# Study on the Effect of Feeding Different Levels of Energy in Compound Pellet on Performance of Growing Black Bengal Goat

## Abstract

Three different complete compound pellets containing different levels of energy, viz. SE (standard energy, ME content 10.28MJ/kg DM as per NRC, 1981), LE (low energy, ME content 9.25MJ/kg DM) 10% less ME and HE (high energy, ME content 11.30MJ/kg DM) 10% high ME than SE respectively, were prepared and fed to three groups of growing Black Bengal goats for evaluating feeding value. Completely randomized design was followed in the experiment. The effect of different levels of energy containing pellet on performance of goat was varied. Both dietary group SE and HE showed higher ($p<0.01$) weight gain, total CPI, total MEI, and better ($p<0.05$) FCR and PCR than dietary group LE and only dietary group HE showed higher ($p<0.05$) total DMI, MEI $100kg^{-1}$ LW $d^{-1}$ and MEI $kg^{-1}W^{0.75}$ $d^{-1}$ than LE and DMI $kg^{-1}W^{0.75}$ $d^{-1}$ than SE and LE. Higher ($p<0.01$) digestibility of DM, OM, ADF, NDF and ($p<0.05$) CP and CF was observed in SE and HE and digestibility of NFE in HE was higher ($p<0.01$) than SE and LE. On the other hand, higher ($p<0.05$) digestibility of EE was observed in SE and LE. Digestible crude protein, TDN and D value were higher ($p<0.01$) in SE and HE. Digestible EE was highest ($p<0.01$) in LE and lowest in HE but digestible NFE was highest ($p<0.01$) in HE and lowest in LE. Higher ($p<0.01$) nitrogen intake and ($p>0.05$) nitrogen retention was observed in SE and HE. Meat yield, selling price of meat, and total price was highest in HE and both SE and HE showed higher ($p<0.01$) value of the parameters than LE. Total rearing cost was highest ($p<0.01$) in HE and lowest in LE. Higher ($p<0.05$) net profit was obtained from SE and HE than LE. There was a positive correlation between increase of energy in dietary pellet and performance. It can be concluded that high energy containing pellet may be used for commercial Black Bengal goat production in stall feeding.