

Constraint Analysis of Drum Seeder Technology in Paddy Cultivation in North Coastal Zone of Andhra Pradesh

P Venkata Rao, S Neelaveni, P B Pradeep kumar and P Punna Rao

Department of Agricultural Extension, Agricultural College, Naira, Andhra Pradesh

ABSTRACT

The major component of agriculture in Andhra Pradesh particularly North Coastal Zone is paddy cultivation (63 per cent of total cultivated area). Transplanting is the most common and conventional method of crop establishment under low land and rain fed situations which is labour intensive and expensive. Direct sowing of paddy with sprouted seed in puddle fields by using an eight row drum seeder at 20cm row spacing is an alternate method of paddy cultivation which reduce the cost of cultivation, drudgery and proved to be good method under late sown conditions. Hence an effort was made with an objective to study adoption level of drum seeder technology in north coastal zone of Andhra Pradesh and to know the constraints in adoption of the drum seeder technology. Ex-post facto research design was used with a sample size of 100 paddy cultivated farmers who were adopting drum seeder technology. 58.00 per cent of the farmers had a medium level of adoption of drum seeder technology in paddy cultivation followed by high(28%) and low(14%) even though its recent inception. It might be due to the attributes of drum seeder technology relative advantage in terms of low cost, labour saving, easy operation, less seed rate, no nursery management and time saving and easy to carry besides compatibility, observability, trial ability and predictability. The correlation analysis revealed that extension contact, achievement motivation, innovativeness, information seeking behavior, education, irrigation facility and risk taking ability were significantly related to the adoption of drum seeder technology at 5% level of probability. The constraint analysis revealed that sudden occurrence of the rain(100%), low lying situation(97%), high weed infestation(91%), bird damage at the time of sowing(80%), maintenance of spacing plant to plant(80%), irrigation management at early stages(74%) dropping of more seeds at a point(71%). It is the dire necessity of wide spread of the drum seeder technology through implementation of Front Line Demonstrations and trainings to the farmers by extension wing of Agricultural University and Department of Agriculture in Andhra Pradesh to cope with the vulnerability in cost of cultivation including scarcity of labour which provide sustainable livelihood to the small and marginal farmers.

Key words : Analysis, Drum seeder, Paddy cultivation.