



A STUDY ON TEA FARM LOCATION ADVANTAGES OF SMALL TEA GROWERS IN NILGIRIS DISTRICT

Mr. J.A.Naushad

*Ph.D. Research Scholar in Rural Industries and Management,
Gandhigram Rural Institute – Deemed University, Dindigul, Tamil Nadu,
India*

Dr. Well Haorei

*Assistant Professor in Rural Industries and Management, Gandhigram
Rural Institute – Deemed University, Dindigul, Tamil Nadu, India.*

ABSTRACT

KEYWORDS:

*Small Tea Growers,
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advantages introduction.*

This research work explores the operational development with reference to tea farm location advantages of Small Tea Growers in Nilgiris district. The study revealed that climatic conditions for tea plantation in the study area were good, but there was no possibility for expansion of the tea farm in the study area and the calculated mean score of 6 advantages of the location tea farm that was considered in the present study was between the score 3.9287 and 3.1663. Further, the suitability of climatic conditions for tea plantation in the study area was ranked 1st among the 6 advantages that was considered in the present study and the 2nd rank was nearing to factories that was rated by the respondents.

INTRODUCTION

The Tea Board of India defines a Small Tea Grower as a person who has a tea cultivation of up to 25 acres. But in the current scenario, most growers own less than 2 acres of land. STGs are often based at very remote areas and are scattered. Though their numbers swell due to remoteness and scattered nature of existence, their lack of organization, bargaining capacity and infrastructure. They are dependent on exploitative trade channels to sell their produce. A range of other issues threatens their existence and livelihood. Since tea has to be grown in hill slopes mechanization is not possible and has to be carried out all the activities by labourer. Further, climate conditions and geographical location of the tea farm also contributes very much to the production of quality tea. Hence, the present study is geared towards an in-depth assessment on tea farm location advantages of Small Tea Growers in Nilgiris District.

SCOPE OF THE STUDY

The study is concerned with the operational development with reference to tea farm location advantages of Small Tea Growers. It deals with the areas of location advantages elements, namely; transport facilities, availability of labour, climate conditions, facilities for expansion and nearness to the factories of the Small Tea Growers.

OBJECTIVES OF THE STUDY

The main focus of the present research work is to evaluate empirically the operational development practices among the small tea growers and the specific objective is to

investigate the tea farm location advantages of the Small Tea Growers in Nilgiris District.

SELECTION OF THE STUDY AREA

Nilgiri district was selected for the present study. Tamil Nadu is the main tea producing state in southern India and 17 % of tea productions are from Nilgiris district. Hence, the above District was purposefully selected for the present research.

THE SAMPLING FRAMEWORK

The present study has followed area sampling method. At the first stage the selected Nilgiris District was classified into 2 clusters according to their geographical location, i.e. cultivable high altitude cluster and cultivable medium altitude clusters, as there was no cultivable low altitude area in the study District. The cultivable medium altitude zone consisted of Udhagamandalam Development Block, Coonoor Development Block, Kaunda Development Block and Kotagiri Development Block. The cultivable medium altitude zone consisted of Panthalur Development Block and Gudalur Development Block.

After grouping the Development Block, 50 percent of the Development Block from each group was selected randomly namely; Udhagamandalam Development Block and Kotagiri Development Block from the High Altitude Cluster, and Gudalur Development Block from the Medium Altitude Cluster. After selecting the Development Block from each cluster random sample method was employed to select the ultimate sample Small Tea Growers (table 1).

Hence, the present research work covered three hundred and fifty (350) Small Tea Growers under four Development Blocks in Nilgiris District.

Table 1 Sample Distribution

DISTRICT	Geographical Location Cluster (Based on altitude)	Development Block of the District	Sample Block (Selected 50% of the development blocks from each cluster)	Sample Size (No. of Small Tea Growers Administered)
NILGIRIS DISTRICT	High Altitude Cluster (Above 1200 meters average from MSL)	(1) Udthagamandalam (DB)	(i) Udthagamandalam (DB)	105
		(2) Coonoor (DB)	(ii) Kotagiri (DB)	95
		(3) Kundah (DB)	(iii) Gudalur (DB)	150
		(4) Kotagiri (DB)		
	Medium Altitude Cluster (800 - 1200 meters average from MSL)	(5) Gudalur (DB)		
		(6) Panthalur (DB)		
	TOTAL		350	

Note: D.B: Development Block

SOCIO-DEMOGRAPHIC PROFILE OF SMALL TEA GROWERS IN NILGIRIS

Gender Dimension

The gender dimension, age and educational qualification of the Small Tea Growers in the study area are presented in table 2. The study reveals that men constitute an absolute majority among the sample small scale tea growers constituting about 78 percent and male account for 22 percent. Thus, there was more number of men taking up the profession of tea plantation in the study area.

