



RESEARCH ARTICLE

Impact of Training Programmes of Krishi Vigyan Kendra (KVK) Towards Socio-economic Development of Weaker section Farmers in Cuddalore district

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ABSTRACT

Researchers at Krishi Vigyan Kendra (KVK) in Cuddalore district, Tamil Nadu, examined the efficacy of their trainings using a sample size of 100 from the adopted villages chosen through proportional random selection of weaker section farmers. Personal interviews were conducted with the sampled subjects utilizing a pre-tested interview schedule. The results revealed that social recognition had the highest efficacy score, followed by technology adaptation rate, knowledge and skill level, economic position, output, and enhancement of livelihood. The rate of technology adoption showed notable discrepancies among various training categories. "Value Addition in Cashew Apple", "Importance of Organic Farming and Integrated Farming System" displayed remarkable effectiveness, boasting adoption rates of 100% and 96.67% respectively. "ICM, INM, IPDM in Groundnut" and "Integrated Weed Management Practices" demonstrated lower effectiveness in this study, suggesting a requirement for reassessment or enhancement of training methodologies to elevate technology adoption rates.

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INTRODUCTION

Food security in the country can be improved with the help of agricultural innovations and the spread of new technologies which assists farmers have an edge over conventional farming and contribute to rising fair standard of living. living standards. Farmers cannot reach their full potential unless they have access to cutting-edge tools, feed, machinery, and information about their enterprises. To address these issues, KVKs in the Cuddalore district have provided training on a variety of agricultural technologies to the district's most poor farmers by cutting-edge technologies, systems educate farmers and provide vital inputs.

The farmers in Cuddalore district, located in Tamil Nadu, face various problems and challenges that affect their livelihoods and farm practices. Socio-economic development of weaker section farmers in Cuddalore district of Tamil Nadu has been a critical focus area for the government and various

development organizations to promote inclusive growth and upliftment of marginalized communities through KVK's training programmes. Cuddalore district, known for its agriculture-based economy, is home to a significant number of small and marginalized farmers who face various challenges in terms of access to farm resources, technology, and market opportunities. Initiatives aimed at improving their socio-economic conditions. These farmers, belonging to marginalized communities and backward classes, have historically faced numerous challenges that hindered their social progress and well-being. However, concerted efforts have been made to address these development issues and uplift their socio-economic status.

Agricultural progress is impossible without dedicated training efforts. Training entails planned experiences



in which individuals can gain the knowledge and abilities they need to do a task successfully (Kulkarni and Nikhade, 1996). By increasing farm productivity, income, and employment through the application of agricultural innovation generated at the research stations, KVK trainings are helping to improve the lives of farmers, farm women, and rural youth in the Cuddalore district's outlying areas (Akinsorotan and Oladele, 2009). Traditionally, KVKs have provided a wide range of educational opportunities. Initially they were conceived as institutions that would provide young people in rural areas with the skills necessary to start their own businesses.

The farmers in Cuddalore district who are at the bottom of the economic ladder tend to have very small holdings or to have no land at all. Therefore, self-development entrepreneurship-based training programmes are organized for this weaker group, while training focusing on the most up-to-date technologies and needed inputs is provided to small landholding farmers. One of KVK's responsibilities is training, which improves farmers' financial security in two ways: first, trained farmers are more effective, and second, effective farmers contribute to the expansion of the agricultural sector. But if their efficacy in terms of knowledge shift, adoption of improved practices, and restrictions experienced by trainees and trainers throughout training is not investigated, they serve little purpose. Therefore, it is crucial to investigate the impact of this training programmes carefully and thoroughly on its participants during the training process. Therefore, this research aims to assess the impact of Krishi Vigyan Kendra, Cuddalore's training programmes on better crop production methods, entrepreneur development, and the quantification of each of these factors (Dubey et al., 2008).

