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# **CLIMED: A NATIONAL CLIMATE-RISK-MANAGEMENT TRAINING COURSE OF VALUE TO RANGELAND INDUSTRIES**

*C.J. Paull<sup>1</sup>, D.A. George<sup>2</sup>, J.F. Clewett<sup>2</sup> and W. Allen<sup>3</sup>*

<sup>1</sup> Qld Centre for Climate Applications (QCCA), DPI&F, 80 Meiers Road, Indooroopilly Qld 4068

<sup>2</sup> PPS, Dept. of Primary Industries and Fisheries (DPI&F), PO Box 102, Toowoomba Qld 4350

<sup>3</sup> AgForce Queensland (Qld), PO Box 13186, George Street, Brisbane Qld 4003

## **THE NEED AND PROJECT OUTLINE**

The Australian climate is one of the most variable in the world. Better understanding of this variability, and how to use seasonal climate forecasts, is essential for maintaining profitable rural industries and managing pasture resources sustainably. The last decade has led to improvements in seasonal climate forecasts and their accuracy, which has helped us with this understanding, and in better forecasting climatic variability. Some graziers are now using this information to improve their drought preparation, resource management and production.

In the past, vocational education and training has not adequately provided for education in applied climate. There was a lack of skilled trainers, resource materials and course content. However, recent accreditation of a new Unit of Competency in applied climate was an important step towards correcting the situation. In response to this situation, the ClimEd Project addressed these issues by developing an accredited national course based on the Unit of Competency, and testing delivery of it. The project was co-led by AgForce and DPI&F Qld. Production of technical material was coordinated by climate-risk-management specialists within DPI&F Qld. A Steering Committee made up of representatives of rural industry, Bureau of Meteorology, technical experts, state agencies and the education / training sector, managed the project.

The aims of the project were to provide a range of training resources, and a process, that assisted agriculture, agribusiness, mining and tourism enterprises with strategic management and planning to address climatic risk. The educational content and process were designed to: satisfy the broad needs of this range of industries; maintain a standard equivalent to the Australian National Training Authority (ANTA) Level 5 benchmark; and cover satisfactorily the elements of competency, and their associated performance criteria, specified in the Unit of Competency RTE5523A–Develop Climate Risk Management Strategies (ANTA 2000).

## **METHODS**

The performance criteria for the Unit of Competency are: surveying climatic and enterprise data; analysing climatic risks and opportunities; and developing climatic risk management strategies. The process for completing the Project included: conducting a needs survey; preparing resource materials; conducting a pilot workshop; training trainers; and evaluating the success of the project by measuring the 'end result' and 'practice change' during the project.

## **RESULTS**

The main outcome was development of nationally-endorsed course materials, for better management of our variable climate for economic, environmental and social benefits. There was also improved understanding of effective learning processes and training delivery.

The materials developed include: Participant Manual; Project Assessment Booklet; Trainer Guide; and Overheads. The Participant Manual covered the following units:

1. *A strategic approach* - investigating climate, weather and business;
2. *Weather and climate* - assessing weather options and evaluating climate processes;

3. *Impacts* - analysing the influence of weather and climate on performance of land and water systems (for example, a pastoral production system);
4. *Options* - exploring alternative options for business and environmental management;
5. *Plans* - developing strategic plans for better management of climatic and weather risk; and
6. *Decisions and actions* - establishing methods to monitor and respond to climate and weather information in business.

## **RELEVANCE AND POTENTIAL VALUE IN RANGELANDS**

There is scope for those in rangeland industries to improve their knowledge and skills pertaining to effective and profitable climatic risk management, through a strategic approach to business decision-making. The ClimEd Program has the potential to improve business management in pastoral industries, and also natural-resource management. Its content is consistent with the needs of pastoral industries, and complements and enhances the training currently available in business management, land management and animal husbandry which may not adequately cover climatic issues.

At all trial workshops, a focused session was conducted on strategic management for climatic variability in pastoral industries, which involved both presentations and discussions with participants from pastoral areas. It covered assessing climatic impacts, and identifying and comparing options for responding to a particular seasonal climate forecast or situation. The following points were highlighted: there is a need to better understand climate and causes of variability; analytical tools and forecasting tools are valuable resources; the pasture/production system and its interaction with climate are complex; and strategic and tactical approaches incorporating climate-risk-management into pastoral business decisions are beneficial.

Participants were trained to use tools and decision-support information available in packages such as Australian Rainman and DroughtPlan (available on CD), and Aussie GRASS (available on Internet). The main areas where this information may improve pastoral decisions are long-term carrying capacities, stocking rates, pasture management, mating, production goals, purchases of feed/supplements, planting pastures/fodder, marketing and cash-flow budgeting.

After June 2004, this Unit of Competency will be offered at selected agricultural colleges, vocational colleges, registered training organisations and tertiary institutions. It will address the needs of those involved in pastoral industries. It is anticipated that participants in a particular course, conducted outside educational organisations, will be engaged in similar enterprises within the same region. Accredited trainers will use mainly local specialists in climatic risk management for technical support. FOR FURTHER INFORMATION contact: Col Paull (07) 3896 9587 or Wendy Allen (07) 3236 3100.

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