Age

The majority of the small scale tea grower respondents falls under the age group of 50–65 years (35.1 percent) and 35-50 years (32 percent) followed by the age group of 20-35 years (15.1 percent) and above 65 years (17.8 percent). It can be inferred that, majority (67.1 percent) of

the small scale tea grower respondents in the study area belonged to the middle age group capable of taking up the profession productively.

Educational Qualification

The distribution of the respondents by educational qualification shows that the sample small scale tea growers had not completed proper education. Merely 0.8 percent of them had completed higher studies, 8.6 percent of them had completed Higher Secondary, 9.4 percent had complete secondary level of education, 30.3 percent of the respondents have just completed primary level of education which ranged between 1st and 5th standard, 14.6 percent of them could sign only and 13.4 percent of the respondents were illiterates. However, 14.9 percent of the respondents had undergone for training in tea plantation. Therefore, it can be inferred that the majority of the respondents had not completed proper education to carryout tea plantation work.

Table 2 Respondents by gender, age and educational qualification

Sl.No.	Variables	No. of Respondents	Percentage
1	Gender;		
	Male	273	78
	Female	77	22
2	Age;		
	20 - 35	53	15.1
	35 - 50	112	32
	50 - 65	123	35.1
	> 65	62	17.8
	Mean	51.2600	
	Standard Deviation	11.98104	
3	Educational Level;		
	Illiterate	47	13.4
	Can sign only	51	14.6
	Up to Primary	106	30.3
	Up to Upper Primary	80	22.9
	Up to Secondary	33	9.4
	Up to Higher Secondary	30	8.6
	Graduate & above	3	0.8
4	Professional Education;		
	Underwent training in tea plantation	52	14.9

Source: Primary data.

Composition of Caste

In the rural social hierarchy, “caste factor” constitutes a major parameter of social status. Caste touches everything in life and socio-economic developments in the villages revolve around it. It decides one’s health, wealth, occupation, social and economic well-being and status and the like. It exerts a great deal of influence on the individual’s perception of everything (Ghurye 1950). Table 3 presents the caste and religious profile of the respondents in the study area.

The study reveals that, close to majority of the respondents (46.6 percent) belonged to other castes, followed

by Scheduled Castes (34.8 percent) and Scheduled Tribes (18.6). Therefore, it is inferred that, the majority of the respondents belonged to other castes and Scheduled Castes in the study area.

Practices of Religion

The distribution of respondents by religion showed that 71 percent of the respondents practiced Hindu religion, 14.3 percent of the respondents practiced Christianity and 14.3 percent of the respondents practiced Islam. Hence, it is inferred that high proportion of the respondents (71 percent) practiced Hindu religion, followed by Christians (14.3 percent) and Muslims (14.3 percent) in the study area.

Table 3
Respondents by caste and religion

Sl.No.	Variables	No. of Respondents	Percentage
1	Caste Composition;		
	ST	65	18.6
	SC	122	34.8
	Other caste	163	46.6
2	Religion;		
	Hindu	250	71.4
	Muslim	50	14.3
	Christian	50	14.3

Source: Primary data.

Types of Sample Family

The family details of sample households are presented in table 4. The study reveals that an absolute majority (78 percent) of the sample households was from nuclear families and 22 percent were from joint family system in the study area.

The majority of the sample families (56 percent) the size were 4-6 members followed by more than 7 members (28.6 percent) and below 3 members (15.4 percent) among the sample households.

Hence, the majority of the sample families were from nuclear family with 4-6 members in the study area.

Table 4
Family detail of the sample households

Sl.No.	Variables	No. of Respondents	Percentage
1	Types of Family;		
	Joint Family	77	22
	Nuclear Family	273	78
2	Family size;		
	Below 3 Members	54	15.4
	4 - 6 Member	196	56
	7 & Above Member	100	28.6

Source: Primary data.

Type of Houses

The type of houses in which the sample families lived were classified into three categories viz., pucca house (consists of bricks, steel and cement construction of the floor, the wall and roof), kutchra house (it is a hut constructed out of mud, thatched wall and the roof with a natural surface roof) and semi pucca house (it is the combination of the earlier two with the exception of tiled roof). Housing details, land holdings, annual income and annual expenditure of the respondents are presented in table 5.