METHODOLOGY

The study was conducted in Cuddalore district of Tamil Nadu during the year 2021 by the researchers as part of the Schedules Caste Sub-Plan (SCSP) programme under Indian Council of Agricultural Research through Agricultural Technology Application Research Institute (ATARI). Cuddalore district was purposively selected for this study. Ten adopted villages (Kolavai, Elangianur, Kalkunam, Manakudianiruppu, Sivayam, Chinnakomatti, Sedapalayam, Agaram Alampadi, Kavanur and Vanamadevi) were selected purposively from ten blocks having the maximum number of trained farmers under KVK, Cuddalore district.

Selection of Farm Respondents

The team members at Krishi Vigyan Kendra, Cuddalore, worked together to compile a comprehensive list of trainee farmers who had attended at least five KVK training programmes. Each adopted community had an equal number of residents selected as trainees. The ultimate sample size was 100, with respondents drawn at random from the weaker sections in the study area.

Measurement of data

Training programmes were evaluated on seven criteria, including their ability to boost participants' understanding of new technologies, their willingness to embrace these technologies, their output and earnings, their sense of pride in themselves, and their standing in the community.

Researchers created a test with questions about modern farming techniques to gauge interest in adopting them, and the timetable was designed to gauge output and productivity. Farmers' confidence in themselves was measured using a modified version described by Aphunu and Otoikhian (2008). Mean and standard deviation values were used to classify the respondents.

To generate reasonable inferences from the data, statistical methods such as frequency, percentage, arithmetic mean and standard deviation was used.

Data Collection

A "Structured interview Schedule" was used to conduct in-depth interviews with the sampled respondents, followed by focus groups to compile the collected data. The investigators and the village leaders visited the homes and fields of the selected respondents to conduct in-depth interviews and document the participants' responses.

RESULTS

Level of Knowledge on crop technologies

The findings of the study revealed that KVK, Cuddalore's training facilities earned an overall score of 72.74. KVK Interventions (91.48 %), Social Acceptances (75.33%), percentage of respondents whose levels of knowledge on crop cultivation practices (74.23 %), Social Economics (69.84 %), Technological Acceptance (60.67 %), Technological Impact (58.17 %), Technological Adoptions (56.97 %). Despite the idea of enhanced technologies in agriculture's growing appeal among farmers, there has been little training



in the methodical and scientific application of these approaches. To better equip them to cultivate their crops, farmers have been urged to participate in training programmes led by professionals. Singh and Saini (2010) research found the same influence and trends and their scoring procedure was used in this study.

$$TE = \frac{D1}{P1} + \frac{D2}{P2} + \frac{D3}{P3} + \dots + \frac{Dn}{Pn} \times 100$$

Where, TE = Training effectiveness, D1, D2, D3 ...Dn refers to the total score obtained by all the respondents on a particular dimension of items P1, P2, P3.... Pn refer to the potential scores obtainable on each dimension was included in the study.

Technology adoption

According to Table 1, most respondents reported a high level of acceptance for enhanced technologies in crop farming, while about 40 percent reported a medium level of adoption, and 7.50 percent reported a low level of adoption. Despite having a solid grasp of improved and better crop cultivation practices, a sizeable portion of farmers in the study area were unable to fully adopt them due to the poor nature of short term/immediate returns in their small farming situations and due to the farmers’ poor economic conditions (Fig. 1). This mostly attributes to the average degree of acceptance by farmers on these technologies. Singh et al. (2010) and Shankara et al, 2014 also reported similar findings.

The technology used in cashew production was taught to 120 people, with a 55% adoption rate and 45.83% efficacy. Ninety-six people were trained in crop cultivation technologies for tomatoes and brinjal, with a 45% adoption rate and 46.88% efficacy. Exposure visit to TRRI, Aduthurai, ICM , IDM and INM training given to 141 individuals, exhibited a 37% acceptance rate and 26.24% efficacy. Green Livelihood training was attended by 30 individuals, with an acceptance rate of 29% and an efficacy rate of 96.67%. Twenty-seven people were trained in ICM for cashew and value addition, with a 24% acceptance rate and an 88.89% effectiveness rate. Three hundred people were trained in ICM, INM, and IPDM in Groundnut, with a 60% adoption rate and 19.87% efficacy. Three hundred and sixteen people were trained in ICM, INM, and IPDM in pulses, with a 96% adoption rate and 30.38% efficacy.

