The aim of this study was to examine the methods of traditional soil tillage (GTI), reduced tillage (ATI) and direct seeding (DE) in chickpea cultivation. The effect of used methods was examined on the degree of sprouting time, germination rate, weed growth and yield. Also soil porosity, bulk density, penetration resistance and weed growth were determined according to traditional soil tillage, reduced tillage and direct seeding methods. The most appropriate tillage and seeding methods of Usak province were determined by evaluating the data. According to the results; germination rate (TFCD) for GTI, ATI and DE were 98%, 85% and 87.7/88??%, respectively and also in same ordering, germination time (OCS) was recorded as 22.4, 23.5, and 23.1 days, respectively. Weed growing for GTI, ATI and DE were 15%, 56% ve 29%, respectively. Penetration resistances in the 0-80 cm soil depth for GTI, ATI and DE were 1.67, 1.84 and 1.83 MPa, respectively. Soil bulk density in 0-30 cm soil depth for GTI, ATI and DE were 1.15, 1.22 ve 1.24 g cm-3, respectively. Soil porosity for GTI, ATI and DE were determined as 56.7 %, 53.7% and 53.1.9% respectively. Yield for GTI, ATI and DE methods were obtained as 161.7, 128.2 and 181.7 kg da-1, respectively.

While the maximum yield was found in the DE treatment, the least yield was found in the ATI treatment. It was found that direct seeding methods could be applicable for chickpea cultivation as technical and economic aspect in Usak province.