The Mongolian goat loses 20 to 30% of its liveweight in the winter and spring due to severe climatic conditions and forage shortage. Supplementary feeding is the only way to maintain liveweight and production during these seasons, but grain is expensive and quite often is not available for feeding of livestock in Mongolia. An experiment was therefore carried out to examine the effect of supplementary wheat bran with or without zeolite and/or urea on liveweight loss.

Sixteen male goats (2.5 years old) were randomly assigned to four treatments and grazed during the day. Each goat received a daily allowance of 90 g wheat bran at 0800 h and 90 g wheat bran and 300 g native grass hay at 1700 h. Then they were subjected to the following treatments: A, Control; B, 10 g urea per goat; C, 25 g zeolite per goat; and D, 10 g urea and 25 g zeolite per goat. The experiment was started in November and concluded in October the following year. Liveweight of the goats was recorded each month for the duration of the experiment.

Supplementation with either 10 g urea or 25 g zeolite had little effect on liveweight, but the combination of the two had marked effect \( (P<0.05) \) from February to May with the goats losing, on average, only 6% of their starting liveweight in May compared to 12% for Diets A and C, and 10% for Diet B.

It may be concluded that supplementation of the Mongolian goat with low quality wheat bran plus urea and zeolite can prevent severe weight loss during the harsh season, thus giving the animal a better production and reproductive status during the summer season.

**Figure 1** Effect of supplementary urea and/or zeolite on the liveweight of Mongolian goats during the winter/spring season. Diet A = control; Diet B = 10 g urea; Diet C = 25 g zeolite; Diet D = 10 g urea + 25 g zeolite.