

Impact of KVK Technology on Mustard growing Farmer in Nagaur District

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INTRODUCTION

Introduction of the Farmer:

Name of farmer	Shri Chhotu Ram Choudhary
Fathers name	Shri Sardar Singh
Village	Khajwana
Block	Mundwa
District	Nagaur
State	Rajasthan



Situation analysis:

Shri Chhotu Ram Choudhary has 3 ha irrigated and 4 ha unirrigated land in which he grow Cotton, Clusterbean, Mungbean, and Sesame in Kharif season and Mustard, Cumin, Isabgob in Rabi season. He has a small nutri-garden and grows seasonal vegetables for family consumption. He is a farmer who was selected for Mustard variety Giriraj (DRMRIJ-31) demonstration under National Food Security Mission on Oilseed. He was earlier growing varieties of Mustard like PM-26 which were low in yield.

Technology implementation & support:

Krishi Vigyan Kendra, Athiyasan, Nagaur-I made them aware about scientific cultivation of Mustard through on campus training which covered all the farm operations from techniques of land preparation to harvesting of the crop. The KVK scientists encouraged the farmer for soil testing and on the basis of that farmer were advised to apply balanced dose of fertilizer with improved variety Giriraj. This variety developed by Directorate of Rapeseed Mustard Research (DRMR), Sear, Bharatpur (Rajasthan) and released during 2013. It has oil content 42% and 137-153 days seed maturity period. It has bold seeded, high oil content and high yielding variety.

Technology demonstrated:

- ❖ Use of improved seed variety Giriraj (2013) @ 3.75 kg/ha
- ❖ Seed treatment with Carbendazim @ 3 g/kg seed and NPK consortia cultures @ 10 ml/kg seed
- ❖ Soil treatment with *Trichoderma viride* @ 2.5 kg/ha and Sulphure (90%

WDG) @ 12.5kg/ha, Zinc Sulphate (33%) @ 12.5kg/ha

- ❖ Sowing in 30 cm row spacing
- ❖ Recommended N:P (60:40 kg/ha) and use of Waste decomposer @ 50 g/ha
- ❖ Use of Acetamiprid (20% SP) @ 625g/ha for Aphid management

Technology uptake & benefit:

Shri Chhotu Ram Choudhary adopted the balanced dose of fertilizer in Mustard crop as per suggestion of Krishi Viyan Kendra scientists for his 0.4 ha land of demonstrated crop in Rabi season during the year 2021-22. The yield of demonstrated crop was 21.15 qtl/ha (earlier practice seed yield 15.61 qtl/ha) with cost of cultivation of Rs. 31265/ha. The net profit/ha was recorded Rs. 99842.50 /ha with 4.19 Benefit Cost ratio. Krishi Viyan Kendra, Athiyasan, Nagaur-I demonstrated Mustard variety Giriraj to 50 farmers in 20 ha area under National Food Security Mission on Oilseed in Rabi 2021-22.

Specific Technology	Yield (q/ha)	Gross cost (Rs/ha)	Gross income (Rs/ha)	Net income (Rs/ha)	B:C ratio
Farmer practices	15.61	29915	92099	62184	3.08
Demonstration	21.15	31265	131107.50	99842.50	4.19
% Increase	26.19	1350.00	39008.50	37658.50	1.11

Technology spread: This technology may be capable for increasing seed replacement ratio in district with extra net return. Due to high demand of Giriraj variety, the progressive farmer Shri Chhotu Ram Choudhary distributed seed from demonstrated Mustard

crop production among 45 to 55 farmers in nearby villages. Thus the farmer provided breakthrough in horizontal expansion of this improved variety and helped in increasing the productivity of the farmers.



Training of Mustard Farmers during Rabi 2021-22 at KVK, Nagaur-I



Field visit of Mustard Farmers during Rabi 2021-22 at Khajwana village



Geo-tagging of Musrad growing farmer