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Making quality silage

This chapter:

Explains the benefits of conserving excess forages as silage, the important principles of consistently making quality silage and how to calculate the size of the silage storage.

The main points in this chapter:

The 10 steps to making quality silage are:

- harvest the forage when excess to feed requirements and high in quality
- wilt the forage to 30% DM
- add a fermentable substrate at ensiling
- chop the forage into short lengths (1–3 cm) before ensiling
- compact the forage as tightly as possible
- complete the entire storage as quickly as possible
- seal storage air tight as soon as possible after filling
- maintain airtight seal until feeding out
- feed out a whole face of the storage to a depth of at least 20 cm each day
- if the silage is unsatisfactory, determine the reason for the next season.

Silage allows the long term storage of a variety of wet agro-industrial by-products.

Excess forages can be conserved as hay or silage. However, ensiling generally produces better quality roughage than hay because less time is required to wilt the feed, when the forage loses nutrients, causing a reduction in feed quality. Hay making requires a longer period of rain-free days, which are often rare in the tropics during the wet season when feed excesses generally occur. This manual will not discuss hay making.

The principles of silage making are the same regardless of size of operation, the major difference being in the type of storage used (Mickan 2003). However, the