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Growing quality forages

This chapter:

Explains the milk production benefits from growing quality forages to reduce the level of concentrate fed to milking cows. The management of forages should aim to optimise both yield and quality.

The main points in this chapter:

- home grown quality forages usually provide the cheapest source of energy for milking cows
- milk responses to improving forage quality can be very large, up to 4 L/cow/day
- the four basic principles of growing good quality forages are:
  1 select the most appropriate forage species for the region
  2 prepare the forage production area for sowing
  3 manage the crop with adequate fertiliser to optimise growth and quality
  4 harvest the crop at the best stage of maturity for nutritive value.

Although this manual is specifically about feeding dairy stock, chapters have been included about growing and conserving quality forages. The key to profitable small holder dairying is to utilise sown forages first and then supplement milking cows with concentrates and other forages to overcome shortfalls in nutrients to achieve target milk yields.

Economic pressures decree that small holder dairy farmers zero graze or 'cut and carry' the forages to their stock. Usually, when cut forage is given, the nutritive value of forage is inferior to that grazed by stock, when they can select a better quality diet of leaves and less mature stems. Therefore, grazing cows have better milk production and reproductive performance than stall-fed cows. Aminah and Chen (1991) concluded that in the tropics, grazing systems can yield 15% more milk (9,700 versus 8,400 L milk/ha per year), which may partly explain the low milk yield of small holder dairy farmers.