Recent studies of the backbending phenomena in medium light weight nuclei near A~60 expanded greatly our interest about how the single particle orbits are nonlinearly affected by the collective motion. As a consequence we have applied a modified version of the exponential model with the inclusion of pairing correlation to describe the energy spectra of the ground state bands and/or the backbending phenomena in mass region at A~60. A firm conclusion is obtained concerning the successful validity of the proposed modified model in describing the backbending phenomena in this region. Comparison with different theoretical descriptions is discussed.