KNOWLEDGE LEVEL OF DEMONSTRATOR AND NON-DEMONSTRATOR GROUNDNUT GROWERS UNDER THE SCHEME OF NMOOP

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ABSTRACT

India is a world leader in groundnut farming. It is major oilseed legume crop and meets 30 percent of edible oil requirements of the country. They rich in protein and vitamins A, B and minerals like Ca, Mg, etc. A multistage, purposively, proportionate and random sampling technique was selected for the study. The study was conducted in Saurashtra region of Gujarat state. Total 12 talukas were selected purposively in which maximum FLDs given under NMOOP and among them 16 villages were selected for the study. Total 160 respondents were selected in which 80 demonstrators and 80 non-demonstrator farmers were selected for this study. Ex-post facto research design was used and data were collected by personal contact. The result revealed that the majority of demonstrator (68.75 per cent) and non-demonstrator (58.75 per cent) farmers had medium level of knowledge about the recommended groundnut production technology, whereas 17.50 per cent of demonstrator and 13.75 per cent of non-demonstrator farmers had high levels knowledge about recommended groundnut production technology. While 13.75 per cent and 27.50 per cent of demonstrator and non-demonstrator farmers had low level of knowledge about recommended groundnut production technology.

Key words: *Knowledge, front line demonstration, national mission on oilseeds and oil palm, demonstrator and non demonstrator farmers, groundnut production technology*

INTRODUCTION

Indian Council of Agriculture Research Initiated Front Line Demonstrations on pulses & oilseedcropsintheyear1990-1991.This Programme was conducted by Krishi Vegan Kendraand showed a great impact on enhancement of yield potential of oilseed and pulse crops. Realizing the importance of such type of technology dissemination Programme, through Cluster approach, IndiancouncilofAgriculturalResearch(ICAR)has launched Cluster Demonstrations Programme on pulse and oilseed crops in the year 2015-2016. Krishi Vigyan Kendra an innovative science based institution plays an important role in bringing there search scientist facet of ace with farmers. Cluster Demonstrations is a novel approach to provide direct interface between scientists and farmers in planning, exceculation & monitoring phases of the demonstrations. The peanut, also known as groundnut ormonkey nut and taxonomically classified as Arachis hypogaea, is a legume crop. the peanut belongs to the botanical family Fabaceae. Groundnut is considered as the world's fourth largest source of edibleoil and the third mostimportant source of vegetable protein. It is also a major oilseed legume crop in India and meets about 30 per cent of the edible oil requirements in the country. Groundnut (Arachis hypogaea.), is an important crop grown worldwide in more than 100 countries. The principal groundnut growing states in India are Gujarat, Andhra Pradesh, Karnataka, Tamil Nadu and Maharashtra, which accounts for more than 85 per cent of the Indian production as well as area.

Groundnut is an important oilseed crop of India. The groundnut accounts for 37.7 per cent in area, production is 51.95 lakh MT and productivity are 1421 kg/ha (anonymous-2018). Hence an attempt has been identifying the constraints faced by the groundnut growers in adoption of cluster frontline demonstration under the scheme of NMOOP in Saurashtra region.

OBJECTIVE

To measure the knowledge level of the demonstrator and non-demonstrator farmers regarding recommended groundnut crop production technology

METHODOLOGY

The research was carried out in Saurashtra region of Gujarat state. Out of eleven district of Saurashtra region, five districts were selected purposively where FLDs were given under NMOOP. The five districts were Bhavnagar, Rajkot, Jamnagar, Gir-somnath and Amreli. The selected five districts in which total 12 talukas were selected, out of 12 talukas the 16 villages were selected purposively. Total 160 respondents

selected under this study. An *Ex-post facto* research design was used for the study.

