



Journal Homepage: - [www.journalijar.com](http://www.journalijar.com)

## INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI: 10.21474/IJAR01/13081

DOI URL: <http://dx.doi.org/10.21474/IJAR01/13081>



### RESEARCH ARTICLE

#### IMPACT OF TRAINING ON THE AWARENESS AND KNOWLEDGE ON IMPROVED PRODUCTION TECHNOLOGIES IN RED GRAM AMONG FARMERS

**Dr. K.P. Vanetha**

Assistant Professor (Agricultural Extension), Horticultural College and Research Institute, Periyakulam.

#### Manuscript Info

##### Manuscript History

Received: 25 April 2021

Final Accepted: 28 May 2021

Published: June 2021

##### Key words:-

Knowledge Level, Training

#### Abstract

The training of farmers is a critical input for the rapid transfer of agricultural technologies. The present rate of agricultural production can be doubled if the available technologies are brought to bear with the production process and programmes focusing more and more on transferring our new technologies away from the confines of laboratories and research institutions to the farmers and make them more result and work oriented. In this context, training plays an important role to the farming community in boosting their farm production. Training for the farmer proved to be a significant input in accelerating our farm production. The present study was undertaken in the three blocks of the Madurai District of Tamil Nadu, 120 farmers were selected for the study. These farmers were trained at KVK in different aspects of Red gram production technologies. A knowledge test was developed to ascertain the knowledge of farmers on various aspects of Red gram cultivation technologies. The result exhibits that majority of the respondents were in middle age group, had middle school education. The findings of the study revealed that very few farmers were aware of the new technologies like redgram transplanting, after attending training programme they have got awareness on seed treatment with biofertilizer, weed management, water management techniques (74.00%), respectively and there was an increase in knowledge gain by the farmers after attending the training programme.

Copy Right, IJAR, 2021., All rights reserved.

#### Introduction:-

Training provides an opportunity to the farmers to get awareness of agricultural technologies as well as the shift in agricultural development approach through farming enterprises. Human resource is the most precious resource for any country. It is agricultural technologies to sustain and increase in farm productivity and economic viability of farming. A variety of extension programmes are implemented for creating awareness, educating and motivating the farmers, farm women and rural youth to adopt and manage the new agricultural technologies in the field. This is one of the major contributing factors for making India food surplus country (Samanta and Gowda 2003). The Krishi Vigyan Kendra (KVK) is an educational institution offers a very good opportunity to farmers by organizing trainings to work closely with trainees in developing a more skilled and educated workforce. KVKs impart trainings and education with a view to raise the level of

**Corresponding Author:- Dr. K.P. Vanetha**

Address:- Assistant Professor (Agricultural Extension), Horticultural College and Research Institute, Periyakulam.

knowledge, attitudinal changes and transferring of recommended improved farm technologies so as to bridge the gap between production and productivity among the farming community.

### Methodology:-

One of the main tasks of KVK is to provide and improve the level of knowledge of trainees about the improved farm practices, because knowledge is cognitive component of individual's mind and plays an important role in covert as well as overt behavior and individuals with a greater knowledge of technical nature of improved practices would lead to high adoption possibly because knowledge is not inert. This study was therefore, conducted to ascertain the prevailing level of awareness and knowledge among the farmers in Red gram cultivation technologies. The present study was undertaken in Alanganallur, Usilampatti, Sedapatti blocks of Madurai district and 120 farmers were selected for the study. These farmers were trained at KVK in different aspects of Red gram cultivation technologies during the year 2018. A knowledge test was developed to ascertain the knowledge of farmers on various aspects of Red gram production technologies. The gain in knowledge was operationalised as difference between the knowledge regarding red gram before and after exposure to trainings. To measure the knowledge, a respondent was given a score of one for correct answer and zero for wrong answer. Thus, the summation of all scores treated as the knowledge of the respondents at pre-exposure stage. Similarly post-training knowledge score was calculated separately. The gathered data were processed, tabulated, classified and analysed in terms of percentage with a view to arrive at the findings in the fulfillment of objectives of the study.

### Results and Discussion:-

The observations of the present study as well as relevant analysis have been summarized under the following heads.

#### Profile of the respondents

Age is an important factor as it reveals the mental maturity of an individual to take decisions for achieving their needs. It could be observed from Table 1 that 52.00 per cent of the respondents belonged to middle age group, followed by young and old age groups (33.00 and 15.00%) respectively. The result exhibits that majority of the respondents were in middle age group. This shows that improved production technologies in Red gram can be successfully promoted among farmers. These results were in line with the findings of the Rachna et al (2013).

**Table 1:-** Profile of the respondents (N = 120).

S.No	Category	Number	Percentage
<b>1.</b>	<b>Age</b>		
	Young (< 30 years)	40	33.00
	Middle (Between 30 to 45 years)	62	52.00
	Old (> 45 years)	18	15.00
<b>2.</b>	<b>Education</b>		
	Low (< 10th Class)	56	47.00
	Medium ( 10th – 12th Class)	43	36.00
	High (Collegiate )	21	17.00

Educational status of an individual farmer plays a vital role in enhancing their knowledge level. It plays its role in motivating them towards knowing new things and understanding the things learnt. Table 1 reveals that 47.00 per cent of the respondents had middle school education, followed by 36.00 per cent of the respondents educated upto secondary school level and higher secondary level of education and Collegiate education to an extent of 17.00 per cent respectively. It is inferred that most of the respondents possessed middle level of education. These results were in accordance with the study conducted by Sharma and Dhaliwal (2014).

