

# Training Needs Of Turmeric Growers In Namakkal District

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**Abstract:** The present investigation "Training Needs of Turmeric Growers in Namakkal District" was designed to study the profile characteristics of turmeric growers and to measure the knowledge level, training needs and the associated factors. This study also covered appropriate season, venue, type, frequency and duration of training as perceived by turmeric growers. Keeping this in view, the study was carried out in selected five villages of Erumapatty and Namagiripettai blocks of Namakkal district. The sample size consisted of 120 turmeric growers. The respondents were interviewed personally through a well structured and pre-tested interview schedule. Arithmetic mean, percentage analysis, cumulative frequency, zero order correlation and multiple regressions were used to analyze the collected data. Majority of the turmeric growers attended one training programme and had moderate knowledge on recommended turmeric cultivation practices. Majority of the turmeric growers expressed huge level of training needs for two major subject areas viz., 'rhizome treatment' and 'disease management'. Majority of the turmeric growers preferred to have training during the cropping season in their own village for two days duration. Majority of the farmers preferred to have training during the cropping season in their own village for two days duration. Majority of the respondents preferred to have peripatetic type of training once in a month.

**Keywords:** Turmeric, Training needs, Cultivation practices, Knowledge Level, Turmeric farmers.

## INTRODUCTION

Turmeric has anti-cancer and anti viral properties in high amount hence it has been used in medicine, food and cosmetic usage. It is used as a colouring agent and in food it is used as a principle ingredient in culinary as curry powder. 'Kum-Kum', popular with every housewife, is also by-product of turmeric. Indian turmeric is having many values in international level due to its high content of curcumin. Turmeric is a well known component of traditional Chinese medicine and also in Indian Ayurvedic medicine. Turmeric underground rhizomes were dried and used as a spice or consume as a powder in capsule and in some cases boiled liquid of turmeric used for therapeutic purpose. Turmeric also used as a paste for curing many diseases in skin. Turmeric is important medicinal plant and considered as golden resources for boosting immune system as medicine, spice, and as dye. Rhizomes of turmeric are part of many traditional medicines used as stomachic, stimulant, and blood purifier. Turmeric also used to treat liver complaints, biliousness, jaundice and it can able to reduce for arthritic, muscular disorders, anorexia, cough, diabetic wounds, hepatic disorders, rheumatism and sinusitis. Turmeric and Pepper with warm milk, used to cure common cold, bronchitis and asthma. Juice of fresh rhizomes is applied to control many skin infections, in addition its decoction effective against eye related complaints. Turmeric rhizomes are one of the constituents responsible for bioactivities. Turmeric a known third largest spice produced in India. It accounts about 14.00 percent of total spices produced in the country. India accounts for 78 per cent in world production and 60 per cent in world export share. Turmeric production is one of cultivation practice followed in southern states of India.

Tamil Nadu is the second largest producer of turmeric in Indian states. The major turmeric growing states in India are Andhra Pradesh (57 per cent), Tamil Nadu (23 per cent), Karnataka (6 per cent) and Orissa (4 per cent). Tamil Nadu occupies second position with 35,795 hectares with 1,34,010 tonnes of production during 2016-17 (<http://www.indianspices.com/>).

In Tamil Nadu major turmeric growing districts are Erode, Coimbatore, Dharmapuri, Salem and Namakkal. Namakkal district is the major turmeric belt in the state. Namakkal produces more turmeric compared with other districts of Tamil Nadu. Turmeric arrives not only from Namakkal district but also from Erode, Salem, Dharmapuri, Coimbatore and even the adjoining state of Karnataka. The turmeric produced from the above districts were sent to Erode market and turmeric produced from all other districts of Tamil Nadu including Erode and nearby Karnataka state were estimated around 3,00,000 million tonnes per year. Namakkal district produces maximum turmeric and ranks first position in the state in area and second position in productivity next to Erode district. Namakkal district has 3,360 hectares under turmeric cultivation with a total production of 10,932 million tonnes during 2016-2017 (<http://www.indianspices.com/>). The productivity of turmeric was 7.47 metric tonnes per hectare during 2016-2017. The productivity was in declining phase as it was just 4.97 metric tonnes per hectare during 2014-2015. This has resulted in shift of acreage. So the area under turmeric has also drastically reduced in Namakkal district.

