Abstract: An ORP demonstration was carried out in selected villages of Raichur district to evaluate and demonstrate the technical soundness of improved cookstoves of Udairaj model for adoption by the rural women. The performance of the improved cookstoves was evaluated in terms of thermal efficiency and power output rating. Also, to analyse the adoption behaviour, the attributes such as relative advantage and compatibility were considered for the study. The results indicated that, the thermal efficiency of double pot improved cookstove of Udairaj model varied from 24 – 26 per cent as compared to that of 10 – 12 per cent for traditional chulha, while the power output rating of these chulhas was 1.42 and 0.98 kW, respectively. After installation of these cookstoves in identified households, it was observed that the improved cookstoves scored high relative advantage and compatibility as compared to the traditional chulhas. The relative advantage and compatibility of Udairaj model cookstove were 89 and 87, respectively as compared to that of 61 and 78, respectively for traditional chulha. The beneficiaries opined that these cookstoves are smokeless and there was 30 to 40 per cent saving in fuel over traditional chulhas.

Key words: Compatibility, Improved cookstove, Power output rating, Relative advantage, Thermal efficiency