In the present study knowledge refers to know-how about different groundnut production practices possessed by groundnut growers. Adequate knowledge is essential for groundnut growers in successful and profitable production. It was therefore thought necessary to obtain information from the groundnut growers about groundnut crop production technology. As discussed in the methodology to measure the knowledge of respondents about recommended groundnut production technology teacher made knowledge index was developed and used. The knowledge was calculated by using following formulas and classified all the respondents into three categories based on mean and standard deviation.

$$\frac{X_1 + X_2 \ldots\ldots\ldots\ldots\ldots\ldots + X_n}{N};$$

Whereas,

Ki = Knowledge index

X1 + X2 ......+Xn = Total number of correct answer

N = Total no. of items in the test

The respondents were classified into three categories of knowledge on the basis of mean and standard deviation as

under:

Sr. No.	Categories	Range
1	Low level of knowledge	<Mean – S.D
2	Medium level of knowledge	In between Mean $\pm$ S. D
3	High level of knowledge	>Mean + S.D

RESULTS AND DISCUSSION

Knowledge level of groundnut growers about recommended groundnut production technology

In the present study knowledge refers to know-how about different groundnut production practices possessed by groundnut growers. Adequate knowledge is essential for groundnut growers in successful and profitable production. It was therefore thought necessary to obtain information from the groundnut growers about groundnut crop production technology.

As discussed in the methodology to measure the knowledge of respondents about recommended groundnut production technology, teacher made knowledge index was developed and used. The knowledge score of respondents about recommended groundnut production practices was calculated by using the formula mentioned into research methodology and classified all the respondents into three categories based on mean and standard deviation. The knowledge of respondents about recommended groundnut production technology is presented in Table 1& fig. 1.

Table 1: Distribution of respondents according to their level of knowledge about recommended groundnut crop production technology

(n = 160)

Sr. No.	Knowledge level category	Demonstrator (n=80)		Non-Demonstrator (n=80)	
		Frequency	Percentage	Frequency	Percentage
1	Low level of knowledge	11 (below 60.69)	13.75	22 (below 54.19)	27.50
2	Medium level of knowledge	55 (60.69 to 82.45)	68.75	47 (54.19 to 75.80)	58.75
3	High level of Knowledge	14 (above 82.45)	17.50	11 (Above 75.80)	13.75
	Mean	71.56		65.00	
	S.D.	10.86		10.80	
	Z cal	3.831*			
	Z tab at 95% los	2.81			

It was clear from Table 1 & fig. 1 that 68.75 per cent of the demonstrator farmers had medium level of knowledge whereas, 17.50 per cent had high and 13.75 per cent had low level of knowledge about recommended groundnut production technology. In case of non-demonstrator farmers, 58.75 per cent had medium level of knowledge, while 27.50 per cent and 13.75 per cent had low level and high level of knowledge, respectively.

From Table 1& fig. 1, it can be observed that the Z calculated is more than Z tab. Therefore, it is inferred that there is significant difference on knowledge level of demonstrator and non-demonstrator farmers. The study of Table 2 said that there is a significance difference among the knowledge level of respondents. Thus from Table 1& fig. 1 and Table 2 it can be concluded that the demonstrator farmers had statistically significant higher knowledge

