A study was conducted to evaluate the different meat quality characteristics of Nandanam Turkey-1 different system of rearing at University Research Farm, Madhavaram Milk Colony, Chennai – 51. Eight week old age of 20 Nandanam Turkeys was randomly selected, ten turkeys were (T1) placed in metal slatted floor and another ten turkeys were placed in mud floor. The T1 were fed with Grower turkey feed (200g / bird/day) and the T2 was fed with 50 gram Grower turkey feed along with chopped greens and kitchen waste procured from Hotels. On 16th week six birds from each treatment were selected and slaughtered to study the meat quality characteristics. Significant (P<0.05) results were found in Shear force value (kg/cm² diameter) and extract release volume (ml). The Shear force value (SFV) is better in T1 than T2 (2.6±0.25;3.5±0.11) and it is reverse in extract release volume (ERV) and the values are 19.0±2.5;25.01±3.5 in T1 and T2 respectively. Other parameters like pH and water holding capacity did not show any significant results. Significant (P<0.05) colour scores were obtained in redness and yellowness between T1 and T2 and the values were better in T1 compared to T2 (14.25±1.15; 13.09±2.36 and 21.84±3.54; 18.27±1.54). The lightness did not show any significant difference. A highly significant (P<0.01) results were obtained in organoleptic characteristics and the odour and over all acceptability were good in T2 than T1 (5.0±0.52;8.0±0.95 and 6.0±0.36;8.0±1.0). This study reveals that the Nandanam Turkey 1 showed better meat quality characteristics in metal slatted system of rearing with better SFV and colour than turkeys reared in mud floor. However, the organoleptic values showed better in turkeys grown in hotel waste and greens than concentrate feed alone. It is concluded that the Nandanam Turkey 1 can be reared in mud floor with minimum concentrate feed and addition of greens and hotel waste without affecting the overall acceptability and meat quality and additionally it reduces cost of production.