STOCKPLAN: IMPROVING DROUGHT DECISIONS

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StockPlan is a computer program for cattle and sheep producers to explore management options
relating to drought. It is designed to be an extension tool to assist producers make management
decisions that minimise the environmental and financial impacts of a drought. This paper aims to
provide an overview of the 3 StockPlan decision support tools: Drought Pack (exploring feeding
options), FSA Pack (exploring “Feed, Sell or Agist” decisions) and Im Pack (exploring herd or flock
dynamics).

A number of decision support tools such as DroughtPlan (QDPI, 2000) and GrazFeed (Freer et al.
1997 and Horizon Technology 1998) are already available to assist managers make management
decisions during drought. However, the authors believe that StockPlan will fill a niche to assist
producers and advisers (i) make strategic decisions before and during drought, (ii) monitor the
financial impact of the decisions they are making, and (iii) make pro-active decisions.

Drought Pack: A windows-based computer program, is an energy-based model (MJ ME/kg fed) that
assesses the cost of feeding and determines the break-even price for specific animal classes. The
nutrition component of Drought Pack performs the critical calculations that are based on several
empirical equations published in AG bulletin 3 (Oddy, 1978). The break-even analysis assists a
producer to determine whether or not to retain stock based on the inputs supplied to the package.
FSA Pack: An Excel spreadsheet, evaluates the cost of feeding, selling or agisting for a specific
livestock category rather than a whole farm analysis. The user specifies up to 4 different drought
lengths, and provides cash cost estimates and “bottom line” estimates. The “bottom line” estimates
include allowances for pasture re-establishment costs, the value of pasture for other enterprises when
an agistment or sell option is chosen, and a projection of stock values over the duration of the drought.
Im Pack: An Excel spreadsheet, assesses the impact of a herd or flock structure. This decision tool
uses a static modelling approach, over a 10-year period, which provides a producer with the
opportunity to assess the structure of the herd or flock after making extra culling decisions in the
drought year. The equations are based around an age and herd structure model for beef breeding
enterprises (Dobos et al. 1997).

The development of StockPlan has employed a strong team approach across a number of disciplines
that has the potential to assist producers make informative and timely decisions before the onset of a
full-blown drought. Multiple runs within StockPlan provide users with a range of strategies that can be
compared. StockPlan will be delivered to producers through a series of workshops that will include the
software on a CD and a comprehensive manual.

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