



Research Article

ADOPTION BEHAVIOUR AND CONSTRAINS IN ADOPTION OF ORGANIC FARMING PRACTICES OF COFFEE PLANTATION IN DINDIGUL DISTRICT OF TAMIL NADU

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Abstract: The study was carried out to determine the farmer's adoption behavior on organic farming practices of coffee plantation. Coffee is one of the world's most popular beverages. It is traditionally grown in the Western Ghats spread over Karnataka, Kerala and Tamil Nadu. The 80 farmers were taken from one block and eight purposively selected villages, to determine the organic farming practices of coffee plantation. The finding of the study revealed that the 50.00 percent of the respondents had medium level of adoption level followed by 11.25 percent and 38.75 percent of respondents had low and high level of adoption. The major constraints faced by the adopters are labour problem, lack of proper transport, post harvest problem followed by non availability of market, financial constraints and lack of knowledge about disease.

Keywords: Coffee, Adoption, Constrains, Organic Farming practices

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Introduction

Coffee is one of the world's most popular beverages. In India, coffee is traditionally grown in the Western Ghats spread over Karnataka, Kerala and Tamil Nadu. India is the only country that grows all of its coffee under shade. Robusta which is highly preferred for its good blending quality, Arabica Coffee from India is also well received in the international market [1]. Coffee production in India stood at 348,000 metric tons (MT) in 2015-16. Robusta variety accounted for 244,500 MT (70.3 per cent) of this production, while Arabica accounted for 103,500 MT (29.7 per cent). In Tamil Nadu, the final production of 2016-17 is placed at 16,335 MT which is a marginal decline of 225 MT over the post monsoon estimate (16,560 MT) of 2016-17 [2].

Materials and Methods

The present investigation was carried out in one block and eight purposively selected villages of Dindigul district, Tamil Nadu. The data was collected with the structured interview schedule from randomly selected 80 farmers [3]. Frequency and percentage were used to study the adoption level and constraints of organic farming practices of coffee. The level of adoption of respondents were classified into three categories viz, low, medium and high on the basis of mean +S.D. [4].

Results and Discussion

Adoption level: The farmers involved in the organic farming practices of coffee plantation were asked questions to determine the extent of adoption of demonstrated package of practices. The distributions of farmers according to their level of adoption are reported in [Table-1] & [Table-2]. From the above [Table-1] revealed that the adoption level of organic farming practices in coffee plantation, 47.50 percent of respondents had high level of adoption level where as 27.50 and 25.00 percent had medium and low level of adoption level of nursery nutrient management followed by 40.00 percent of respondents had high level of adoption whereas 36.25 and 23.75 percent had medium and low level of adoption in nutrient management. 37.50 percent of respondents had medium level of adoption

followed by 28.35 and 35 percent of respondents had high and low level of adoption in soil enrichment. From the below [Table-2] revealed that the overall adoption of organic farming practices of coffee plantation, majority of respondent's 50.00 percent had medium level of adoption whereas 11.25 and 38.75 percent of respondents had low and high level of adoption of organic farming practices of coffee cultivation. It is concluded that majority of respondents had medium level of adoption.

Table-1 Adoption level of respondents towards organic farming practices of coffee plantation

SN	Statements	FA	PA	NA
1	Adoption of coffee varieties	35(43.75)	25(31.50)	20(25.00)
2	Seed rate	29(36.25)	27(33.75)	24(30.00)
3	Seed preparation	27(33.75)	29(36.25)	24(30.00)
4	Nursery practices	22(27.50)	29(36.25)	29(36.25)
5	Nursery nutrient management	38(47.50)	22(27.50)	20(25.00)
6	Pre sowing treatment	23(28.75)	29(36.25)	28(35.00)
7	Sowing time	24(30.00)	33(41.25)	23(28.75)
8	Spacing	25(31.50)	28(35.00)	27(33.50)
9	Soil erosion management	22(27.50)	30(37.50)	28(35.00)
10	Soil enrichment	23(28.75)	29(36.25)	28(35.00)
11	Nutrient management	32(40.00)	29(36.25)	19(23.75)
12	Weed management	21(30.00)	31(38.75)	28(35.00)
13	Shade management	22(27.50)	30(37.50)	28(35.00)
14	Bush management	23(28.75)	29(36.25)	28(35.00)
15	Pest management	22(27.50)	34(42.50)	24(30.00)
16	Post harvest management	24(30.00)	33(41.25)	23(28.75)

Table-2 Overall adoption levels of respondents

SN	Category	Frequency	Percentage
1	Low (15-25)	9	11.25
2	Medium (26-36)	40	50
3	High (37-48)	31	38.75
	Total	80	100

Perceived constrains: The perceived constraints expressed by the coffee growers have been indicated in following [Table-3]

Table-3 Constrains faced by the respondents

Constrains	Frequency	Percentage	Rank
Labour problem	80	100	I
Non-availability of inputs	28	35	XI
High cost of inputs	35	43.75	X
Lack of knowledge about the diseases	59	73.75	VI
Financial constrains	73	91.25	V
Non-availability of proper market	76	95	IV
Lack of timely advisory	57	71.25	VII
Lack of proper transport	78	97.5	II
Inadequate irrigation facilities	16	20	XII
Non availability of organic fertilizer	34	42.5	IX
Post harvest problem	77	96.25	III
Inadequate training	48	60	VIII

From the above table revealed that the major constrains faced by the adopters are labor problem (100%), lack of proper market (97.50%) followed by post harvest problem, (96.25%) non-availability of proper market (95.00%), financial constrains (91.25%), lack of knowledge about the diseases (73.75%), lack of timely advisory (71.25%), inadequate training (60.00%), non-availability of organic fertilizers (43.75%), high cost of inputs (42.50%) and inadequate irrigation facilities (20.00%).

Conclusion

The study revealed that the respondents had medium level of adoption, the 50.00 percent of the respondents had medium level of adoption level followed by 11.25 percent and 38.75 percent of respondents had low and high level of adoption. The major constrains faced by the adopters are labor problem, lack of proper transport, post-harvest problem followed by non-availability of market, financial constraints and lack of knowledge about disease. From the above conclusion revealed that the majority of respondents had the medium adoption level, so for the further level of high adoption, for to overcome the constrains, by adequate training programmes and to increase their knowledge by using mass media exposure techniques.

Application of research: The study helpful for the farmers to know about the adoption level of the organic farming practices and for to overcome the constrains for the greater adoption.

Research Category: Agriculture Extension

Abbreviations:

MT: metric tons

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Ethical approval: This article does not contain any studies with human participants or animals performed by any of the authors.

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