

**ECONOMIC EFFICIENCY OF BEEF CATTLE FINISHING STRATEGIES WITH
DIFFERENT LEVELS OF INTENSIFICATION DURING THE DRY SEASON**

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The intensification of beef cattle production has become an important strategy for ensuring global food security, optimizing land use, and promoting production sustainability. However, for these systems to be adopted and contribute to the economic and social pillars of sustainability, they must be financially viable. The collection and interpretation of productive and economic data support decision-making in precision livestock farming. Therefore, the study aimed evaluate the economic efficiency of different beef cattle finishing strategies during the dry

season. The experiment was carried out in the Embrapa Beef Cattle, in Campo Grande, Mato Grosso do Sul, Brazil, between June and September 2025. Seventy F1 Angus × Nellore young bulls, with an average initial body weight of 462 ± 4.55 kg, were randomly assigned to one of three finishing systems: pasture supplementation (SUP; n = 22), supplemented with concentrate at 0.8% of body weight (BW); intensive pasture finishing (TIP; n = 24), supplemented with concentrate at 1.6% of BW; and feedlot finishing (n = 24), supplemented with concentrate and corn silage at 1.6% and 0.8% of BW, respectively. The economic analysis included costs with animal health, labor, feed, and pasture lease costs for the SUP and TIP systems, as well as the arroba (15 kg of carcass equivalent) at slaughter time. Revenue were calculated by multiplying the hot carcass weight by the market value per kg of carcass equivalent. Production per animal was greater in the feedlot (8.7 @), intermediate in TIP (5.6 @), and lower in SUP (3.1 @). However, feedlot had the highest concentrate cost per arroba produced, which was R\$ 17.00/@ higher than TIP. Among pasture systems, TIP had the lowest concentrate cost, R\$ 3.00/@ lower than SUP. A similar trend was observed for the total cost per arroba produced. Despite its intermediate productive performance (feedlot = 667 kg; TIP = 556 kg; SUP = 544.0 kg), TIP achieved the highest economic margin (R\$ 689.00), followed by feedlot (R\$ 329.62) and SUP (R\$ 242.39). The greater economic efficiency of TIP shows its potential as a beef cattle intensification strategy and highlights the importance of economic analyses for decision-making, as increased production intensification does not necessarily translate into higher economic returns.

Palavras-chave: supplementation; intensive pasture finishing; feedlot;.