Summary

This field experiment was carried out by Embrapa Cerrados on a private farm, on a *Brachiaria brizantha* cv. Marandu pasture over a dard-red latossol. The objective was to test different estrategies for cattle supplementation, based on urea as substitute for natural protein, as well as milled corn and soy bean meal as energy sources. During the dry season (84 days), from June to September of 1987, 160 Zebu cattle, averaging 175 kg live weight were asigned to four treatments, in a completely randomized design. The treatments (supplements) were: (1) mineral salt with 38% of triple superphosphate content; (2) milled corn 30%, soy bean meal 15%, urea 10%, mineral salt 35%, commom salt 10%; (3) milled corn 36.4%, soy bean meal 7.5%, urea 11.1%, mineral salt 35%, commom salt 10%; (4) milled corn 42.7%, urea 12.3%, mineral salt 35%, commom salt 10%. The mean monthly forage available presented 4,500 kg of dry matter per hectare along the season. The grazing pressure during experiment was 7%, and stocking rate 0.9 AU/ha. The crude protein content was high in June and July but fell to less than 6% in August. The in vitro dry matter digestibility decreased along the season, while the neutral detergent fiber percent increased in August. The animals fed with supplements 2, 3 and 4 presented similar live weight gain, which was superior to those in treatment 1.

Supplement 2 increased in 46% the net income of the interprise, providing US$3.59 of economic return for each US$ invested.