

## **Economics of Guar Korma Based Ummb Formulation Using Local Ingredients in Semi - Arid Rajasthan**

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### **Abstract**

Economics of guar korma based UMMB was investigated using local ingredients. Ingredients used were molasses, deoiled rice bran, guar korma, urea, mineral mixture , common salt and cement.

**Keywords:** Urea-molasses-mineral-block; Guar korma; Economics; Milch livestock; Local ingredients.

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## Introduction

An experiment was planned and conducted to explore, economics of formulating UMMB based on locally available ingredient of Jaipur region. The multi-nutrient block was formulated on the basis of availability and cost of local ingredients. The principal ingredients are rice bran and molasses. In general, deoiled rice bran which is the major component of the block is available in almost all parts of the country throughout the year. Guar korma is also available in semi-arid region of Rajasthan. Molasses, a by-product from sugar factory is also available in all regions even if it is far away from the factory. Other ingredients like urea, salt, cement and minerals are commercially available. Use of urea as a non-conventional source of non-protein nitrogen for ruminal micro-organisms. **UMMB used as a feed supplement for ruminants.**

## Material and Method

Ingredient selected were molasses, deoiled rice bran, guar korma, urea, mineral mixture, common salt and cement. UMMB was prepared with above ingredient in proportion of 50% molasses, 20% deoiled rice bran, 5%g Guar korma, 5% cement, 10% urea, 5% mineral mixture, 5% common salt (35.73 % CP and 49.40% TDN).

All the ingredients were weighed separately in an electrical balance before mixing. Liquid molasses was heated up to boiling temperature for 2-3 minutes for killing the micro-organism and easy mixing of ingredients with urea and for setting. Molasses was weighed again as the moisture was lost. Urea was broken down to ensure proper mixing and to avoid toxicity problem then urea was added to the molasses and is thoroughly mixed. Then, mineral mixture, Guar korma, DORB and salt were added and mixed continuously. Water and cement were added in the ratio of 2:4 to make which is then added to molasses mixture and thoroughly stirred to obtain a consistent paste and prepared UMMB using hydraulic pressure by UMMB machine at 1000 psi.

## Result

Taking in to account, cost of ration, electricity and labour, cost of UMMB formulation comes around 17 Rs. per kg. It is concluded that UMMB can be prepared economically using guar korma and local ingredients to maintain milch livestock during scarcity period.

## Conclusion

The cost of the UMMB normally would be less than the other concentrate meal, and the use of urea obviously as an economical replacement for a part of protein in a ration.

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