On the Importance of Fodder Pellets and Production Strategies about 45 participants received training and had a 20% adoption rate and 44.4% efficacy. On the importance of millet cultivation, about 25 people were trained, with a 21% acceptance rate and 84% efficacy. 86 people were trained in better cluster bean and vegetable cowpea production practices, with a 55% acceptance rate and 63.95% efficacy. Improved seed production systems in Gingelly trained 50 people, with a 46% adoption rate and 92% efficacy. Improved paddy seed production method: 153 people were trained, resulting in a 54% acceptance rate and 35.29% effectiveness. The Integrated Farming Cluster

Fig 1. KVK Cuddalore Interventions towards upliftment of weaker section Farmers

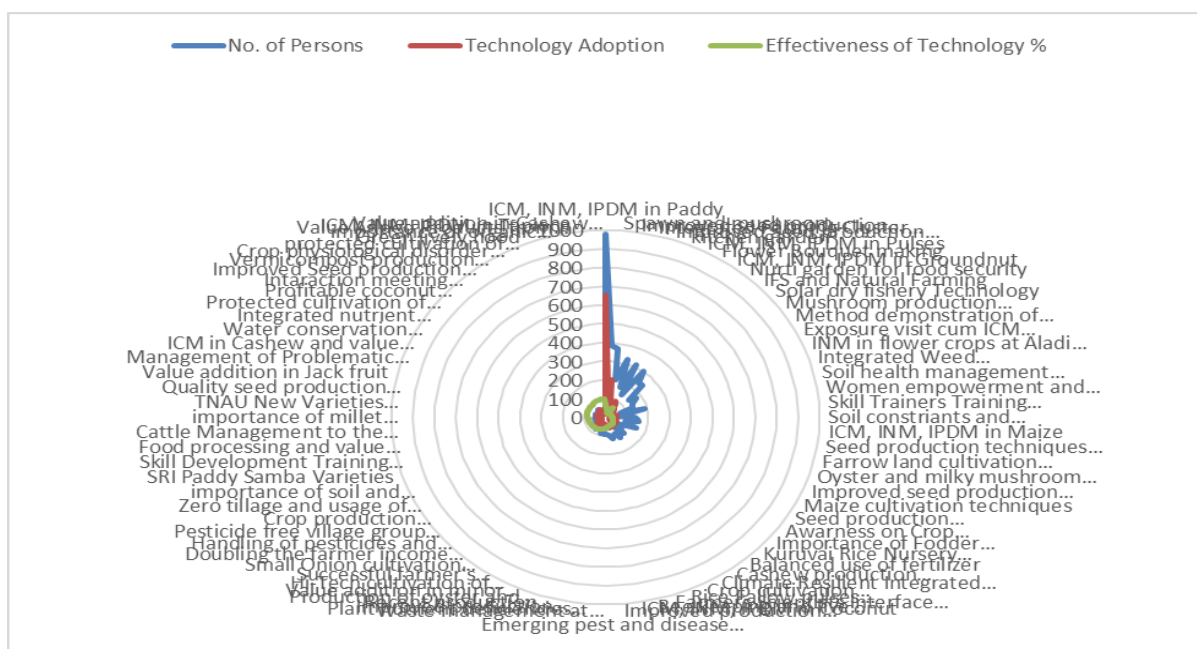




Table 1. KVK intervention to the farmers by training and effectiveness and adoption of farmers

