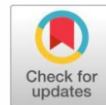


## Research Article

## Open Access

# Perception of Farmers on Varietal and Technological Diversification Efforts of KVKs

C. Padma Veni<sup>1</sup> and M. Vamshi<sup>2\*</sup><sup>1</sup>Directorate of Extension, Administrative Office, Rajendranagar, Professor Jayashankar Telangana State Agricultural University, Hyderabad, Telangana (500 030), India<sup>2</sup>Department of Agricultural Extension, College of Agriculture, Rajendranagar, Professor Jayashankar Telangana State Agricultural University, Hyderabad, Telangana (500 030), India

## ABSTRACT

Food scarcity and hunger are escalating in India giving an alarm for food security measures. Government of India started a Mission on Food Security in 2007 through KVKs. Pulses which are most consumed food by both vegetarians and non-vegetarians has the nutritional capacity more than cereals. These pulses having comparative advantage over other crops in irrigation requirement and cost of cultivation, can be cultivated as intercrop. Hence pulses can be viable food to tackle nutritional scarcity. To promote pulse cultivation Government of India introduced Cluster Front Line Demonstration CFLD-Pulses programme through Krishi Vigyan Kendras (KVKs). Krishi Vigyan Kendra (Farm science center) is entrusted with task of demonstrating and disseminating latest varieties and technologies to encounter food and nutritional scarcity in the country. KVKs in the selected sample area were conducting CFLD since 2015-16 and it becomes necessary to assess the effectiveness of the KVKs in successfully performing the demonstration and farmers perception on the efforts of KVK scientists. The present study is done to assess the perception of farmers on the effectiveness of KVK in varietal and technological diversification efforts

**Keywords:** Cluster Front Line Demonstration (CFLD), KVK, Pulses, Nutritional Security, Food Security, National Food Security Mission, Perception.

## INTRODUCTION

Food scarcity and hunger are escalating in India giving an alarm for food security measures. As per the Global Hunger Index India ranked 107th position indicating a serious situation of India [3]. Government of India started National Food Security Mission in 2007 for reducing poverty by increasing production of rice, wheat and pulses at 10, 8, 2 million tonnes respectively. Pulses which are most consumed food by both vegetarians and non-vegetarians has the nutritional capacity more than cereals. These pulses having the comparative advantage over other crops in irrigation requirement, cost of cultivation, can be cultivated as intercrop. Hence, pulses can be viable food to tackle nutritional scarcity. To promote pulse cultivation Government of India introduced CFLD-Pulses programme through Krishi Vigyan Kendras (KVKs). Krishi Vigyan Kendra (Farm science center) is entrusted with task of demonstrating and disseminating latest varieties and technologies to encounter food and nutritional scarcity in the country. The

present study is done to assess the perception of farmers on the effectiveness of KVK in varietal and technological diversification efforts. The present study was conducted in Central Telangana Zone purposively. Two KVKs namely KVK Wyra and KVK Malyal which were located in Khammam and Mahabubabad districts were considered as they were performing CFLD from 2015-16. Hundred beneficiary farmers of CFLD-Pulses programme (50 from each district) were taken for the study.

## METHODOLOGY

To study the perception of beneficiary farmers, comprehensive list of statements were prepared by reviewing the literature on the activities [2] and guidelines to effectively perform the Cluster Front Line Demonstration programme under National Food security Mission (NFSM). Twenty statements were prepared covering varietal and technological diversification efforts of selected KVKs. A three-point continuum scale was applied consisting Agree, Undecided and Disagree with scoring pattern of 2, 1 and 0 respectively. The score for each statement from the response given by the respondents was counted and total score for each statement was calculated. Likewise the individual member score on perception was also calculated. The perception score for each respondent was the sum of the scores obtained by the respondent to all the statements. Based on the total score of the members, their Perception towards functioning of CFLDs was determined in terms of Low, Medium and High.

\*Corresponding Author: M. Vamshi  
Email Address: [vamshi6654@gmail.com](mailto:vamshi6654@gmail.com)

