

Impact of Vocational Training Programme Friends of Coconut Tree Conducted by Krishi Vigyan Kendra, Shivamogga, Karnataka

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ABSTRACT

This paper gives a description of research in the field of Vocational Training programme conducted by KVK, Shivamogga. A total of 120 trainees were considered as sample for the study. The study revealed that majority of the respondents possessed low (55.00%) and high (41.67%) knowledge level before and after training. The respondents had low (60.83%) and high (40.84%) adoption level before and after intervention of training. The training programme brought about significant gain in acquisition of skills by the respondents. Only seven respondents (5.83%) were professional coconut tree climbers before undergoing training and it was enhanced to 20 percent after training. There is an average additional gain of earnings by ₹ 55,812/- per annum by the professional coconut tree climbers after training. An average net profit of ₹ 620/- per tree per year was obtained before training and it was increased to ₹ 950/- per tree per year was obtained after undergoing training by the coconut growers. Overall, the training impacted in increase in knowledge and adoption level regarding improved cultivation practices, acquisition of skills, employment generation, enhancement of income level of professional coconut tree climbers and coconut growers.

Key words: Adoption, Economics, Impact, Knowledge, Vocational training programme

Coconut palm (*Cocos nucifera*) is an important horticultural crop, grown in more than 90 countries of the world. The coconut growers were lacking knowledge on improved cultivation practices and there exists a scarcity of skilled labors for harvesting, crown cleaning and plant protection. To address these problems, ICAR-KVK, Shivamogga had conducted "Friends of Coconut Tree and Plant Protection" vocational training programme in collaboration with Coconut Development Board.

The FoCT is a 6 day residential training programme held at partnering KVKs, NGOs, Farmers associations, Yuva-kendras/Youth clubs, Krishi bhavan with the collaboration of Coconut Development Board. It is aimed at capacity building of coconut farmers who usually faced difficulty in harvesting and carrying out plant protection measures. The Board supports 6 days residential training of unemployed youth of 18-40 years including 30 percent women. Beneficiaries were selected by the KVKs in consultation with the state department of agriculture and horticulture. The training was conducted in batches of a minimum of 20 members for a week (6 days). Krishi Vigyan Kendras being educational institutions for the farmers, are involved in imparting need based training to the farmers,

farm women and rural youths of the concerned KVK jurisdiction. Hence, selected as centers for implementing this sponsored vocational training programme. ICAR-KVK, Shivamogga had conducted "Friends of Coconut Tree and Plant Protection" vocational training programme during the period from 2013 to 2015 by covering 180 trainees in eight batches. The programme was sponsored by Coconut Development Board, Bangalore. Impact refers to the outcome of the results of activities and net effect of activities on economic and social status. The present study was undertaken to assess the impact of training on trainees' gain in knowledge, adoption, acquisition of skills, employment generation and income level.

MATERIALS AND METHODS

The study was conducted in Shivamogga district of Karnataka state. All the trainee trained by KVK-Shivamogga during the period from 2013 to 2015 constitute population for the study. All the persons who had undergone vocational training Thus, the total size of the population was 180. All the 6 taluks in the district were selected for the study; from each taluk 5 villages were selected considering highest number of trainees. Four trainees were selected

randomly from 30 villages. Thus, total sample size for the study was 120 trained youth. The data was collected from the respondents using structured interview schedule by personal interview method. The statistical tools namely frequency, percentage, mean, standard deviation (SD), per cent deviation and paired t test were used to analyze the data. Ex-post facto research design was employed in the study.

RESULTS AND DISCUSSION

Majority of the respondents were possessed low (55.00 %) knowledge level before training and high (41.67%) knowledge level after training (Table 1). The reasons for majority of the respondents having high knowledge level after training could be due to the fact that the respondents undergone continuous training for a period of 6 days. The respondents attended training programme on their own interest with intention of gaining additional knowledge. The training programme added additional knowledge to the respondents hence majority had high level of knowledge after training. Similar results were reported by More *et al.*

(2000). The respondents had high (40.84%) overall adoption level after intervention of training (Table 1). A remarkable difference was found in the adoption level before and after training. The reason might be due to the fact that almost all the respondents were attended the training programme with an intention of increasing their coconut production by adopting improved management practices. As majority of the respondents adopted use of climbing equipment, practicing right time of harvesting coconuts, identification major pest and diseases, cultivation of improved varieties/hybrids and integrated pest management. The information that was provided during training programme on various aspects of coconut cultivation motivated them to adopt majority of the practices with a view to enhance their income from coconut cultivation. During the training period, the respondents were exposed to the activities of the research stations i.e. AICRP Palms and Horticultural Research Station, Arasikere. This could be the additional factor for majority (40.84 %) of the respondents belongs to high overall adoption level category. The results are in line with the findings of Srinivas and Hilaja (2013).