#### Extent of knowledge about Red gram cultivation technologies

To assess the effects of farmers training the knowledge of the respondents was measured with the help of standardized test at two periods of interval that is pre-training, immediately after training. A score of one was given for each correct answer. On the basis of score the respondents was classified as having high, medium and low level of knowledge.

**Table 2:-** Pre-training knowledge score of the respondents (N = 120).

S.No	Knowledge level	No.	Percentage
1.	Low	22	18
2.	Medium	68	57
3.	High	30	25

The data depicted in table-2 shows that the majority (57.00%) of the respondents had medium knowledge level about different aspects of improved production technologies in Red gram followed by high (25.00%) while 18.00 percent of the respondents obtained low level of knowledge score related to different aspects of Red gram technologies, before participating in the training.

#### Extent of gain in knowledge

The gain in knowledge was determined by subtracting the pre-training knowledge score from knowledge score obtained immediately after training. Based on the differential score respondents were classified as low, medium and high. It is observed from table-3 that the knowledge was low in respect of 18.00 per cent of the respondents, medium in (57.00 %) while 25.00 per cent of respondents had high level of knowledge.

**Table 3:-** Knowledge gained by respondents after training (N = 120).

S.No	Knowledge level	No.	Percentage
1.	Low	22	18.00
2.	Medium	68	57.00
3.	High	30	25.00

Redgram Transplanting is the one of the new technology disseminated to farmers was selection of long duration redgram varieties, Transplanting within the month of August either under rainfed condition or under irrigated condition, Selection poly bag with a size of 6x4 inches and 200 micron thickness, Filling the poly bag with native soil: Sand: FYM @1:1:1 and put 3-4 holes in the bottom to avoid water stagnation, Soaking the seeds in 0.2% Calcium chloride for one hour and dry it under shade for 7 hours to harden the seeds, Treating the hardened seeds with T. viride @ 4g/kg and 100 g Rhizobium and 100 g phosphobacterium. Sowing the seeds @2/poly bag at 1 cm depth. Sow the seeds in polybags 30-45 days prior to transplanting, Ploughing the field deeply to get fine tilth followed by 2-3 harrowings at 3 weeks prior to transplanting. In medium to deep soils for raising long duration varieties, dig 15 sqcm pits at 5' X 3' for pure crops and 6' x 3' for intercropping under irrigated condition. For rainfed condition dig the pits at a spacing of 5'x3'. for short duration varieties dig 15 sq cm pits at 3' x 2' spacing. Under water logging condition, form furrows before digging pits. Apply inorganic fertilizers @ 25:50:25 kg NPK /ha at 20-30 days after planting as urea, DAP and potash around the seedlings, Apply ZnSO<sub>4</sub> @ 25 kg/ ha as basal along with FYM or sand, Nip (removal of top 5 cm) the plants at 20 – 30 days after planting to arrest the terminal growth, Spray planofix @ 0.5 ml/litre to control flower dropping.

**Table 4:-** Distribution of respondents according to the knowledge level on various aspects of Red gram production technologies.

S.No	Name of the technologies	Pre-training knowledge		Post-training knowledge	
		No	%	No	%
1	Season and varieties and preparation of the land	21	17.50	85	71.00
2	Seed treatment with biofertilizer	18	15.00	92	77.00
3	Application of fertilizers	37	31.00	87	72.50
4	Sowing the seeds	41	34.00	83	69.00
5	Weed management	33	27.50	90	75.00
6	Water management	43	36.00	89	74.00
7	Spraying of NAA and salicylic acid	45	37.50	78	65.00

8	Harvesting the crop	25	20.00	70	58.00
9	Inter-cropping	47	39.00	83	69.00
10	Redgram transplanting	20	17.00	76	63.00

The data presented in the (Table 4) revealed that very few farmers were aware of the new technologies like Seed treatment with biofertilizer, Weed management, Water management after attending training programme they have got awareness on Redgram transplanting techniques (63.00 %) Inter-cropping (69.00%), respectively after attending the training programme.

### Conclusion:-

The study concluded that the training program has a tremendous impact on the farmers on knowledge gain, It revealed that Red gram cultivation is one of the technology for the farmers, It showed a positive sign among farmers and its leads to extend the level of adoption in future. The overall knowledge gain percentage by the farmers, which indicated that training, had a significant impact in uptake of new technologies thereby increasing their livelihood with renewed income. The training imparted to the farmers increased their awareness and knowledge and also farmers will disseminate the technologies to the other farmers at village level.

### References:-

1. Rachna, Goel R and Sodhi G P S (2013). Evaluation of Vocational Training Programmes organized on Mushroom Farming by Krishi Vigyan Kendra Patiala. J Krishi Vigyan 2(1): 26-29
2. Samanta R and Gowda M 2003. Krishi Vigyan Kendra: the capacity builder of farmers. Kisan World 4: 41-43.
3. Sharma K and Dhaliwal N S (2014). Socio Economic Profile of Successful Beekeepers and Profitability of Bee Keeping in Muktsar District of Punjab. J Krishi Vigyan 2(2): 69-73.