

# Quality Fodder Seed Production



**An important determinant to enhance  
fodder production**

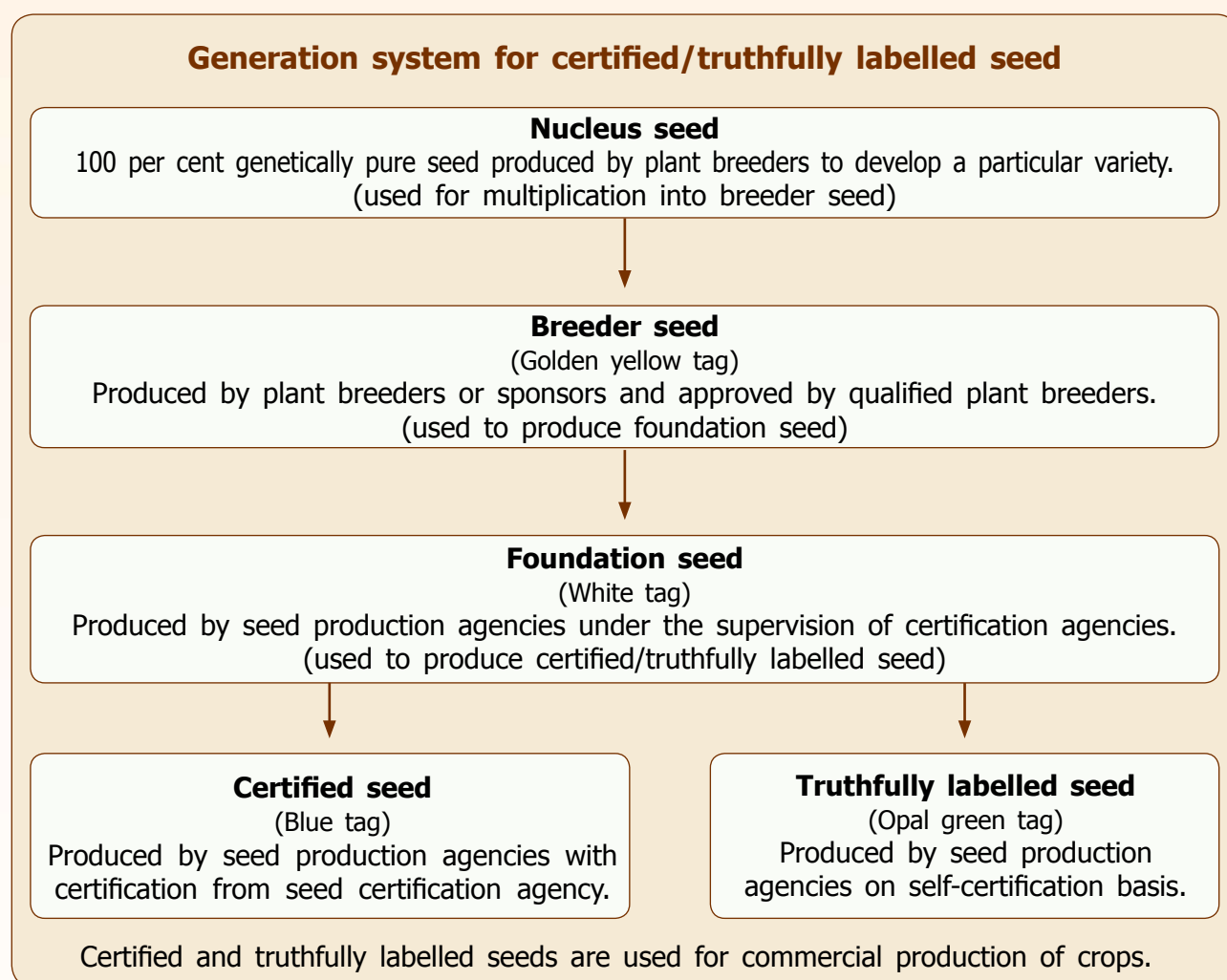


**National Dairy Development Board  
Anand**

## Introduction

Seed is the most critical and important input to enhance the production potential of all agricultural crops, including fodder. The efficacy of other inputs is largely dependent on availability and timely sowing of quality seeds of improved genetics. Therefore, an assured supply of fodder seeds of improved varieties/hybrids to farmers at a reasonable price is crucial for enhancing fodder production.

In India, fodder is produced from 9.38\* million hectares of cultivated and 11.04\* million hectares of permanent pasture land with an average yield of 40.0 and 0.75 tonnes/hectare respectively, which is much lower than the potential yield. Inadequate production and supply of quality fodder seeds of high yielding varieties/hybrids is the main reason for this low fodder yield. NDDDB is assisting dairy cooperatives to facilitate production and marketing of quality fodder seed.



## Seed quality

Fodder seeds of improved varieties should have good germination and vigour, resistance to diseases and have potential to give a high and stable yield. The seeds – properly treated, bagged and labelled – should have safe levels of moisture content, be relatively free from physically damaged and diseased seeds and also be free from seeds of other fodder varieties, crops and weeds as well as inert material.