The study revealed that, the majority of the respondents (58.3 percent) possessed pucca houses of their own, 23.1 percent of the respondents were living in duplexes, 15.1 percent of the respondents in cottage and 3.5 percent of the respondents were living in huts. Hence, it was found that the majority of the respondents were living in pucca houses in the study area.

Landholding

In rural India, land holding is an important component in the rural economy. The majority of the people in one way or another is engaged in agriculture and allied activities.

Table 5 presents the landholding of the sample population. The study shows that a high proportion of the respondents (67.7 percent) had a land less than 5 acres for tea plantation activities, 24.6 percent of the tea growers had a land between 5 – 15 acres and 7.7 of them had 15 – 25 acres of land for tea plantation activities if the study area. Hence, the present study revealed that an absolute majority of the respondents were practicing tea plantation work with a possession of less than 5 acres in the study area

Table 5 Respondents by Types House and Land Holding

Sl.No.	Variables	No. of Respondents	Percentage
1	Types of House;		
	Pucca house	204	58.3
	Duplex	81	23.1
	Cottage	53	15.1
	Huts	12	3.5
2	Land Holding;		
	< 5 acres	237	67.7
	5 - 15 acres	86	24.6
	15 - 25 acres	27	7.7

TEA FARM LOCATION ADVANTAGES

An analysis of the location advantages of tea plantation by the Small Tea Growers is presented in table 6. The study shows that 25.1 percent of the Small Tea Growers' transport facilities were good, 22 percent of them had poor transport facilities and 21.2 percent of the small tea growers' transport facilities were fair. However, 20.2 percent of the Small Tea Growers' tea plantation areas were located in very good transport facilities and 11.5 percent of the Small Tea Growers' tea plantation was with excellent transport facilities.

Transporting the output to the market is also major activities and incurs huge expenses for a producer. The study revealed that, the 21.4 percent of the Small Tea Growers' tea plantation areas were located adjacent to the factories where they can go and sell the plucked green tea leaf in a very short period of time or else the quality of the green tea leave will degrade, 24 percent of the Small Tea Growers' tea plantation areas were located very near and 24.3 percent of the Small Tea Growers' tea plantation was moderately near to the factories. But, for the 18.6 percent of the Small Tea Growers, factories were located far away from the factories even though they have to sell the plucked green tea leaf in a very short period of time and for 11.7 percent of the Small Tea Growers it was moderately far away from the factories.

Availability of labourer in the market is also one of the important advantages in the location of the tea farm. The study found that 23.5 percent of the Small Tea Growers had a shortage of labourers and furthermore, 11.1 percent of the Small Tea Growers had a severe shortage of labourers at the time of their needs for engaging in their tea cultivation activities. However, in the areas where 12.9 percent of Small Tea Growers were taking up their tea cultivation profession they could get labourers any time, in the areas where 19.4 percent of Small Tea Growers were taking up their tea cultivation profession, there were rare occasion where they could not get labourers and 33.1 percent of Small Tea Growers had at some occasions they could not get labourers to engaging in their tea cultivation activities.

On the availability of sufficient water in the tea farm of the Small Tea Growers the study revealed that in the 16.2 percent of the Small Tea Grower's plantation land the availability of water was excellent, it was very good in the land of the 15.1 percent Small Tea Growers' plantation land and water was moderately available in the 31.5 percent of the Small Tea Grower's plantation land. However, in the 22.3 percent of the Small Tea Grower's plantation land the availability of water was not much and it was difficult to manage for water in the 14.9 percent of the Small Tea Grower's plantation land but continuing tea cultivation.

The ideal climatic conditions for the production and growing of tea are with the temperature between 21°C

and 29°C, high temperature is required in summer and lowest temperature for the growth of tea is 16°C. Further, 150-250 cm of rainfall is required for tea cultivation and needs well drained land for tea cultivation. Therefore, the climatic conditions of the sample Small Tea Growers' geographical tea plantation location were elicited in the study area and it is presented in table 4.2. The study revealed that 26.9 percent of the Small Tea Growers' geographical location for tea plantation was very much ideal for tea cultivation, 25.4 percent of the Small Tea Growers' geographical location for tea plantation was ideal for tea cultivation and 25.4 percent of the Small Tea Growers' geographical location for tea plantation was moderately ideal for tea cultivation. However, in the remaining sample small tea growers' (26.2 percent) plantation location the climatic conditions were fair and poor.

