

COMMERCIAL GREEN FODDER CULTIVATION

A SCALABLE MODEL FOR FODDER ENTREPRENEURSHIP

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PROBLEMS/CONSTRAINTS

- Goa faces an acute shortage of quality green fodder, with a 49% deficit in green fodder, 50% deficit in dry roughages, and 93% deficit in concentrate feed. Existing feed resources meet only about 40% of the state's fodder requirement, forcing dependence on fodder imported from neighbouring states and constraining sustainable dairy farming.
- Limited availability of quality planting material of improved, high-yielding fodder varieties has restricted the large-scale adoption of scientific fodder cultivation.
- The persistent shortage of green fodder has created a strong and assured market among dairy farmers, commercial dairy units, and *goshalas*, presenting an excellent opportunity to develop green fodder cultivation as a commercially viable agricultural enterprise.
- Centralized commercial green fodder production by farmers or entrepreneurs, including those without livestock, offers a promising enterprise opportunity along the west coast. By supplying fresh green fodder and quality planting material to dairy farmers, these enterprises can bridge the fodder demand-supply gap while generating a sustainable source of farm income.

INTERVENTIONS

- Facilitation of a supply of 10,000 quality root slips of the high-yielding Bajra-Napier Hybrid 'Super Napier' from ICAR-Indian Grassland and Fodder Research Institute (IGFRI), Regional Research Station, Dharwad, enabled the establishment of 2 acres of commercial green fodder in *Kharif* 2023.
- Provided the farmer with the complete scientific package of practices for green fodder cultivation, including land preparation, planting, nutrient management, irrigation scheduling, harvesting, and fodder management.
- Delivered continuous technical guidance and need-based advisory support, enabling efficient crop management and optimum fodder production under the lateritic soil conditions of Goa.



Fig 1: Planting of super napier stem cutting at a spacing of 90 cm x 90 cm



Fig 2: Vigorous regeneration and field performance of Super Napier after the first harvest.

IMPACT

- Commercial success in the first year: The farmer harvested 105 tonnes of green fodder in four cuttings from 2 acres, generating a gross income of ₹3.90 lakh by selling fresh fodder at ₹3.50-4.00 per kg, clearly demonstrating the economic viability of commercial green fodder cultivation.
- Rapid enterprise expansion: Driven by strong market demand and attractive returns, the farmer expanded the fodder cultivation area from 2 acres (2023) to 12 acres (2024) and further to 20 acres (2025), successfully transforming a small-scale initiative into a thriving commercial fodder enterprise.
- High productivity and year-round income: Under assured irrigation, the fodder crop consistently produces 150-200 tons of green

COMMERCIAL GREEN FODDER PRODUCTION FOR HIGHER INCOME

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fodder per hectare per year, ensuring uninterrupted fodder supply and a dependable source of year-round farm income.

- Strong market demand: Fresh green fodder is marketed at an average price of ₹4.00 per kg, with average daily sales of around 4 tons. Demand remains robust throughout the year, increasing after the monsoon and peaking during the fodder-scarce months of April and May.
- Mechanization for efficiency: Adoption of a high-capacity mechanized fodder chopper by farmer significantly improved harvesting efficiency, reduced labour requirements, and enhanced the ease of fodder transportation and feeding.
- Catalyzing technology dissemination: The farmer has emerged as a reliable supplier of quality fodder planting material, distributing root slips of improved fodder varieties to neighbouring farmers and accelerating the adoption of scientific fodder cultivation across the region.
- A scalable model for fodder entrepreneurship: This intervention demonstrates that centralized, market-oriented green fodder production is a scalable enterprise model for the west coast. It strengthens fodder security, bridges the demand-supply gap, reduces dependence on fodder imports, generates year-round income and rural employment, and promotes a resilient, climate-smart fodder value chain.



Fig 3: Reaping the benefits: High-yielding green fodder harvested for commercial marketing and dairy feeding.



Fig4: Mechanized fodder harvest handling: tractor loading and chopping for convenient fodder handling and transport

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