In India more than 70 per cent of farmers serving on agricultural farming. Our economics is based on agricultural production because most of the farmer worked as hired labour who are receiving 50 per cent or more income from agricultural operations during the year. A large farmers have a tendency to employ a labour to the points whose marginal productivity is equal to the prevailing wage rate. The present study is based on design and fabrication of intercultural CAET-hand tool, hoe, modern weeder which was compared the performance with traditional equipment and modern weeder in onion cultivation. By utilizing these tools it was found that there was increase in labour use efficiency, saving in labour cost and increase production and productivity of onion crop. These tools performed better intercultural operations, good aeration into the soil and also saved labour and irrigation supply. In this experiment drip irrigation provided an efficient method of fertilizer delivery and allowed precise timing and uniform distribution of nutrients. Fertilizer application through drip irrigation (fertigation) can reduce fertilizer dozes and minimize ground water pollution due to fertilizer leaching from excessive irrigation. Fertigation events can be scheduled as often as irrigation upto several times per season. It was observed that the highest mean marketable yield in treatment T_3 (76.44 kg/ha) while in treatment T_2, T_1 and T_4 was obtained to be 61.86 kg/ha, 55.67 kg/ha and 55.57 kg/ha, respectively when CAET hand tool, hoe, modern weeder as well as traditional hand tools were used in intercultural operation of onion crop as shown in Table 1, the benefit cost ratio of onion crop has been found highest in treatment T_3 (3.60:1) with respect to treatment T_2, T_4 and T_1 (2.80:1, 2.70:1, 2.45:1), respectively, as shown in Table 2. It is also observed that net return, and gross revenue were maximum in treatment T_3 inspite of treatment T_2, T_4 and T_1 which was minimum as shown in Table 3.

**Key words**: Intercultural tool, Hoes, Weeder, Fertigation, Benefit cost ratio