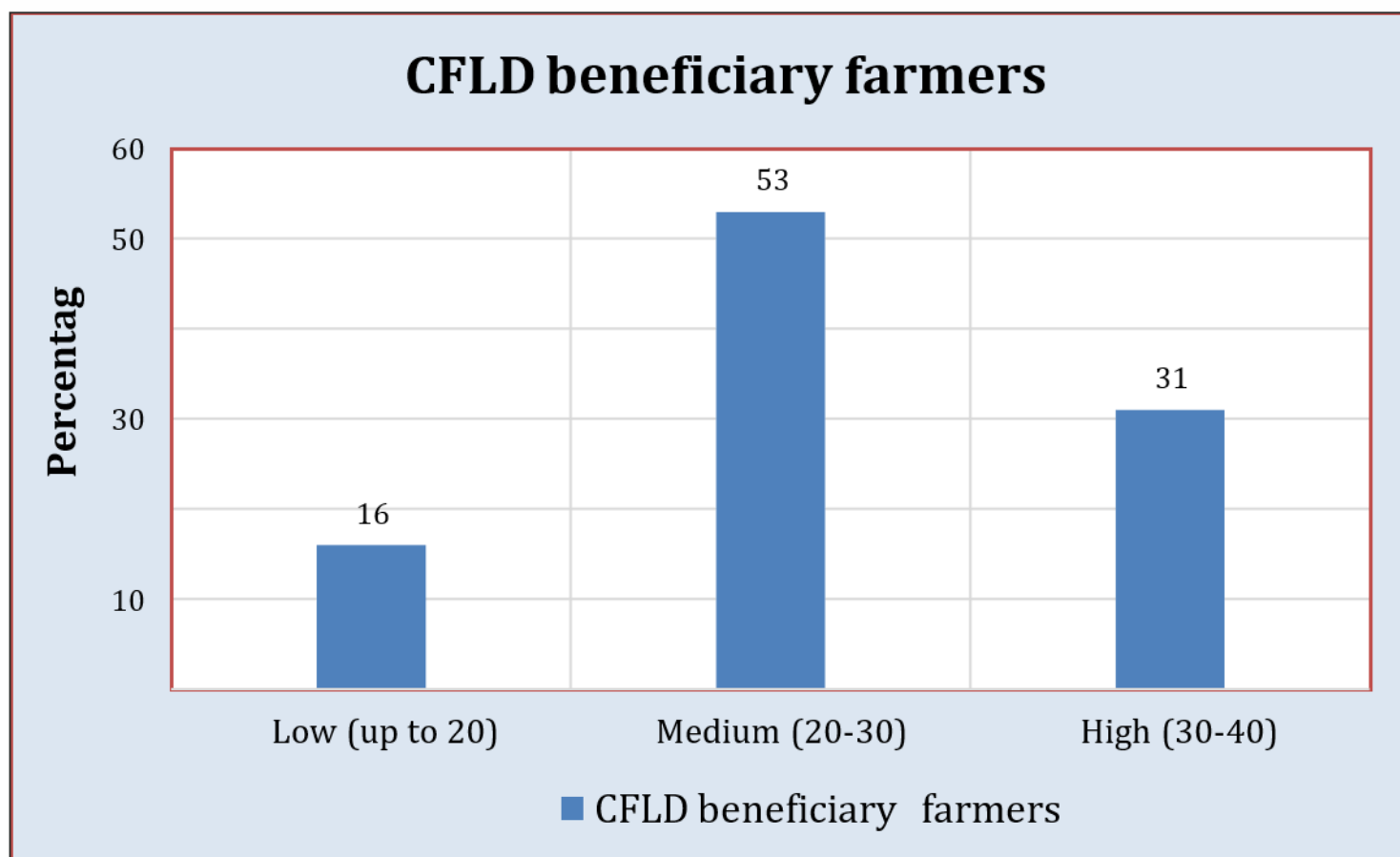
DOI: <https://doi.org/10.58321/AATCCReview.2023.11.03.104>  
© 2023 by the authors. The license of AATCC Review. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).

## Results and Discussion

**Table 1. Distribution of CFLD beneficiaries according to their level of perception on varietal and technological diversification efforts of KVK**

S. No	Perception	CFLD beneficiary (n=100)	
		F	%
1	Low (Up to 20)	16	16.00
2	Medium (20 - 30)	53	53.00
3	High (30 - 40)	31	31.00

The table 1 and fig 1, delineates that Majority of the CFLD beneficiary farmers belong to medium perception (53%) followed by High (31%) and Low (16%) perception levels. The table gleans that majority of the CFLD beneficiaries were spread in the region between medium to high perception towards CFLD. This may be due to the farmer friendly approach by KVK scientists and the favorable results obtained from the technologies demonstrated by the scientists. Most of the farmers responded favorably to the statement "Technology provided helps in increasing the productivity and quality of crop produce".



**Fig. 1. Distribution of CFLD beneficiaries according to their level of perception.**

These results are in line with work of Rao and Dubey [4] and sawant et al. [5].

The table 2. states that the statement which got positive response from most of the respondents was "Technology helps in increasing the productivity and quality of crop produce (86%) followed by "Maintain farmer friendly approach" (78%); "Provide technological inputs sequentially and systematically" (72%); "Provide pulse seed well before conducting CFLD" (78%); "Provide interface to researcher and farmers and take farmers feedback at every stage"(66%); "Conduct Field days" (65%); "Conduct brainstorming sessions" (64%); "Provide training to farmers on how to conduct CFLD" (61%); "Scientists personally visit to fields identifying the beneficiaries" (60%); "Regular monitoring visits by personnel" (59%); "Krishi Vigyan Kendra personnel help in providing guidance in soil sampling" (58%); "Selecting check plot properly"(50%) and "Collecting water sample"(32%).

