

Dissemination of Paddy Crop Technologies Acquired by Krishi Vigyan Kendra Trained Farmers of Anantapur District of Andhra Pradesh



Agriculture

KEYWORDS : KVK scientists, Farmer training programs, Agricultural technologies acquired

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ABSTRACT

The study was conducted to analyze the Krishi Vigyan Kendra trained farmers in dissemination of paddy crop technologies. The investigation was carried out in four adopted villages of Andhra Pradesh covering three adopted mandals of Reddipalli Krishi Vigyan Kendra, Anantapur district. Exploratory research design was followed for the study. Majority of the trained farmers had medium acquisition (71.67%) followed by low acquisition (13.33%) and high acquisition (15.00%) on groundnut crop technologies. Cent percent of the respondent acquired technologies viz, BPT5204 variety adoption, basal dose of fertilizers, seed treatment, harvesting 14 percent moisture in paddy grain and trimming of bunds.

INTRODUCTION

The farmers, farm women and rural youths are the one who utilize and adopt the technologies for increasing the agricultural production. The present agricultural production can be substantially increased, if the available technologies are more on transferring new technologies away from the confined laboratories and research institutes to the farmers fields and make them more result and work-oriented. These can be achieved by organizing suitable and effective training programmes to the farmers.

Several organized efforts have been made to disseminate the agricultural technologies with greater speed. Krishi Vigyan Kendra is one of the major Extension wings established by the ICAR with main objective being the transfer of technology to farmers, farm women and rural youth related to Agriculture, Horticulture, Aquaculture and allied fields. The feedback of any training programme provides the knowledge gained by the trainees and also training satisfaction as a result of undergoing training. Further, it provides the scope for improvement in the conduct of training based on their needs, time, place, duration and use of different extension teaching methods and also increase the effectiveness of the trainings that are conducted.

MATERIAL AND METHODS

Reddipalli Krishi Vigyan Kendra of Anantapur district of Andhra Pradesh was selected purposively for conducting the research. Training programme were organized in five identified mandals of Krishi Vigyan Kendra. Krishi Vigyan Kendra out of the five mandals, four mandals namely Kalyandurga, Beluguppa, Bathalapalli, Atmakur were selected randomly and these four mandals comprised of 12 adopted villages. Out of 12 adopted villages of the district four villages viz. Pathacheruvu, Berampalli, Hanimireddypalli and Malyantham were selected randomly. From each of the selected villages 15 trained and 15 untrained farmers were selected randomly for Paddy and Groundnut crops respectively. Thus, a total of 120 respondents, which included 60 trained and 60 untrained farmers constituted the sample of the study. The data were collected by personal interview method through structured interview schedule and suitable statistical tests were applied for analysis.

RESULTS AND DISCUSSION

On the basis of their acquisition of technologies on Paddy crop the respondents were classified into three categories based on mean and standard deviation. The results thus obtained were discussed in the following tables.

The findings of the table 1 revealed that 71.67 per cent of trained farmers had medium acquisition followed by high acquisition (15.00%) and low acquisition (13.33%) on paddy crop technologies.

Table 1: Distribution of trained farmers based on Paddy crop technologies acquired (n=60)

S. NO.	Category	Frequency	Percentage
1.	Low	8	13.33
2.	Medium	43	71.67
3.	High	9	15.00
	Total	60	100.00
		Mean=18.00	S.D.=2.26

The finding of the table 1 revealed that 71.67 per cent of trained farmers had medium acquisition followed by high acquisition (15.00%) and low acquisition (13.33%) on paddy crop technologies.

As paddy crop is the staple crop in this area, the technologies which are in good olden days and the technologies which the scientists had recommended might be same with some modifications. As a result majority of the KVK trained farmers had awareness, knowledge and skills about the technologies.

On the other hand, the farmers under high category might have acquired paddy technologies due to college education, attended more trainings and may have large farms, had more contacts and were enthusiastic in adoption of these technologies. The farmers under low category might have acquired paddy technologies less due to less practicability and more complexity of the technologies they might have perceived. And also due to less resistance to new technology and had belief in traditional practices. This finding is in conformity with findings of Ramakrishnan et al. (2007) and Kiror and Mehta (2008)

It could be seen from table 2 that cent per cent of the respondents had acquired technologies viz. variety BPT-5204 adoption, basal dose of fertilizers, seed treatment, harvesting, paddy grain should have less than 14 per cent moisture and trimming of bunds, followed by application of potassium and application of nitrogen about 96.66 percent had acquired seed rate, application of nitrogen, application of potassium. Seed rate (91.66%), water management (90.00%), application of pre-emergence weedicide (86.66%), seedling root dip method (53.33%), zinc application, alternate wetting and drying and blast control (41.66%), passing the rope (40.00%), sheath blight control (36.66%), clipping of leaf tips (to distract stem borer) (33.33%), application of phosphorus (30.00%), neem oil spray, using of light traps (25.00%) were acquired by the trained farmers. About 13.33 percent had acquired in learning alleys of 20cm for every 2m.