level than non-demonstrator farmers. Therefore, it can be concluded that CFLDs conducted by the KVKs was able to create a significant advantage to knowledge level of respondents.
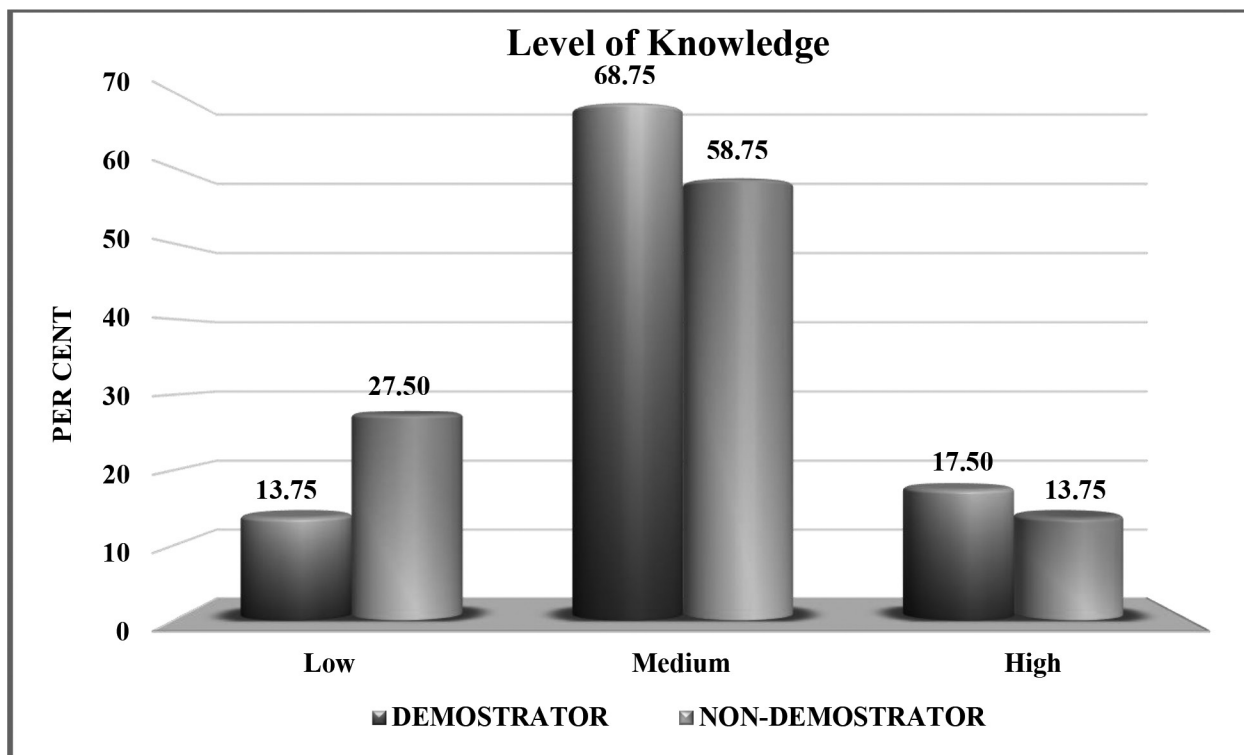

Level of Knowledge

Fig. 1. Level of Knowledge of groundnut growers about recommended groundnut production technology

It was found that demonstrator farmers were with more knowledge than the non-demonstrator farmers. The probable reason might be that demonstrations of recommended groundnut production technology had helped them to acquire more knowledge and demonstrator farmers participated in extension activities, they were more innovative than non-demonstrator farmers. So they acquired more knowledge about recommended groundnut production technology as compare to non-demonstrator farmers.

Table 2: Independent sample t- test   (n=160)

Details		Knowledge Level	
		Equal variances assumed	**Equal variances not assumed**
Levene's Test for Equality of Variance	F	0.122	-
	Sig.	0.990	-
t- test for Equality of Means	t	3.850	3.850
	df	158	157.959
	Sig. (2-tailed)	.000	.000
	Mean Difference	6.53750	6.53750
	Std. Error Difference	1.69799	1.69799
	95% Confidence Interval of the Difference	Lower	3.18381	9.89119
		Upper	3.18381	9.89119

This finding was in conformity with the findings Satasiya (2008), Deshmukh (2012), Chodvadiya *et al.* (2013) Patoliya (2013), Hadiya (2013), Chaturvedi *et. al.* (2015), Poshiya *et al.* (2019), Desai *et al.* (2020), Rai *et al.*

(2020), Rathod *et al.* (2021) and Patel and Vinaya (2022).

CONCLUSION

Groundnut is one of the important cash crop in Saurahstra Region of Gujarat State. The studies revealed that the respondents had a medium level of knowledge about recommended groundnut production technology. But there was a significant difference between demonstrator and non-demonstrator farmers in knowledge level about groundnut production technology. Therefore, some specific programmes to enhance the knowledge level of non-demonstrator farmers should organized by KVK because Saurashtra is major groundnut growing area. It is suggested that target specific approach should be adopted. It is also confirmed from the finding that the other farmers around these demonstration consulates demonstrator farmers to adopt all major practices, as main source of information. Hence, the planners, administrators and extension workers and progressive farmers give more focus on the concept of frontline demonstrations**.**

CONFLICT OF INTEREST

No conflict of interest among researchers.

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