S. No	Factor	Training Categories	No. of Persons	Technology Adoption	Effectiveness of Technology %
1	IPM	ICM, INM, IPDM in Tapioca	15	15	100.00
2	VAM	Value addition in Cashew apple	15	15	100.00
3	VAM	Value Added Products from Milk and Fodder Bank	41	40	97.56
4	ICM	Green livelihood	30	29	96.67
5	INM	Importance of organic farming and Integrated Farming System	30	29	96.67
6	IPM	Protected cultivation of vegetable crops	25	24	96.00
7	INM	Crop physiological disorder and its management	20	19	95.00
8	SHT	Vermicompost production techniques	50	47	94.00
9	ICM	Improved Seed production technologies on Gingelly	50	46	92.00
10	SUM	Interaction meeting between Bankers and Farmers for crop loans	47	43	91.49
11	TDM	Profitable coconut cultivation technologies	32	29	90.63
12	INM	Integrated nutrient management and fertilizer usage	20	18	90.00
13	IPM	Protected cultivation of Vegetable crops	20	18	90.00
14	TDM	Water conservation methods for various agricultural crops	37	33	89.19
15	ICM	ICM in Cashew and value addition	27	24	88.89
16	INM	Management of Problematic Soils	50	44	88.00
17	VAM	Value addition in Jack fruit	45	39	86.67
18	TDM	Quality seed production techniques	44	38	86.36
19	ICM	importance of millet cultivation	25	21	84.00
20	TDM	TNAU New Varieties popularization	25	21	84.00
21	TDM	Cattle Management	50	41	82.00
22	VAM	Food processing and value addition	31	25	80.65
23	TDM	Skill Development Training for Entrepreneurship development of Alternatively disabled people	36	29	80.56
24	ICM	SRI Paddy Samba Varieties	50	39	78.00
25	INM	importance of soil and water testing	45	35	77.78
26	TDM	Zero tillage and usage of seed drill	26	20	76.92
27	TDM	Crop production technologies and Honey bee keeping	56	43	76.79
28	TDM	Handling of pesticides and sprayers	50	38	76.00
29	TDM	Pesticide free village group training	50	38	76.00
30	TDM	Doubling the farmer income through Integrated Farming System	73	55	75.34
31	TDM	Small Onion cultivation techniques	38	28	73.68
32	SUM	Successful farmer's feedback for giving training to New Farmers	75	55	73.33



33	TDM	Hi-Tech cultivation of vegetable crops	59	43	72.88
34	VAM	Value addition in minor millets	55	39	70.91
35	TDM	Production of oyster and milky mushrooms	60	42	70.00
36	IPDM	ICM, INM, IPDM in Paddy	979	652	66.60
37	TDM	Recent production technologies and Value addition in Cashew	50	33	66.00
38	ICM	Improved production technology of cluster bean and vegetable cowpea	86	55	63.95
39	ICM	Plant nutrient deficiencies and its management & Vermicompost technologies	60	37	61.67
40	TDM	Waste management	90	55	61.11
41	TDM	Flower Bouquet making	139	84	60.43
42	IPM	Emerging pest and disease in Horticulture crops to extensional functionaries	89	52	58.43
43	TDM	Improved production technologies in Cumbu	94	53	56.38
44	TDM	Improved seed production techniques in agricultural crops	371	201	54.18
45	IPM	ICM, INM, IPDM in Coconut	101	54	53.47
46	TDM	Bee keeping and live demonstration	112	56	50.00
47	TDM	Farmers Scientists Interface on Climate Resilient Varieties	118	58	49.15
48	ICM	Rice Fallow pulses (Black gram varieties) and seed production	100	47	47.00
49	ICM	Crop cultivation technologies on Tomato and Brinjal	96	45	46.88
50	SUM	Climate Resilient Integrated Wet Land Farming System	130	60	46.15
51	ICM	Cashew production technologies	120	55	45.83
52	INM	Balanced use of fertilizer	68	31	45.59
53	ICM	Kuruvai Rice Nursery Management	121	54	44.63
54	ICM	Importance of Fodder Pellets and Production Strategy	45	20	44.44
55	TDM	Awareness on Crop diversification	95	42	44.21
56	ICM	Integrated Farming Cluster Village	204	89	43.63
57	ICM	Seed production technologies in Paddy, Groundnut & Vegetable cultivation	60	26	43.33
58	TDM	Spawn and mushroom production	383	157	40.99
59	TDM	Maize cultivation techniques	91	37	40.66
60	TDM	kitchen garden	173	64	36.99
61	ICM	Improved seed production technology of paddy	153	54	35.29
62	SUM	Oyster and milky mushroom cultivation technology for Women	100	35	35.00
63	TDM	Fallow land cultivation Technique	92	32	34.78
64	ICM	Seed production techniques in Paddy, Pulses & Oilseeds	155	53	34.19
65	IPM	ICM, INM, IPDM in Maize	148	48	32.43
66	INM	Soil constraints and management	135	43	31.85



