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Popular Article

Feeding of Livestock During Scarcity Period

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Abstract

Shortage of feed and fodder is more common in drought prone areas of our country due to acute crop failure in dry seasons. The scarcity of fodder brings misery to the population of livestock affecting its overall health and production and leading to nutritional deficiencies and other diseases. There is even scarcity for drinking water which further aggravates the situation.

Introduction

The main focus on feeding livestock during drought or fodder scarcity periods is to meet out the nutrient requirements of the animals and preventing nutrient deficiency, thereby maintaining production. To ensure that the animals must have adequate energy, protein, minerals and vitamins. Secondly, these nutrient requirements must be met by the available feed during the scarcity period.

Most important nutrients to be taken care of during a drought

Energy

Energy is the most limiting nutrient for grazing animals during scarcity period. Alternative energy rich feed resources must be included to feed the animals to meet out the energy requirements. Hay, grain and crop processing byproducts can be used to supply energy. Poor quality forages can be processed and various physical, chemical and biological methods can be adopted to improve the nutritive value and digestibility of low-quality forages.

Protein



Under drought condition, the pastures and forages are may be deficient in protein. In case of deficiency of protein, reduction in pregnancy rate may occur and also decrease the production of the lactating animals. This can be corrected by supplementing protein in the form of protein-rich feed resources or by supplying nitrogen in the form of non-protein nitrogenous feed resources. Urea is one of the most widely used non-protein nitrogen sources used for improving the crude protein level of the poor-quality roughages.

Minerals

The requirement of minerals and salt is same for the animals in drought as during the normal conditions. However, during drought the requirement of phosphorus is increased and more critical. A mixture of 50 % trace mineralized salt and 50 % DCP can be supplied free of choice to meet out the demand. The salt mixture is placed closed to watering locations.

Vitamin A

Vitamin A is the most common deficient vitamin among the animals that were grazing on the drought affected pastures during the dry season. Animals should receive vitamin A and vitamin D supplements for proper maintenance and production.

Feeding technologies that can be employed in scarcity periods

1. Use of sugarcane bagasse

Bagasse is a byproduct of sugar factories that can be used as livestock feed during scarcity. Though it is unpalatable, it can be treated with urea-molasses mixture to improve palatability, digestibility, energy and protein content of the feed. The mixture can be sprayed over the bales of bagasse or watering can also be used. Proper mixing and soaking are to be ensured.

2. Urea treatment of crop residues like straws, gotars, sugarcane residues can be followed.

Urea supplementation at 2 – 4 % of straws can improve palatability, digestibility and its nutritive value. Straws like rice, wheat, ragi, jowar, bajra can be used.

3. Urea molasses liquid feed

Liquid molasses containing 2 to 3 % uniformly mixed urea fortified with minerals and vitamins.

4. Uro-mol Brick feeding

It plays an important role in drought-prone areas by supplying nitrogen to the microbes in the rumen and improving digestibility. It can also be packed and transported easily to the areas of



necessity.

5. **Uromin lick** It is also called “Pashu Chaat” that contains urea, molasses and minerals and certain fillers like de-oiled rice bran, maida and feed binder.
6. **Top feed resources** such as tree leaves, pods, bark etc. play an important role in drought conditions. Tree leaves are good source of protein, calcium and vitamin A. it is palatable and can replace green fodder to meet out the nutrient requirements.
7. **Vegetable leaves** like cabbage, potato, cauliflower and fruit wastes like apple pomace, citrus peels, banana peels, mango kernel, coconut pith can also be used in livestock feeding.
8. **Paper waste**

Paper waste made of cellulose (70%) helps in filling up the stomach and satisfy the hunger cravings. Complete feeds can be prepared by including other concentrates to maintain the animal during scarcity.

9. Complete fed blocks

The blocks are made with concentrates like wheat bran, rice bran, mustard or groundnut cake supplemented with urea, molasses, minerals and salt. The blocks can be prepared and stored during the drought.

10. Aquatic plants

Various types of aquatic plants like water hyacinth, water chestnut, stalks and leaves of lotus plant, hydrilla, aquatic weeds are may be used for livestock feeding of farm animals. They are readily available in water logging areas and during floods and are rich sources of carotenes.

11. Creation of feed and fodder bank:

To meet the needs of livestock during adverse condition of scarcity, it is essential to create feed and fodder banks. Grasses and crop residues from forest area, harvesting lands or waste lands can be collected, preserved and stored as hay.

Conclusion

The natural calamities play a havoc in the health of animals and in livelihood of farmers. Adopting newer strategies and promoting unconventional feeds in feeding livestock is the most ideal choice of mitigating the unfavorable circumstances.

