If you are interested in planting Fodder Shrubs, contact your local seed dealer, extension staff, research officer, or ask farmers who have planted fodder shrubs.

**FODDER SHRUBS HELP YOU:**

- Earn more money from milk production (by up to Ksh. 7000 per year).
- Nurture healthier cows, goats and chickens (even during droughts).
- Each markets assuredly with higher quality milk.
- Improve your income by selling seeds, seedlings, and leafmeal.
- Control soil erosion.
- Harvest more honey from your beehives.
- lessen your work load with ready source of fuel wood.
- Invest in other activities with money saved on commercial feeds.
-italize and fertilize your soil with better manure and litter fall.
- Enhance the beauty of your farm.
- ave your land by establishing boundaries around your property.

Fodder shrubs, such as **Calliandra, Mulberry, Tricandra, Sesbania, Grilicidia & Tree Lucerne**, grow well in a wide range of environmental conditions.

**BENEFITS REALIZED WITHIN THE FIRST YEAR AFTER PLANTING!!!**

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Planting Fodder Shrubs

Nurseries should be established 2-3 months before the long rains (December & January) and the short rains (August & September).

Make a nursery of 1m (3 ft) wide by any appropriate length for calliandra, trichandra and tree lucerne. Ensure the nursery bed is free of weeds and use well-decomposed manure. Add some fresh ash to keep off the pests. Water your seedlings every day in the late evening. Keep livestock away from the nursery to avoid destruction of the seedlings.

During the long rains (March to May) and the short rains (October to November), transplant the seedlings at the onset of the rains to ensure proper establishment and growth. The spacing of seedlings should be about 0.5 m (1 1⁄2 ft) between the shrubs. Mulberry cuttings can be planted directly into the field using the same spacing.

Managing Fodder Shrubs

Use sharp objects such as a sickle, secateurs, or a panga to harvest fodder shrubs to avoid damage of the plants.

- During the first 7 to 9 months after planting the seedlings, start harvesting the shrubs at a uniform height of about 1m (3 ft).
- Harvest each shrub every 8 to 12 weeks.
- Apply well-decomposed manure at the onset of the long rains every year.
- For seed production, leave one shrub uncult for every 20 m (60 ft). Ensure that you have at least 30 shrubs for seed production.
- To promote new growth of the shrubs, cut them back to about 15 cm (6 in) after 6 years.

Feeding Dairy Cows and Goats

3 kg fresh material fodder shrub material gives roughly the same milk yield as 1 kg dairy meal.

- Harvest and feed one part tree fodder (mix with other protein rich materials such as desmodium or lucerne to grasses).
- If tree fodder is fed without dairy meal, feed 6-10 kg fresh fodder per cow per day. (A load of fodder that is placed on the shoulder and held by the same hand or a load held under the arm pit is about 6-10 kg).
- To feed one cow 6-10 kg per day, the farmer needs to have about 500 shrubs and to feed one goat 0.5 kg - 1 kg per day, the farmer needs about 100 shrubs.
- Fodder Shrubs can also be fed to other animals like rabbits and chicken to improve production.

Making Leaf Meal from Fodder Shrubs

If the farmer has plenty of shrubs, leaf meal can be made during the wet season, when leaf production is high, for storing and use during the dry season.

- Harvest the shrubs during the rainy season when there is plenty of leafy materials.
- Dry the material in the shade for 2-4 days until they are dry enough to crumble in your hand even though they are still green.
- Remove and discard sticks and other non-leafy materials.
- Loosely pack the leafy materials in bags that let the air circulate, such as sisal bags. Do not use plastic materials.
- Store in a cool dry place.
- Feed about 2-3 kg of the leaf meal per cow per day. (An empty 1 kg cooking fat container - holds about 0.25 kg of leaf meal).
- Leaf meal can also be used to make home made dairy rations by mixing it with other energy concentrates such as bran.

For more information, contact the AP³ team through:
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