Adoption and Innovation Hub (the Hub).

As the Bureau of Meteorology (BoM) predicts unusually high temperatures for the next three months, southern NSW farmers are preparing for a hotter than average season. The hot summer forecast will make it challenging for producers on many fronts, including animal and pasture health, water supply and increased fire risk.

The Hub partnered with Meat & Livestock Australia (MLA) to develop resources to train almost 40 advisors across six industries to work with farmers to apply seasonal climate forecasts on-farm.

The Forewarned is Forearmed Climate Coaching project is the final stage of the national Forewarned is Forearmed project. As part of this project, funded by the Australian Government Department of Agriculture, Fisheries and Forestry as part of its Rural R&D for Profit program, BoM worked with research and industry groups to develop five forecasting tools focused on heat, cold and rainfall extreme weather events.

In the final phase of this five-year project, the Hub worked with dairy, beef, grains, sugar and wine reference groups to develop industry-specific resources. This included learning resources tailored to farmers as well as pilot 'train the trainer' deliverer and producer workshops across the different industries.

Agri consultant, Tanisha Shields, was one of the project deliverers. She said a critical learning from this project was developing a better understanding of weather forecasts and how forecasting tools can help farmers in the face of extreme climatic conditions.

"These tools enable farmers to plan ahead, beyond the immediate future covered by a typical seven-day weather forecast, to help them make informed decisions based on longer seasonal outlooks.

"Having a better understanding of weather forecasting language, such as medians, averages, deciles and probability, provides growers with more confidence to use long range weather outlooks in their on-farm management decisions."

Ms Shields said feedback from producer workshops highlighted that while farmers were aware of and used the forecasting tools, they lacked the confidence to interpret them accurately.

"That's why this phase in the project is so important – farmers can use these as an additional resource, combining them with other data for more comprehensive decision-making."



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With BoM currently predicting around median rainfall coupled with warmer days and nights, Ms Shields said this may impact how producers approach livestock joining.

“Taking into account the average rainfall forecast and current pasture levels, most sheep producers in the southern NSW region will be going into joining with enough feed.

“The hot temperature forecast will come into play when deciding the length of joining and also potential paddock allocations, such as selecting those with more shelter if heat becomes an issue. If it was a drier outlook or if the higher temperatures continue, you could start to use that information to put some triggers in place for if they reach certain thresholds. That way, you’re making the best decisions you can with the data you have.”

Hub Program Manager Mary Goodacre said increasing the knowledge and confidence in interpreting seasonal forecasts for advisors had flow-on affects, with a typical farm advisor likely to influence 20-50 producer clients.

“The more they use these tools with farmers, the more comfortable and confident they will feel in workshop delivery.

“Plus, the flexible design of the Forewarned is Forearmed workshop package lends itself to be an add-on workshop for other extension activities, particularly activities themed around climate and weather sensitive decisions.”

Southern NSW Innovation Hub is one of eight hubs established across Australia through funding from the Australian Government’s Future Drought Fund to build resilience to drought and form the epicentre of user-driven innovation, research and adoption and facilitate transformational change in Australian agriculture.

To access the BoM long range forecast, visit:

<http://www.bom.gov.au/climate/outlooks/#/rainfall/summary>

For more information on the Forewarned is Forearmed Climate Coaching project, visit:

<https://www.csu.edu.au/research/southern-nsw-drought-resilience-hub/projects/forewarned-is-forearmed-climate-coaching>

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