

**PRODUCTIVITY AND PROFITABILITY OF MUSTARD (*BRASSICA JUNCEA L.*)
IN PEARL MILLET-MUSTARD CROPPING SYSTEM AS INFLUENCED BY
FRONT LINE DEMONSTRATIONS IN TRANSITIONAL PLAIN OF INLAND
DRAINAGE ZONE OF RAJASTHAN**

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Abstract: Front line demonstration is an appropriate means for demonstration as well as transfer of improved agricultural innovations to the farming community. Under centrally sponsored schemes on oilseed production technology under NFSM schemes, KVK Athiyasan, Nagaur-I conducted 425 demonstrations on mustard covering 180 ha area during Rabi, 2015-16 to 2019-20. The critical inputs were identified in existing production technology through discussion with farmers and on the basis of soil sampling. Lack of plant protection measures were the predominant identified causes of low productivity of oilseed crop in district Nagaur. In the same sequence the other parameters like technological impact, economical impact and extension gap were analyzed for impact assessment of frontline demonstration (FLDs) on mustard crop. The results of five consecutive years study revealed that the demonstration plots produced on an average 1954 kg/ha mustard grain yield, which was 22.51% higher compared to prevailing farmers practice (1597 kg/ha). The average increase in gross return, net return and cost of cultivation was in the tune of 22.36, 31.08 and 6.43 per cent, respectively. Further, data indicated that the average additional cost of cultivation (Rs. 1435/ha) under integrated crop management demonstrations and has fetched additional net returns of Rs. 12659 per hectare with incremental benefit: cost ratio of 0.41. The average technology gap, extension gap & technological index were found 636kg/ha, 356kg/ha and 24.44percent, respectively. The results clearly indicate the positive effect of FLDs over the existing practices.

Keywords: Economics, Extension gap, Frontline demonstration, Mustard, Satisfaction, Technology gap, Technology index

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