

POST SCRIPT

The Undertaking of UMB Production in Kathmandu Valley: Preliminary Observation

Information on the prevailing situation of livestock keeping in Nepal primarily indicates that the production performance of farm animals can be greatly improved by adopting a simple feed utilisation technology: urea molasses' block supplementation. It has been proved that feeding UMB to livestock plays a significant role in the use efficiency of straw for better animal production in the tropical and subtropical areas of Nepal, where the available feed for ruminants is limited to cereal straws.

Keeping in mind the background, a preliminary survey was made regarding whether entrepreneurs would be interested in launching UMB production. In this context, Ratna Feed Industry (RFI), located at Balaju in Kathmandu, was contacted. Their response to having a pilot-scale project on the preparation of UMB was instantaneous and enthusiastic.

In fact, RFI was also considered to be the most appropriate industry to introduce UMB production on a pilot scale. It is equipped with all the prerequisites and necessary infrastructure needed; e.g., mechanical mixers, drying oven, suitable space, and the basic ingredients needed for UMB production. It was also agreed that the required materials and facilities would be provided by the industry and that the product would be part of their product line.

The procedure recommended above for the preparation of UMB was principally followed with minor changes in some ingredients; wheat bran was totally replaced by boiled rice bran since the former is much more expensive than the latter and is not easily available in Kathmandu.

Wooden frames for moulding UM mixtures into brick size blocks were constructed locally. The preliminary preparation of UMB was commenced in February 1992 at Thecho, Lalitpur, where all the required facilities were made available. Altogether, about 250 UMB weighing 2.5 kg each were prepared by using a small electric drier, which could accommodate eight blocks at a time. This meant that only eight blocks could be produced per day. Therefore, it was decided to dismantle and reconstruct an old incubator to produce a drying oven that could accommodate more than 100 blocks at a time. The large size drying oven is now ready for use.

Feeding Demonstration

UMB, thus prepared, were fed to cows, buffaloes, and goats in the pastures and on a Balaju farm owned by the RFI proprietor who had some Jersey and Holstein-Freisian cows. More than 16 local farmers were involved in the short duration feeding demonstration at and around Thecho village. In all cases the UMBs were hung with a rope within the reach of farm animals at all times. Each farmer received one to four UMB for the test.

It was repeatedly reported that the daily straw intake of cows and buffaloes substantially increased, i.e., from five kg (without UMB) to eight kg (with the provision of UMB). On an average, the cows and buffaloes took a daily intake of 400 grammes and 600 grammes respectively. One farmer (Mr. Gopal Shrestha) observed an increase in the milk yield of a Jersey cow when she was continuously given UMB for 16 days. Other farmers who offered UMB for less than a week did not notice any change in milk production. But in all cases it was claimed that there was an immediate positive response to straw consumption in cows.

At the Balaju farm, UMB were given to one Jersey and three Holstein Freisian cows for almost a month. All of them were basically fed on straw and concentrate-based diets. It was observed that among the four cows, the daily straw consumption increased from two *bhari* (15 kg = one *bhari*) to three *bhari* and the milk yield increased from 34 to 40 litres per day. These cows were given a new block every four to six days. The daily amount of concentrate feed for each cow was kept constant throughout the observation period.

Currently, there are about 100 blocks in stock. Further production of these blocks has been delayed for some time due to some formalities to be fulfilled before marketing this product. Advertisements directed at wholesale dealers have already been published in "Krishi Dairy" and other additional appropriate avenues of publicity will be made as soon as details regarding proper packaging of blocks are complete. It has been decided to cover the final block with printed wax paper to make it air tight. Necessary proof-reading sample and advanced payments have already been made for processing the wax paper with the label describing the type of product and its use. The final product should be launched within a month.

Expected Cost of UMB

As per the basic formula of UMB mixture, the tentative cost of raw ingredients alone may cost about five to six Rs/kg. However, it is expected that the initial overhead cost will be much higher than estimated. Much of the overhead cost depends on advertisement and publicity. However, preliminary indications show that the final selling price could be between Rs 9 and Rs 10/kg. This cost can vary based on the demands for UMB in the market. Farmers' demands for UMB will depend on the degree of response of animals in terms of animal production. Its quick and positive effect on high fibre diets (such as paddy straws) could encourage farmers to accept the new product. Needless to say, the role of an appropriate marketing strategy for introducing and promoting any new product is crucial.