The facilities for expansion of tea plantation land in the study area reveal that merely 9.4 percent of the sample respondents' land was ready for expansion, but yet to take up tea cultivation, 14.6 percent of their land was about to get ready for taking up tea cultivation work and 20.9 percent of their land may take some time to get ready for expansion for taking up tea cultivation work. Further, for the 31.1 percent of the sample Small Tea Growers' the scope for expanding their tea cultivable land may take long time and for the 24 percent of the sample Small Tea Growers there was no scope for expanding their tea cultivable land.

The calculated mean score of 6 advantages of the location tea farm that was considered for the present study was between the score 3.9287 and 3.1663, the mean score of tea farm location advantages concentrated around the score of 4, and the calculated standard deviation value on an average of the considered 6 advantages of the location tea farm that was 1.2 which signifies that the location of the tea farm was good in the study area.

Further, the suitability of climatic conditions for tea plantation in the study area was ranked 1st among the 6 advantages that was considered in the present study and the 2nd rank was nearing to factories that was rated by the respondents. The availability of water at the location of the tea farm was ranked 3rd, 4th rank was the availability of labourers in their locality, the availability of transport facilities in the location the tea farm was ranked 5th and the availability of facilities for the expansion of the tea farm was placed in the last rank.

Hence, the climatic conditions for tea plantation in the study area were good, but there was no possibility for expansion of the tea farm in the study area.

Consequently, multiple regression analysis was employed to investigate the factors that are influencing significantly the location of the tea farm. The result is presented in Multiple Regression Model table 6.1. It is found

that the coefficient of determination (R^2) = 0.953 which indicates that the six independent variables considered are able to explain about 95 percent of the variation in the influence on advantages of tea farm location. Among the six independent factors considered for the analysis, five independent variables

namely, transport facilities (x_1), availability of labour (x_3), climate conditions (x_5) and facilities for expansion (x_6) are highly significant on advantages of tea farm location in the study area. The other one independent variable namely, nearness to factories (x_2) is not significant on advantages of tea farm location of the Small Tea Growers.

Table 6
Tea Farm Location Advantages

Sl. No.	Factors	No. of Respondents					T.S.	M.S.	S.D.	Rank
		Excellent	Very Good	Good	Fair	Poor				
1	Transport facilities	40 (11.5)	71 (20.2)	88 (25.1)	74 (21.2)	77 (22)	973	3.3926	1.19585	V
2	Nearness to factories	75 (21.4)	84 (24)	85 (24.3)	41 (11.7)	65 (18.6)	1113	3.7853	1.15820	II
3	Availability of labour	45 (12.9)	68 (19.4)	116 (33.1)	82 (23.5)	39 (11.1)	1048	3.4561	1.10222	IV
4	Availability of water	57 (16.2)	53 (15.1)	110 (31.5)	78 (22.3)	52 (14.9)	1035	3.5043	1.18531	III
5	Climate conditions	94 (26.9)	89 (25.4)	79 (22.5)	55 (15.8)	33 (9.4)	1206	3.9287	1.09236	I
6	Facilities for expansion	33 (9.4)	51 (14.6)	73 (20.9)	109 (31.1)	84 (24)	890	3.1663	1.25195	VI
Tea Farm Location Advantages								3.539	1.2	

Source: Computed from the sample survey.

Note: Figures in parentheses are percentages, calculate. T.S.: Total Score, M.S.: Mean Score and S.D.: Standard Deviation

Multiple Regression Model Table 6.1
Tea Farm Location Advantages

Factors	Coefficient	Standard Error	t	Level of Significant
Transport facilities (x_1)	-.198	.023	-7.728	##
Nearness to factories (x_2)	.021	.022	1.097	N.S.
Availability of labour (x_3)	.149	.030	5.101	##
Availability of water (x_4)	.672	.028	22.401	##
Climate conditions (x_5)	-.210	.027	-11.338	##
Facilities for expansion (x_6)	.265	.019	10.060	##

N = 350, R^2 = .953, F = 2600.229, ## Highly Significant, N.S. = Not Significant

Multiple Regression Model

$$\hat{Y} = -.585 - .198x_1 + .021x_2 + .149x_3 + .672x_4 - .210x_5 + .320x_6$$

CONCLUSION

The present study concludes that there was more number of men taking up the profession of tea plantation in their middle age and had not completed proper education to carryout tea plantation work. The majority sample families were from nuclear family having big family belonging to other castes and Scheduled Castes. Further, the present study also concludes that an absolute majority of the respondents were practicing tea plantation work with a possession of less than 5 acres of land in a suitability of climatic conditions for tea plantation but had a shortage of labourers at the time of their needs.

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