## Need for the study

Namakkal district is the major turmeric belt in the state. Namakkal area is very famous for turmeric production and it was marketed throughout the country. Turmeric arrives not only from Namakkal district but also from Erode, Salem, Dharmapuri, Coimbatore and even the adjoining state of Karnataka. Namakkal district has 3,360 hectares under turmeric cultivation with a total production of 10,932 million tonnes during 2016-2017. The productivity of turmeric was 7.47 metric tonnes per hectare during 2016-2017. The productivity was in declining phase as it was just 4.97 metric tonnes per hectare during 2014-2015. This has resulted in shift of acreage. Based on the above traits the

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turmeric cultivation has drastically reduced in Namakkal district. Keeping this in view, the present research was undertaken.

## METHODOLOGY

Turmeric is one of the major crops in Namakkal district. Hence, Namakkal district was selected purposively for this study. The details of the area under turmeric cultivation in various districts of Tamil Nadu. Namakkal district has seven taluks viz., Namakkal, ParamathiVelur, Rasipuram, Tiruchengode, Kumarapalayam, Kolli Hills and Sendamangalam. Namakkal and Rasipuram taluks were selected based on the maximum area under Turmeric production in Namakkal district. The details of the area under turmeric cultivation in various taluks of Namakkal district. Namakkal district has fifteen blocks viz., Elachipalayam, Erumapatti, Kabilarmalai, Kollihills, Mallasamudram, Mohanur, Namagiripettai, Namakkal, Pallipalayam, Paramathi, Pudukhatram, Rasipuram, Sendamangalam, Thiruchengode, Vennandur. Of the fifteen blocks, Erumapatti and Namagiripettaiblocks were selected based on the maximum area under Turmeric production in Namakkaldistrict. The details of the area under turmeric

cultivation in various blocks of Namakkaldistrict. There are 18 revenue villages in Erumapatty and Namagiripettaiblocks. A list of villages undertaking turmericcultivation was collected from the office of the Assistant Director of Agriculture of Erumapatty and Namagiripettai blocks. Out of the 18 villages, five were selected based on the maximum area under turmeric cultivation. From the list, five villages viz., Alanganatham, Erumapatty, Namagiripet, Singalamkombai, Gejakombai occupied the first five places under maximum area under turmeric cultivation. The details of the area under turmeric crops of Erumapatty and Namagiripettai blocks.

## FINDINGS AND DISCUSSIONS

### Training needs of turmeric growers

As already discussed under methodology, each of the major subject matter areas were ranked based on the mean score values. Training Needs of Turmeric Growers on Major Subject Matter Areas in Turmeric Cultivation. The results of training needs of turmeric growers on the major subject matter areas in turmeric cultivation are presented in Table-1.

**Table-1.** Training needs of turmeric growers on major subject matter areas in turmeric cultivation (n=120)

S.No.	Major Subject Matter Areas	Mean Score	Rank
1	Rhizome treatment	2.50	I
2	Disease Management	2.41	II
3	Nutrient Management	2.23	III
4	Pest Management	2.17	IV
5	Weed management	2.08	V
6	Planting method	1.80	VI
7	Main field preparation	1.49	VII
8	Irrigation	1.44	VIII
9	Harvesting	1.33	IX
10	Inter cropping	1.31	X
11	Season and Varieties	1.23	XI

Regarding the turmeric cultivation, it could be revealed from Table-1 that the training needs for 'rhizome treatment' (MS 2.50), 'disease management' (MS 2.41), 'nutrient management' (MS 2.23), 'pest management' (MS 2.17), 'weeding' (MS 2.08), 'planting method' (MS 1.80), 'main field preparation' (MS 1.49), 'irrigation' (MS 1.44), 'harvesting' (MS 1.33), 'inter cropping' (MS 1.31), 'season and varieties' (MS 1.23) were perceived in the descending order of importance. It could be inferred that out of the eleven major subject matter areas in turmeric cultivation, 'rhizome treatment' (MS 2.50) and 'disease management' (MS 2.41) were the most needed areas on which training was demanded as the score for these areas ranged from 2.25 to 3.00. 'nutrient management' (MS 2.23), 'pest

management' (MS 2.17), 'weeding' (MS 2.08) and 'planting method' (MS 1.80) were the four technologies for which the respondents expressed need for training as the scores for these areas ranged from 1.50 to 2.24. Training was not at all needed in the remaining five areas viz., 'main field preparation' (MS 1.49), 'irrigation' (MS 1.44), 'harvesting' (MS 1.33), 'inter cropping' (MS 1.31), and 'season and varieties' (MS 1.23) as the scores for these areas ranged from 0.75 to 1.49. These findings are in line with the findings of Karthikeyan, T. 2017. Training needs of turmeric growers on specific subject matter areas in season and varieties. Results of training needs of turmeric growers on the specific subject matter areas of Season and Varieties are presented in Table -2.