And only 3.33 percent had acquired knowledge on use of egg parasitoid *Trichogramma japonicum* for stem borer.

Table 2: Paddy crop technologies acquired by trained farmers (n=60)

S. No.	Statements	Frequency	Percentage
1.	Variety- BPT-5204	60	100.00
2.	Seed treatment (by soaking the seed in water treated with carbendazim (3gms/kg seed)	60	100.00
3.	Seed rate (Rainfed rice 30-36 kg/acre, Irrigated 20-25 kg/acre)	58	96.66
4.	Application of pre-emergence weedicide (with in 4-6 days after transplantation prevents weed growth)	52	86.66
5.	Basal dose of fertilizers (should be applied during puddling operation)	60	100.00
6.	Application of Nitrogen (in 3-4 equal splits at basal, maximum tillering and panicle initiation stage)	58	96.66
7.	Application of Phosphorus (in last puddling)	18	30.00
8.	Application of potassium (in two equal splits at basal and panicle initial stage)	58	96.66
9.	Water management (should be drained during application of urea top dressing and pesticide granules)	54	90.00
10.	Paddy grain should have less than 14% moisture (for longer storage life and avoidance of pest infestation)	60	100.00
11.	Zinc application (is corrected by spraying of $ZnSO_4$ @2gms/lit infestation)	25	75.00
12.	Seedling root dip method (in chloropyrphos effective ways to prevent stem borer infestation)	32	53.33
13.	Clipping of leaf tips (to distract Stem borer egg mass)	20	33.33
14.	Trimming of bunds (of field bunds to prevent Grass hopper multiplication)	60	100.00
15.	Leaving alleys of 20 cm for every 2m (in the main field helps in prevention and effective control against BPH)	8	13.33
16.	Passing the rope (on the crop and drying of water for Caseworm)	24	40.00
17.	Using of light traps (to monitor GLH, BPH and Stem borer)	15	25.00

S. No.	Statements	Frequency	Percentage
18.	Neem oil spray (does not have ovicidal action on eggs of pests of paddy)	15	25.00
19.	Alternate wetting and drying in BPH	25	41.66
20.	Use of egg parasitoid <i>Tricograma japonicum</i> for Stem borer	2	3.33
21.	Blast control (Tricyclozole 3gms/kg seed or casugamysin-3L 2.5ml/1lit water)	25	41.66
22.	Sheath blight control- Hexaconazole or propiconazole- 2ml/lit water	22	36.66
23.	Harvesting (should be done as close as possible the ground)	60	100.00

Very few trained farmers have acquired leaving alleys of 20cm for every 2m (13.33%) and (3.33%) of them had acquisition in use of egg parasitoid *trichograma japonicum*.

The probable reason for the above trend might be that the technologies viz. variety BPT-5204 adoption, basal dose of fertilizers, seed treatment, harvesting, paddy grain should have less than 14 per cent moisture and trimming of bunds were simple and easy to acquire technologies found to be more effective in adoption for all the trained farmers.

Whereas the technologies viz. application of potassium, application of nitrogen, seed treatment, water management, application of pre-emergence weedicide, seedling root dip method, zinc application, alternate wetting and drying, blast control, passing the rope, sheath blight control and clipping of leaf tips (to distract stem borer), application of phosphorus, using of light traps, neem oil, leaving alleys of 20cm for every 2m and use of egg parasitoid *trichograma japonicum* might be complex and had given less importance in farming community and also due to less stress on training of these technologies by Krishi Vigyan Kendras trainers and also suitability of these technologies to the farmers situations, may be less. So the acquisition percentage reduced gradually the findings are in confirming with Kiror, B.S and Mehta, B.K. 2008. Extent of knowledge of tribal farmers about Rice production technology. Indian Research Journal of Extension Education. (2&3):119-122.

Conclusion:

The results of study indicated that the majority of the trained farmers had acquired medium level of knowledge on selected crop technologies. It is desirable to develop high knowledge gain by educating the trained farmers through conducting more number of training programme before the commencement of crop season. The trained farmers acquired how to knowledge about application of fertilizer doses, for this, calls for a strategy to educate the farmers on use and application of fertilizers not only by conducting demonstrations but involving them in varied training programmes on fertilizer management.

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