67	TDM	Skill trainers training programme to Project Staff and Farmers of Cuddalore district	48	15	31.25
68	ICM	ICM, INM, IPDM in Pulses	316	96	30.38
69	SUM	Women empowerment and rights of their women	96	29	30.21
70	INM	Soil health management Technology	186	55	29.57
71	IWM	Integrated Weed Management Practices	70	20	28.57
72	INM	INM in flower crops	137	37	27.01
73	ICM	Exposure visit cum ICM Paddy, IDM Paddy & INM in Paddy TRRI, Aduthurai	141	37	26.24
74	TDM	Method demonstration of Drone spray	146	38	26.03
75	TDM	Mushroom production technologies	179	46	25.70
76	TDM	Solar dry fishery Technology	145	37	25.52
77	IFS	IFS and Natural Farming	242	59	24.38
78	TDM	Nurti garden for food security	238	58	24.37
79	TDM	Improved Seed production technologies on groundnut	326	78	23.93
80	ICM	ICM, INM, IPDM in Groundnut	302	60	19.87

Village trained 204 people, with 89% acceptance and 43.63% effectiveness.

With regard to the management of Kuruvai Rice Nursery about 121 people were trained and the adoption rate was found to be 54%, and the efficacy was 44.63%. Plant nutrient deficits, their treatment, and vermicomposting techniques 60 people were trained; the acceptance rate was 37% and the efficacy was 61.67%. In rice fallow rice pulses, varieties of blackgram for seed production 100 people were trained, resulting in a 47% adoption rate and 47% efficacy. Techniques for producing seeds for pulses, oilseeds, and paddy were taught to 155 people, who showed 34.19% effectiveness and 53% acceptance rate in this study.

About 60 people trained on the technology for producing seeds for the development of vegetables, groundnuts, and paddy and the adoption rate was about 26% and the efficacy was 43.33%. In Paddy, samba varieties from SRI 50 people were trained, and 78% were found to be effective and 39% has adopted it. About 242 people were trained in both natural farming and the integrated farming system, with a 24.38% effectiveness rate and a 59% adoption rate. With regard to Fertilizer use about 68 individuals were trained, 31% adopted the practices and 45.59% were found to be effective. Twenty people were educated to handle crop physiological disorders, with a 19% acceptance rate and a 95% efficacy rate. In Integrated Farming System about 30 people were trained and

has a 29% adoption rate and 96.67% efficacy which is extremely important in this study.

With regard to the significance of evaluating water and soil, 45 people were trained; their efficacy was 77.78% and their acceptance rate was 35%. About 137 people were educated in INM for flower crops in Aladi village, with a 37% acceptance rate and 27.01% effectiveness. In Integrated use of fertilizers and nutrient management about 20 people were trained, and they had 90% efficacy and 18% adoption rate were achieved. With regard to handling complicated soils, 50 people were trained, and 88% was found to be effective and 44% adopted it. About 135 people were trained in soil limits and management, with adoption rate of 43% and a 31.85% efficacy rate. Most respondents reported a medium level of productivity, followed by those who reported a low level (20%), 28%. These findings were similar to Roy et (2013).