Table 1 Knowledge and adoption level of the respondents on coconut cultivation practices (N=120)

Category	Before training		After training	
	Frequency	Percentage	Frequency	Percentage
Knowledge level				
Low	66	55.00	28	23.33
Medium	32	26.67	42	35.00
High	22	18.33	50	41.67
	Mean= 26.15, ½SD=3.15		Mean = 52.66, ½SD=5.01	
Adoption level				
Low	73	60.83	34	28.33
Medium	27	22.50	37	30.83
High	20	16.67	49	40.84
	Mean =6.36 , ½SD=0.75		Mean =11.13, ½SD=0.81	

There is a statistically significant (all p values < 0.01) mean score gain from the pre training scores to post training scores related to various skills. There is a significant difference between total mean score of skills before and

after training (Table 2). This indicates there is strong evidence that vocational training programme had positive impact on acquisition of all the nine skills by the respondents (Arora 2015).

Table 2 Impact of training on various skills of the respondents (N=120)

Skills	Mean difference	't' value
Identification of tender nut, mature nut and seed nut	0.5666	10.779**
Observation of particular disease and pest	1.2666	24.729**
Diagnose and understanding of the problem and find out suitable solutions	1.5000	31.687**
Coconut harvesting operations and crown cleaning techniques	0.9250	11.897**
Coconut climbing techniques	1.6166	35.058**
Entrepreneurship development skills and employment generation	1.1666	30.667**
Leadership qualities	0.9083	27.143**
Communication skills	0.5583	9.289**
Financial management	1.0083	33.430**

**Significant at 1 per cent level

Only seven respondents (5.83%) were professional coconut tree climbers before undergoing training and it was enhanced to 20 per cent i.e. 24 respondents are practicing coconut tree climbing as their profession after training

(Table 3). The probable reason for increase in number of professional tree climbers is due to the fact that one of the objectives of training programme is to provide employment opportunities for the trainees. The training programme

provided alternate employment opportunity for unemployed rural youth who had possessing less landholding, possession of less number of coconut trees and lower income level. The acquisition of climbing skill, provision of free supply of climbing equipment, demand for professional coconut tree climbers, ease of climbing technique, reduced incidents of body injuries, time saving, reduced drudgery and reduced fear of climbing motivated them to become professional tree climbers after training programme. Nearly seventy (69.17%) of the respondents are using climbing equipment for climbing the coconut trees within their farm only. The possible reason for this could be that these respondents possess large size landholding, higher income level,

possessed more number of coconut trees and had additional income from agricultural allied activities. The busy schedule of these respondents and sufficient income from their own landholding made them not to work as professional tree climbers. However, these respondents also acquired skill of coconut climbing and they were using the coconut climbing device to harvest coconuts within their own farm thereby reduced dependency on external coconut tree climbers. Thirteen respondents (10.83%) are not practicing the skill of coconut tree climbing even after undergoing training. All these respondents are women, due to social restrictions and non-cooperation by the family members. However, their male family members are using the device.

Table 3 Distribution of respondents as professional and non-professional coconut tree climbers (N=120)

Particulars	Before training		After training		Percent deviation
	Frequency	Percentage	Frequency	Percentage	
Professional coconut tree climber	7	5.83	24	20.00	243.05
Non-professional coconut tree climber (climbing trees within their farm only)	17	14.17	83	69.17	388.14
Non climbers	96	80.00	13	10.83	- 86.46

There is an average additional gain of earnings by ₹ 55,812 per annum by the professional coconut tree climbers after training (Table 4). A sum of ₹ 55,812 per year was increased due to harvesting of more number of coconuts per day, claiming more charges per tree (₹ 25 to 50) and gaining additional amount for attending crown cleaning and plant protection operations.

coconuts. The respondents harvesting nuts and attending crown cleaning operation on their own by using climbing device reduced the cost of cultivation which was earlier done by hired skilled labours.

Table 5 Economics of coconut growers (N=119)

Particulars	Before training	After training	Deviation
Average yield (nuts/tree/year)	100	120	20
Average cost (₹/tree/year)	₹ 280	₹ 250	₹ -30
Average net profit (₹/tree/year)	₹ 620	₹ 950	₹ 330

Table 4 Economics of professional coconut tree climbers

Particulars	Before training (n=7)	After training (n=24)	Deviation
Average number of working days/year	123	118	-5
Average expenditure (₹/year)	₹ 3,446	₹4,555	₹ 1109
Average earnings (₹/year)	₹ 48,300	₹ 1,04,112	₹ 55,812

An average net profit of ₹ 620 per tree per year was obtained before training and ₹ 950 per tree per year was obtained after undergoing training by the respondents (Table 5). The gain in additional income by the coconut cultivators is due to increased productivity by adopting improved practices and increased market rate of tender and matured

The attempt of KVK, positively impacted on knowledge and adoption of improved cultivation practices. There was enhancement of skills, professionalism and income level thus contributed for welfare of the coconut growers and employment generation for unemployed youths. Increased income from production and tree climbing occupation helps in youth to remain in agriculture particularly and avoiding migration of youth to cities in search of employment in general. This was the main objective of the FoCT programme.

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