\* Directorate of Economics & Statistics, Department of Agriculture and Cooperation, Ministry of Agriculture, Government of India

## Role of organisations/individuals in quality fodder seed production and marketing

- 1. National Dairy Development Board:** Supports production agencies by organising supply of breeder seeds of improved varieties from the Union Ministry of Agriculture/Indian Council of Agricultural Research, arranging for funds to create the necessary infrastructure and in training manpower. It also assists production agencies to market surplus certified/truthfully labelled seeds.
- 2. Production agencies:** They are organisations that produce and market quality fodder seeds on a financially self-sustaining basis e.g. state dairy federations, milk unions and NDDB managed farms viz., Animal Breeding Centre, Salon and Sabarmati Ashram Gaushala. They carry out the following activities:
  - Collect advance data from milk producers regarding their requirement for fodder seeds for a five-year span.
  - Ascertain annual requirement of breeder/foundation seed on the basis of the above data and send indent for breeder seed to NDDB three years in advance.
  - Arrange for procurement of breeder and foundation seeds and organise their further multiplication – breeder seed into foundation seed and foundation seed into certified/truthfully labelled seed – through registered seeds growers under a buy-back arrangement.
  - Provide technical guidance to seed growers to produce quality seed.
  - Own and manage seed storage godown, office-cum-seed testing laboratory and seed processing area – containing equipment such as seed-cleaner-cum-grader, specific gravity separator, seed treater, machines for weighing and packing and other miscellaneous facilities.
  - Organise field inspection and procurement of raw seed.
  - Undertake seed processing, grading, treating, packing, weighing, labelling, certification and storage.
  - Supervise and approve the production of truthfully labelled seed.
  - Market certified/truthfully labelled seed to milk producers at a reasonable price.
- 3. Seed growers:** They are farmers and organised farms – having adequate irrigated land – who are registered with seed production agencies and produce quality seeds under a buy-back arrangement.
- 4. State seed certification agencies:** They are autonomous bodies of state governments set up in 21 states to monitor and approve the quality of foundation and certified seeds at the request of production agency. In other states, this responsibility is with state agriculture departments.

## Quality control

The quality control measures taken up by state seed certification agencies/production agencies include field inspections and laboratory tests.

Field inspections are carried out at different stages of the seed crop to ensure genetic purity and maintain the minimum standards for isolation distance, off-type plants/ear-heads, other inseparable crop plants, objectionable weed plants and plants affected by seed-borne diseases.

The processed/graded seeds are tested in any of the approved seed testing laboratories of state governments to maintain the seed standards for physical purity, other crop seeds and other distinguishable varieties, weed seeds, objectionable weed seeds, germination and moisture.



## Fodder seed production agencies in the cooperative sector

Production agency		Fodder seed
Andhra Pradesh	Guntur Dist. Milk Producers' Mutually Aided Co-op. Union Limited, Vadlamudi, Guntur	Sorghum sudan hybrid (multi-cut), Cowpea
Bihar	Mithila Dugdh Utpadak Sahkari Sangh Ltd., Harpur Alowth, Samastipur	Oats, Maize
Gujarat	Baroda District Co-operative Milk Producers' Union Ltd., Vadodara	Sorghum, Cowpea, Maize, Oats, Lucerne
	Sabarmati Ashram Gaushala, Bidaj Farm, Bidaj	Lucerne, Oats
Karnataka	The Bangalore Urban & Rural Dist. Co-op. Milk Producers' Societies Union Ltd., Bangalore	Maize
	The Kolar District Co-operative Milk Producer's Societies Union Ltd., Kolar	Maize
Madhya Pradesh	Bhopal Sahakari Dugdh Sangh Maryadit, Bhopal	Berseem, Oats
Maharashtra	Solapur Zilla Sahakari Dugdh Utpadak Va Prakriya Sangh Maryadit, Solapur	Maize, Sorghum
Punjab	The Punjab State Co-operative Milk Producer's Federation Ltd., Fodder Seed Processing Plant, Bassi Pathanan	Maize, Cowpea, Guar, Berseem, Oats, Chinese cabbage
Rajasthan	Rajasthan Co-operative Dairy Federation Ltd., Unit Seed Processing Plant, Bikaner	Guar, Cowpea, Sorghum, Oats, Berseem, Lucerne
Uttar Pradesh	Animal Breeding Centre, Salon, Raebareli	Sorghum, Cowpea, Oats, Maize
	Seed Production, Processing and Marketing Unit, Pradeshik Cooperative Dairy Federation Ltd., Aligarh	Cowpea, Sorghum, Oats, Berseem

## Benefits of quality fodder seed production and marketing

### To farmers

- Farmers get quality fodder seed in time at a reasonable price.
- Quality fodder seed ensures increase in fodder production leading to improved milk production and reduced feeding cost.
- Better agro-climatic suitability of the locally produced fodder seed ensures good fodder yield. It is advisable for farmers to go for outside purchase of only those seeds which require specific agro-climatic zones for production.

### To seed growers

- Increases their income as they get a premium on production of fodder seed.

### To production agencies

- Reduces the cost of seed by minimising long-distance transport.
- Ensures self-sufficiency in quality fodder seed supply.
- Enables earning a small profit from this programme.



Oats seed crop



Seed processing unit



Labeled fodder seed