Table 2. Statement wise distribution of beneficiaries based on their level of perception towards CFLD

S. No	Statements	Agree	Undecided	Disagree
<b>BEFORE CFLD</b>				
1.	Provide direct interface to researcher and farmers at all stages of CFLD pulses and take farmers feedback at every stage	66	17	17
2	Scientists visit villages to identify ideal farmers in clusters and suitable site (upland) for conducting CFLD	60	22	18
3	Technology provided under CFLD helps in increasing the productivity and quality of crop produce	86	10	4
4	Conduct brainstorming sessions on crop diversification towards pulse crops in accordance with their resource and decide suitable pulses crop and variety	64	21	15
5	Guide in collecting soil sample and conduct soil testing and provide Soil health card in time	58	18	24
6	Provide services in collecting water samples	32	46	22
7	Provide a platform to interact cum discuss with principal scientist pulse and distribute literature on pulse crop	56	27	17
8	Scientists Select the check plot properly and record data systematically	50	35	15
9	Provide improved pulse seed well before conducting CFLD	78	13	9
<b>DURING CFLD</b>				
10	Provide trainings to the farmer on how to conduct CFLD Pulses with proper explanation	61	27	12
11	Provide technological inputs sequential and systematically during various Pulse crop stages using various extension methods	72	21	7
12	Scientists conduct monitoring visits regularly to demonstration site and obtain farmer feedback for varietal diversification, if required for next season	59	24	17
13	Scientists maintain farmer friendly approach	78	10	12
14	Scientists conduct diagnostic services	49	30	21
15	Conduct Field days with involvement of all stakeholders, press and media.	65	22	13
16	Disseminate information widely regarding performance of demonstration plot in comparison with check plot	57	30	13

17	Proper recording and display of data	58	32	10
<b>AFTER CFLD</b>				
18	Follow up action carried out by scientists	47	32	21
19	Monitor fields on a continuous and regular basis through visits to FLD plots, recording observation, getting the feedback from the farmers and extension workers for varietal diversification	45	34	21
20	Scientists help farmers in marketing the produce	36	38	26

More than 45% of the beneficiaries spreading over medium to high level of perception range affirms KVK scientists efforts, hard work in implementing and executing the CFLD-pulses programme despite their hectic and routine official activities, their sustained interest in motivation through various extension activities starting from intimating the beneficiaries regarding CFLD-pulses well in advance and keep updated even after the programme, distributing good quality and high yielding seed; monitoring of crops during different crop stages, paying intensive attention at critical stages; abreasting farmers with weather forecasting adding to their medium to high level of perception.

KVK scientists friendly approach (78%) in helping the beneficiary farmers by providing technological inputs to improve the crop performance (86%) mainly might have contributed for the above results. This results were in line with chand [1].

## CONCLUSION

As a complex process, perception involves sequential thought of actions governed by personal, economic, psychological and cultural factors in a given situation. Because of varied personal characteristics some farmers perceive new agricultural technologies more quickly than others. Considering the importance of these characteristics, an attempt has been made in this investigation to know farmers' perception on varietal and technological diversification efforts made by the scientists of KVK Malyal and KVK Wyra. Farmer friendly approach of KVK scientists while conducting CFLDs revealed as factor to have medium to high farmer perception. The efforts like organizing need based and timely training programmes by KVK scientists during various stages of pulse crop growth while conducting CFLD along with success stories documented and used to motivate farmers contributed for varietal and technological diversification. Increasing the Pulse production through area expansion is the need of hour to restore soil fertility, productivity at individual farm, enhance economy level leading towards food and nutritional security.

## Acknowledgement

This study was conducted in connection with Krishi Vigyan Kendra (Wyra and Malyal). We thank KVK working staff for their cooperation.

## REFERENCES

1. Chand, S. 2012. Perception of farmers towards technical capability of public extension personnel. *M. Sc. (Agri.)* thesis. Anand Agricultural University. Anand.
2. Chavda, V. N. 2005. Farmers' perception about usefulness of agricultural extension system. *Ph.D Thesis*, JAU, Junagadh.
3. Global Hunger Index report, 2022.
4. C, M.S., Dubey, V. K. 2001. Managing agricultural production by minimizing environmental risk: A study of farmer's perception of environmental risk in pesticide use. *Manage Extension Research Review*. 70-77.
5. Sawant, A.G., Suryawanshi, S.K., Bhairamkar, M.S. 2001. Perception of fertilizer user about fertilizer distribution network. *Journal of Maharashtra Agricultural University*. 26 (1): 100-102.