

# ADOPTION OF GRAM VARIETY (GNG-2144) IN NAGGAUR DISTRICT

H.R. Choudhary<sup>1\*</sup>, Gopichand Singh<sup>2</sup> and Bhawana Sharma<sup>3</sup>

<sup>1</sup>Subject Matter Specialist (Agronomy),

<sup>2</sup>Senior Scientist & Head and

<sup>3</sup>Subject Matter Specialist (Home Science), Krishi Vigyan Kendra, Athiyasan, Nagaur-I, Agriculture University, Jodhpur, Rajasthan

## INTRODUCTION OF THE FARMER:

Name of farmer	Shri Dungra Ram Jat
Fathers name	Shri Nenu Ram
Village	Bijathal
Block	Riyabadi
District	Nagaur
State	Rajasthan



## SITUATION ANALYSIS:

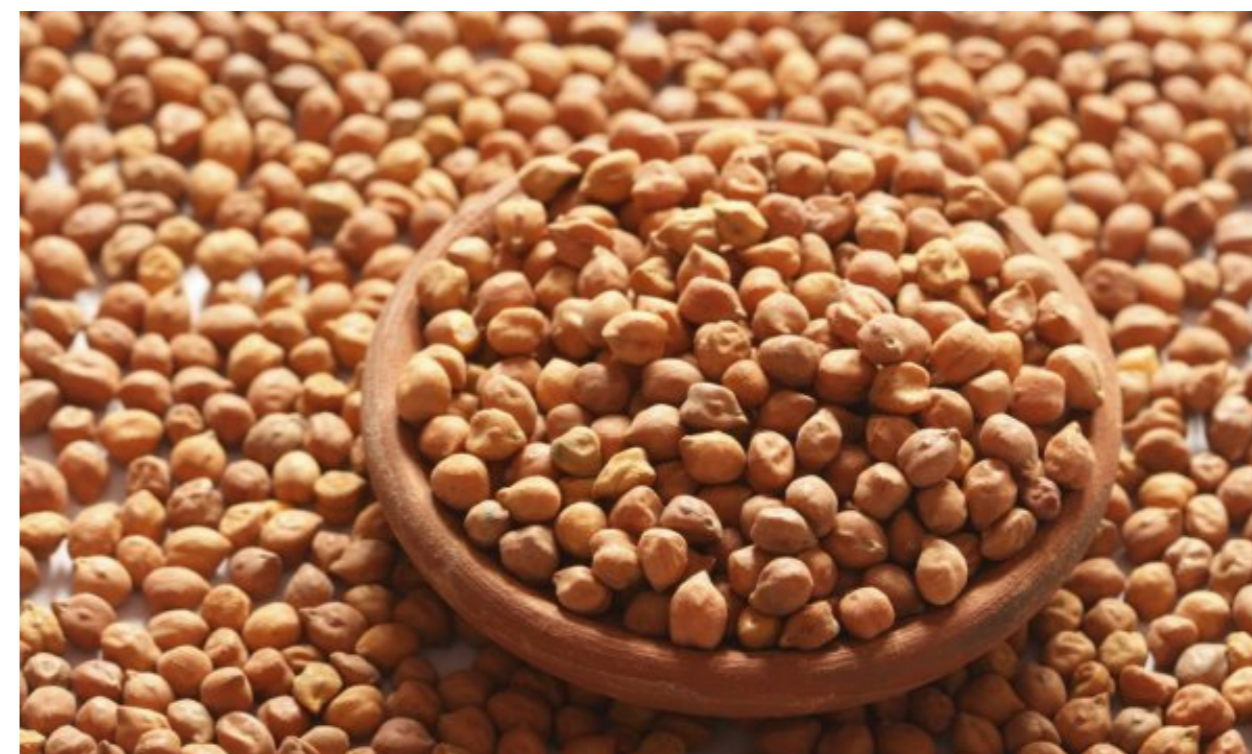
Shri Dungra Ram Jat has 2 ha irrigated and 2 ha unirrigated land in which he grows Mungbean, Clusterbean, Cotton, Groundnut and Sesame in Kharif season and Cumin, Isabgob Mustard, Chickpea in Rabi season. He has a small nutri-garden and grows seasonal vegetables for family consumption. He is a farmer who was selected for chickpea variety GNG-2144 demonstration under National Food Security Mission on Pulses. He was earlier growing varieties of chickpea like C-235 which were low in yield.

## TECHNOLOGY DEMONSTRATED:

- ✿ Use of improved seed variety GNG-2144 (2015) @ 75 kg/ha
- ✿ Seed treatment with NPK consortia cultures @ 10 ml/kg seed
- ✿ Soil treatment with Trichoderma viride @ 2.5 kg/ha
- ✿ Sowing in 30 cm row spacing.
- ✿ Recommended N:P (20:40 kg/ha) & use of Waste decomposer @ 50 g/ha
- ✿ Use of Emamectin Benzoate @ 250ml/ha
- ✿ Use of Tebuconazole @ 250ml/ha

## TECHNOLOGY IMPLEMENTATION & SUPPORT:

Krishi Vigyan Kendra, Athiyasan, Nagaur-I made them aware about scientific cultivation of chickpea 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 high yielding variety GNG-2144. This variety developed by Agriculture Research Station, Sri Ganganagar (Rajasthan) and released during 2016. It has medium bold seeded & double podded variety and 133 days seed maturity period. It has Fusarium wilt tolerance and minimum yield loss under late sown irrigated condition.





# TECHNOLOGY UPTAKE & BENEFIT

Shri Dungra Ram Jat adopted the balanced dose of fertilizer in chickpea crop as per suggestion of Krishi Viyan Kendra scientists for his 0.4 ha land of demonstrated crop in Rabi season during the year 2020-21. The yield of demonstrated crop was 20.25 qtl/ha (earlier practice seed yield 14.75 qtl/ha) with cost of cultivation of Rs. 25915/ha. The net profit/ha was recorded Rs. 84230 /ha with 4.25 Benefit Cost ratio. Krishi Viyan Kendra, Athiyasan, Nagaur-I demonstrated Chick pea variety GNG-2144 to 25 farmers in 10 ha area under National Food Security Mission on Pulses in Rabi 2020-21.

Specific Technology	Yield (q/ha)	Gross cost (Rs/ha)	Gross income (Rs/ha)	Net income (Rs/ha)	B:C ratio
Farmer practices	14.75	24150	71906.25	47756.25	2.98
Demonstration	20.25	25915	110145	84230	4.25
% Increase	37.29	1765	38238.75	36473.75	1.27

## TECHNOLOGY SPREAD:

This technology may be capable for increasing seed replacement ratio in district with extra net return. Due to high demand of GNG-2144 variety, the progressive farmer Shri Dungra Ram Jat distributed seed from demonstrated chick pea crop production among 30 to 35 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.



Input Distribution & Training of Chickpea Farmers during Rabi 2020-21



Field visit of Chickpea during Rabi 2020-21 Field day of Chickpea during Rabi 2020-21

