CHAPTER 27

LIVESTOCK MANAGEMENT DURING DROUGHT

Stock farmers need to have an armoury of strategies at the ready with which to minimize losses caused by drought.

In many regions seasonal drought is a normal and predictable feature of the climate. Although varying somewhat from year to year in severity and duration, seasonal drought can usually be bridged without much difficulty by using feed surpluses carried over from the previous rainy season.

Far harder to deal with are sporadic droughts whose onset, duration and severity are still largely unpredictable and which may be short-lived or reach devastating proportions. These droughts call for an orderly but flexible array of preplanned strategies which can be invoked successively, jointly or as alternative options, as drought worsens. Preparedness is of the essence, for even if intermittent droughts are unpredictable, they are inevitable and will recur time and again.

Sheep farming and extensive cattle ranching are particularly vulnerable to drought as they are usually practised in regions where the rainfall in many if not most years is too low to provide substantial income from crop production or even much in the way of supplementary fodder crops.

At the core of successful drought management is the realization that it must start well ahead of the onset of drought, and continue for some time after the drought has broken, until both the grazing and the livestock have recovered. Some strategies for managing and feeding livestock during drought will therefore be given for each of three phases, namely predrought, early or short drought, and progressive drought. Most of the strategies embody general principles applicable to both sheep and cattle, but will be amplified for each category of livestock where necessary.

Phase I – Predrought Management

Central to good livestock management in regions subject to seasonal or erratic drought is the selection of livestock which are hardy, well-adapted to drought, and acclimatized to the local environment. Animals lacking these attributes are ill-equipped to withstand the stress of frequent, often prolonged drought and heat, deteriorating grazing, and dwindling reserves of feed. Moreover to be profitable under these harsh conditions livestock need to be efficient and economic converters of feed into growth, meat, milk and other products. Enhancing the drought tolerance of traditional beef breeds by crossing them with hardy Zebu and Texan Santa Gertrudis lines has illustrated strikingly how much can be done to improve and stabilize livestock productivity in the face of frequent drought.

Having decided on the most appropriate and promising livestock breeds or crosses, the next step is systematically to select those males and females which are most likely
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Endowing their offspring with attributes which will help them through droughts. Thus bulls with a marked ability to utilize fodder effectively - manifested in rapid growth to a good size - should be earmarked for breeding as this trait is hereditary and likely to be transmitted to the offspring. Sturdy calves with a high weight at birth should be singled out as likely to be more resilient than weak ones. Similarly cows with a high milk yield to help their calves attain a high weight at weaning, should be earmarked for breeding. Endowing livestock with qualities such as these to help them cope with drought, should start well in advance of a possible drought, that is, not only in the previous season but in previous generations. The ongoing process of herd improvement by judicious selection, breeding and management is a cornerstone of efficient and sustainable stock farming not only in good years but also during drought, and should become long-term policy. Wise stock breeding, feeding and management in years of good rainfall will pay off handsomely in drought years as well, for animals entering a drought in peak condition are better able to ride out a period of deprivation than animals which are already below par at the onset of drought.

A judicious mix of livestock (say cattle, sheep and goats) may utilize available grazing and browse more effectively than would only one class of livestock. However, this calls for strict control to avoid excessive competition for the available feed.

Above all, it is crucial to resist the temptation to overstock in good years ahead of drought, as heightened pressure on the dwindling reserves of grazing during drought can lead rapidly to a near-irreversible decline in the condition of both the grazing and the livestock. Instead, the stocking rate should be maintained as near as possible to the long-term carrying capacity of the farm, which can be gauged by experience or be ascertained from competent agricultural advisers.

It is equally vital to resist the temptation to overcapitalize in years when the rainfall is above normal, as this is likely to increase financial loss and cause serious retrogression of both the overstocked rangeland and the animals during drought. A fairly stable and conservative stocking rate at all times can help not only to maintain a plant cover of good density and species composition but can yield surplus feed in good years which can serve as a buffer against recurrent drought. This surplus growth can be cut for hay to form a fodder bank or be sold to build up drought contingency funds, or be made into silage.

As natural grazing is usually by far the cheapest form of feed, it is vital at all times to try to minimize retrogression in the composition, productivity and quality of rangeland. Principles of sound grazing management are dealt with in greater detail elsewhere but include maintaining rangeland and planted pastures in peak condition between droughts, and dividing the grazing into sectors (camps) which are grazed in rotation so as to give each one a periodic rest period in which to reseed or tiller.

The degree to which the number and siting of watering points for stock influence utilization of rangeland is not always appreciated. Watering points should not be sited haphazardly but at points which will spread the grazing animals more or less uniformly over the entire grazing area. Allowing livestock to congregate at only a few watering points can lead not only to serious denudation and erosion around them but to understocking of large expanses of grazing which lack water.

Establishment in good years of drought-resistant, perennial fodder crops such as spineless cactus and saltbush, also fodder, browse and shade trees, can pay excellent dividends during drought by keeping stock in good condition when natural grazing is