**Table -2.** Training needs of turmeric growers on specific subject matter areas in season and varieties (n=120)

S.No.	Items	Most Needed		Needed		Not Needed		Mean Score
		No.	Per cent	No.	Per cent	No.	Per cent	
1.	Recommended Season	7	5.84	12	10.00	101	84.66	1.22
2.	Recommended Variety	9	7.50	12	10.00	99	82.50	1.25

Average Mean Score	1.23
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It could be inferred from Table-2 that training need was expressed for the recommended variety (MS 1.25). This was followed by training need for recommended season (MS 1.22). The respondents have not expressed any training need for varieties and season. This clearly indicates that the respondents were already familiar with the season

and varieties. These findings are in line with the findings of Jangid et al. (2009). Training needs of Turmeric growers on specific subject matter areas in nutrient management Results of training needs of turmeric growers on the specific subject matter areas of nutrient management are presented in Table-3.

**Table-3.** Training needs of turmeric growers on specific subject matter areas in nutrient management (n=120)

S.No.	Items	Most Needed		Needed		Not Needed		Mean Score
		No.	Per cent	No.	Per cent	No.	Per cent	
1.	Micronutrient application	75	62.50	16	13.33	29	24.17	2.31
2.	Top dressing	64	53.33	29	24.17	27	22.50	2.31
3.	Basal fertilizer application	53	45.83	23	19.17	42	35.00	2.06
Average Mean Score								2.23

It could be inferred from Table.3 that training need was expressed for the micronutrient application (MS 2.31), followed by top dressing (MS 2.31) and basal fertilizer application (MS 2.06). The respondents were interested in knowing about 'basal fertilizer application' as well as 'micronutrient application', as they believed that proper nutrient management will increase the growth of turmeric crop. This findings are in line with the findings of Anand (2015) Training needs of turmeric growers on specific subject matter areas in pest management

Results of training needs of turmeric growers on the specific subject matter areas of pest management are presented in Table-4. It could be inferred from Table-4 that training need was expressed for the rhizome scale (MS 2.24), followed by training need for leaf roller (MS 2.19) and shoot borer (MS 2.08). There were cases of rhizome scale, leaf roller and shoot borer attack in some villages. The farmers were very much interested in knowing about pest management practices. So they expressed training needs for such practices. These findings are in line with the findings of Muthukumar, L. 2008.

**Table - 4.** Training needs of turmeric growers on specific subject matter areas in pest management (n=120)

S.No.	Items	Most Needed		Needed		Not Needed		Mean Score
		No.	Per cent	No.	Per cent	No.	Per Cent	
1.	Rhizome scale	54	45.00	41	34.17	25	20.83	2.24
2.	Leaf roller	46	38.33	51	42.50	23	19.17	2.19
3.	Shoot borer	36	30.00	57	47.50	27	22.50	2.08
Average Mean Score								2.17

Training needs of turmeric growers on specific subject matter areas in disease management Results of training needs of turmeric growers on the specific subject matter areas of disease management are presented in Table-5. It could be inferred from Table.5 that training need was expressed for the rhizome rot (MS 2.46), followed by

training need for leaf blotch (MS 2.36). This shows that the farmers were worried about the diseases, which are affecting the turmeric crop. This might be the reason for the expressed higher level of training need for the major diseases. This findings are in line with the findings of Dillikumar (2006).

**Table-5.** Training needs of turmeric growers on specific subject matter areas in disease management (n=120)

S.No.	Items	Most Needed		Needed		Not Needed		Mean Score
		No.	Per cent	No.	Per cent	No.	Per cent	
1.	Rhizome rot	63	52.50	49	40.83	8	8.67	2.46
2.	Leaf blotch	59	49.17	45	37.50	16	13.33	2.36
Average Mean Score								2.41

## CONCLUSION

The respondents expressed high level of training needs for two major subject areas viz, 'rhizome treatment' (MS 2.50), 'disease management' (MS 2.41). Under 'rhizome treatment' the respondents viewed three specific subject matter areas viz, 'biological treatment' (MS 2.56), 'chemical treatment' (MS 2.51) and 'treatment against pest and disease' (MS 2.43).

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