About one hundred eighty-six people were trained in soil health management technology, which has 55% adoption rate and 29.57% efficacy. About 979 people were trained in ICM, INM, and IPDM in Paddy, with a 65.2% uptake rate and 66.6% efficacy. About 89 extension workers were trained on emerging pests and diseases in horticulture crops, and their acceptance rate was found to be 52%, while their effectiveness was 58.43%. 101 individuals were trained in ICM, INM, and IPDM, with a 54% acceptance rate and 53.47% effectiveness rate. In this study, 148 people

were trained in ICM, INM, and IPDM in maize with a 48% acceptance rate and a 32.43% efficacy rate. In tapioca, 15 people were trained in ICM, INM, and IPDM and they had a 15% acceptance rate and 100% efficacy.

With regard to cultivation of vegetable crops under protection, 25 people received training and they were 96% effective and 24% has adopted it. In integrated methods of weed control 70 people were trained and the acceptance rate was 20% and the efficacy was 28.57%. In methods for producing vermicompost 50 people were trained and they were 94% successful and 47% adopted it. With regard to Resilient to Climate Change Wet Land Farming System 130 people were trained, resulting in a 46.15% efficacy and 60% acceptance rate.

Meetings between bankers and farmers to discuss crop finance 47 individuals were given guidance, resulting in about 43% acceptance rate and 91.49% efficacy. All the women were educated in oyster and milky mushroom growing, with a 35 percent adoption and 35 percent efficacy rate. With regard to feedback from successful farmers to new farmers, 75 individuals were trained resulting in a 55% acceptance rate and 73.33% efficacy. About 96 people were trained on women's rights and empowerment in this study, with a 29% adoption rate and 30.21% effectiveness rate.

About 95 people were trained on Knowledge of Crop Diversification and the adoption rate was 42% and the efficacy was 44.21%. 112 people were trained in bee keeping and live demonstrations, with a 56% adoption rate and 50% efficacy. With regard to Farmers' perspective on cattle management 50 people were trained, resulting in an 82% efficacy and 41% acceptance rate. About 56 people were trained in crop production technology and honey beekeeping, with a 43% acceptance rate and a 76.79% effectiveness rate. For farmers to double the income they were trained on Integrated Farming System with training given to 73 trained individuals with 55% adoption rate and 75.34% effectiveness rate.

On Farmers and scientists collaborating on climate-resilient varieties about 118 people were trained with a 58% acceptance rate and 49.15% efficacy. In Fallow land cultivation techniques, 92 people were trained with a 32% acceptance rate and 34.78% efficacy. In Flower Bouquet training for 139 people there was 84% adoption rate with 60.43% efficacy. On Pesticide and sprayer management about 50 people were trained, with a 38% acceptance rate and 76% efficacy. With

regard to High-tech cultivation of vegetable crops, 59 people were trained, with acceptance rate of 43% and 72.88% efficacy. On Improved production technology in Cumbu, 94 people were instructed, with a 53% acceptance rate and 56.38% efficacy.

Social acceptance

Fifty six percent of people adopted the KVK farm technology interventions in this study. Respondents' positive assessments of the training programme's ability assisted them to grasp the significance of peer approval and suggest its efficacy. It is more effective to motivate the farmers for the adoption of new technology through the effective transfer of technologies among the target groups, such as field visits to different farms owned by trained farmers.

