Performance Evaluation of Treadle Pump— A Case Study of Two Clusters in Saptari District of Nepal

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ABSTRACT

Treadle pump is found to be an efficient water lifting device for irrigating small land. The study documented the average overall cost of treadle pump, pattern of ownership, ease of operation operated by different gender, system efficiency, useful expected life, annual use of pump and socio economic impact after the installation of treadle pump using semi structural questions. Total of 28 respondents were selected randomly, 16 from Malhanma V.D.C. (Location 1) and 12 from Banrjula V.D.C. (Location 2). The cropping intensities and the annual use of treadle pump were found to be 271.50% and 300.13 hrs respectively. The farmers using the treadle pump were found to switch from the local varieties of crops to the improved and hybrid varieties. The system efficiency of the pump was found 44% and pump operation was done by the male member of the family (78%), while the female also had a considerable share on the operation (28%).