



Dept OF LPM

SCARCITY FODDER

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SCARCITY FODDERS

- ▶ It results due to flood or drought and even during normal years- shortage of animal feed is upto 60%.
- ▶ Ruminants due to large body size need high quantity of dry fodder.
- ▶ So need to find out roughage substitute

TYPES OF SCARCITY FODDER

- ▶ Failed crops
- ▶ Crop residue
- ▶ Vegetable crop residue
- ▶ Non traditional plants
- ▶ Plant oriented wastes
- ▶ Agroindustrial wastes & unconventional feeds
- ▶ Vegetable & Animal Protein sources

FAILED CROPS

Whenever failure of monsoon causes, the existing crops fail to grow & can be utilized for feeding the animals during scarcity.

- ▶ Sugarcane- After making silage, untreated silage provides 4% DCP & 48% TDN on DMB. cane products-Leave tops, baggasse & malasses are used.
- ▶ Banana- Leaves, stem, flowers etc
- ▶ Papaya- Leaves high in CP and calcium Stems fed after removing skin .

CROP RESIDUE

- ▶ These are available from crops of previous yrs.
- ▶ Hulls & husks are fibrous materials.
- ▶ Mustard plant parts (stem, leaves, pods) rich in protein & calcium
- ▶ Stalks of cotton, Pigeon pea & other similar crops are used.
- ▶ Crop residue such as Straw of wheat & paddy can be used afterri storing in fodder bank.
- ▶ Improved straw by urea treatment.

VEGETABLE CROP RESIDUE

- ▶ Crop residue of veg such as cabbage, cauliflower, sweet potato top & leaves, pod cover of legume crops etc can be used.
- ▶ These are high in CP (11-20%) & calcium. They also provide carotenes.

NON TRADIOTIONAL PLANTS

- ▶ Some plants that come up in little rain in beginning of monsoon can be used
- ▶ cassia tora can be used after making silage.
- ▶ Cactus after burning of thorns.
- ▶ Water hyacinth is high in CP & oxalates can be used after mixing with 20% molasses.

PLANT ORIENTED WASTES

- ▶ Saw dust as bulk provider to animals
- ▶ It can be fed at the rate of 30 % in high urea molasses and maize bran ration for short term feeding during scarcity to satisfy hunger.
- ▶ Paper – as made of cellulose – digestability 50-60%
- ▶ Fallen dry leaves from forest and roadside trees , Fresh leaves is high in CP and Ca can be used after grinding and mixing with molasses ,urea, salt, min mix etc in complete feed.

Agro-industrial wastes and other conventional feed

- ▶ Besides tree leaves other by products such as flowers ,fruits and pods can be used
- ▶ Important trees where by products can be used are subabool ,mango ,tamarind etc
- ▶ Mango seed kernels can be used upto 10,20 and 40% in concentrate.
- ▶ Subabool seeds, tomato waste, neem seed cake , etc are useful during scarcity.

Use of Molasses

- ▶ By product of sugar industry
- ▶ Used as source of energy .Apetiser , to reduce dustiness of ration, binder for pillet, stimulates rumen microbes activity, carrier for NPN and vitamins, trace minerals, etc.

Vegetable protein sources

- ▶ Sunflower meal –decorticated sunflower seedoil meal is good for poultry with other proteins.
- ▶ Guarmeal – good source of protein.
- ▶ Niger cake – as replacer of GNC in poultry ration.
- ▶ Karanj cake – as replacer of Til cake upto 30 % in feed.
- ▶ Neem cake – 34% protein, a.a cysine and methionine comparable to GNC .

In ration upto 15 – 20% level

- ▶ Rubber seed cake – 30% protein , used 10-20% in ration.
- ▶ Sunhemp seed – fed as fodder.

Animal protein Sources

1) Hatchery by product meal

- ▶ Liver residue meal
- ▶ Frog meal
- ▶ Dried poultry manure
- ▶ Cow dung meal
- ▶ Crab meal
- ▶ Poultry product meal
- ▶ hydrolysed poultry feather
- ▶ Squilla meal
- ▶ Processed feed ensilage

THANKS