Effectiveness of Training

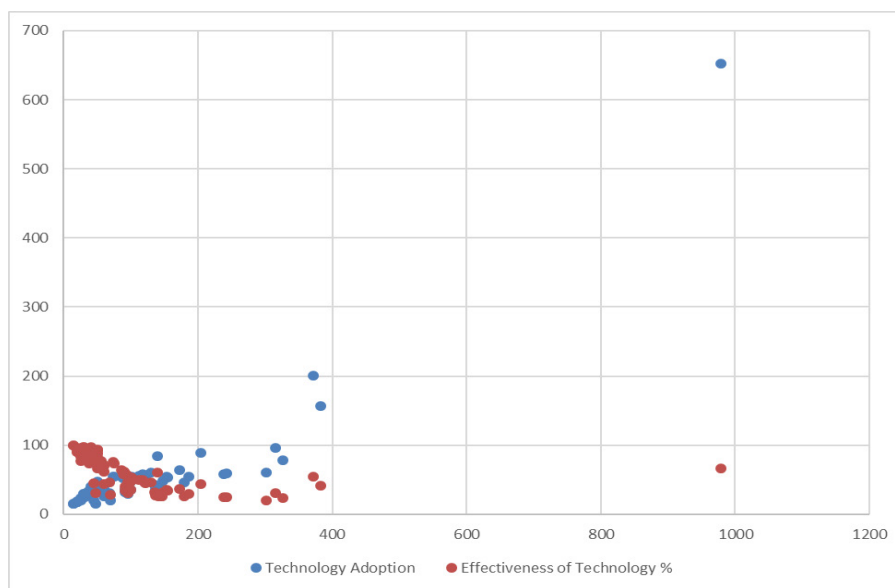
The Training Effectiveness Scores for the various dimensions under consideration are listed in Table 2 below, using the same methodology of Kulkarni and Nikhade (1996). According to Table 2, the effectiveness score for KVK intervention was determined to be the highest (91.48), followed by the score for social acceptance out of the seven primary aspects chosen for the study. Training courses were shown to be successful in boosting trainees' understanding of improved crop farming practices, as a result, KVKs should organize additional trainings so that a greater number of crop growers can get benefitted. Knowledge of Technology understanding score of 74.23 suggests that most farmers implemented the practices despite the training they received. Therefore, these methods require constant guidelines and the refinement of farmer-level methods and recommendations to ensure their widest possible implementation. When it comes to improving their economic situation, the instruction was effective enough to boost their annual net revenue from adoption of technology (scoring 56.97), but more needs to be done. The study also indicated that the impact of training score (58.17) was lower than the other dimensions perhaps because most of the respondents were small farmers. The lowest efficacy score (56.97 out of 100) was for Adoption of technology, which is concerning because people who are secure in themselves are more likely to embrace change (Fig. 2). The findings also indicate that despite extensive attempts to educate farmers in conventional professions and interests, there is still a gap that must



Table 2. Training effectiveness score of each dimension under study

Dimensions	Training effectiveness score (%)	Rank
KVK Interventions	91.48	1
Social acceptances	75.33	2
Knowledge on Technologies	74.23	1
Social Economics	69.84	4
Technology acceptance	60.67	5
Impact of training	58.17	6
Adoptions of Technologies	56.97	7
Overall Training Effectiveness score	72.74	

Fig 2. Impact of KVK trainings by adoption and effectiveness



be narrowed upon. To effectively transfer technologies among the target groups, KVKs need to reorient their training considering the above findings of this study. The field visits to different farms owned by farmers are more effective at motivating the farmers to adopt new farm technologies. It was determined that the KVK training was effective across all evaluated aspects, with an overall training effectiveness score of 72.74.

DISCUSSION

The data in this study presents a comprehensive overview of various training categories along with their respective metrics of effectiveness, including the number of participants, technology adoption rates, and the effectiveness of technology adoption. The effectiveness of various training categories in terms of technology adoption and effectiveness percentage is summarized in the table provided. Upon analyzing the effectiveness of different training categories, several

observations can be made as patterns and trends emerge.

Technology Adoption Rates: Across different training categories, there is a wide range of technology adoption rates. On “IPM, ICM, IPDM in Paddy” and “Improved Seed Production Technologies on Gingelly” it shows relatively higher adoption rates, indicating successful dissemination and acceptance of this technological practices within these domains. Conversely, categories such as “ICM, INM, IPDM in Groundnut” and “Integrated Weed Management Practices” exhibit lower adoption rates, suggesting potential challenges or barriers towards technology uptake. There is also a significant variation in technology adoption rates across different training categories. For instance, training sessions on “IPM, ICM, IPDM in Paddy” have seen high adoption rates with a technology adoption percentage of 66.6%,

whereas in certain sessions like “Integrated Weed Management Practices” exhibit lower adoption rates at 28.57%. These findings are similar to Patil and Kokate (2016).

Effectiveness of Technology Adoption: The effectiveness of technology adoption varies significantly across different training categories. In categories like “Value Addition in Cashew Apple” and “Importance of Organic Farming and Integrated Farming System” demonstrate exceptionally high effectiveness, with adoption percentages of 100% and 96.67% respectively. Conversely, categories such as “ICM, INM, IPDM in Groundnut” and “Integrated Weed Management Practices” exhibit lower effectiveness, indicating the need for reassessment or enhancement of training methodologies to improve technology adoption among the trainees. This findings are line with the findings of Jaganand Ravikumar (2016) who reported that Precision farming optimizes inputs based on field variability to boost productivity and conserve our resources. In India, challenges like limited education and small-scale farming hinder its adoption.

Successful Training Strategies: “Flower Bouquet Making” and “Cattle Management to the Farmers” exhibit high effectiveness percentages, suggesting the successful transfer of skills and practices to all the trainees. Categories like “Green Lively Hood” and “Value Addition in Cashew Apple” has shown high effectiveness with adoption percentages of 96.67% and 100% respectively. On the other hand, categories like “ICM, INM, IPDM in Groundnut” and “Integrated Weed Management Practices” demonstrate relatively lower effectiveness with adoption percentages below 30%. This similar trend was also observed by the Belay et al (2012).

Diverse Impact: Training categories, like “Improved Seed Production Technologies on Gingelly” and “Successful Farmer’s Feedback to Training to New Farmers,” showcased a balanced adoption rate and effectiveness percentage, indicating their positive impact on technology uptake and agricultural practices.

Areas for Improvement: Categories with lower technology adoption rates and effectiveness percentages highlight the potential areas for improvement in training content, delivery methods, or participant engagement strategies. Addressing these gaps can enhance the overall impact and effectiveness of agricultural training programs. Training categories

with lower effectiveness percentages, such as “ICM, INM, IPDM in Groundnut” and “Integrated Weed Management Practices,” also require reassessment or enhancement of training methodologies to improve technology adoption rates. Additionally, gathering feedback from participants and stakeholders can help us in identifying specific challenges or barriers to adoption, enabling trainers to tailor future programs more effectively.

CONCLUSION

Farmers in the Cuddalore district encounter numerous challenges, including a lack of technological knowledge. To bolster our farm sector towards future prosperity, KVK can undertake various trainings promoting modern farming practices, enhancing irrigation facilities, facilitating financial inclusion, and advancing technology utilization. However, for KVK training programs to thrive, scientists must consider these challenges and make necessary regimes to the training agenda and content. One of the significant hurdles to broader adoption of these practices is the complexity of specialized techniques and the time and labor they demand for implementation in farming operations. Marginal farmers require greater support to enhance their crop yields and annual net income. Tailoring training to the educational level of farmers is also essential as it instills confidence and motivates them to adopt new and more efficient farming methods.

To summarize the designing and delivering agricultural training programs must go beyond mere information dissemination. It should create engaging experiences that provide practical skills and cater to participants’ individual needs. Continuous evaluation and adaptation of these programs are essential to encourage technology adoption and drive positive change in our farm communities. Refinement in certain training areas underscores the need for ongoing evaluation and improvement to ensure effective dissemination and adoption of modern agricultural technologies across diverse sectors.

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