

Perspectives of Small Scale Tea Growing System (Stgs) : A Study of North Bengalareas In India

Avrajyoti Ghosh¹, Litan Das², P. K. Pal³, A. Sarkar⁴ and M. S. Nain⁵

ABSTRACT

Tea cultivation in small individual holdings in a commercial mode is a recent phenomenon and started in Upper Assam during late seventies and early eighties. In West Bengal, history of small tea growing witnessed major change due to sudden drop of pineapple prices in northern part of the state converting erstwhile pineapple fields into tea during nineties. Having estate orientation, historically, tea is associated with prestige and dignities in the society. People from peasantry background feel an awe to be associated with it and it fulfills the gratification of rural youth to be regarded as the uplifted class. Gradually, based on comparative economic advantage, the traditional crop areas had been diverted to small tea growing sector. The present study was undertaken in Jalpaiguri and Uttar Dinajpur districts having around 80% of total small tea growers of the state during 2014-15. Study revealed that the maximum number of farmers resorted tea cultivation between 2005 to 2009 and neighbours were the main motivating actors in conversion. Pre-planned expenditure support to the family, best substitute for existing niggling farm enterprise, neighbour's success, higher relative net profit and existence of good marketing channels for tea were some of the strongest reasons for resorting tea cultivation in North Bengal. Highest family education status, outside contact behaviour and media communication had significant positive correlation with the earliness of conversion to tea. So, small tea growing system can grab the rural educated youth into it and may be a promising enterprise for attracting rural youth in farm entrepreneurship.

Keywords: Small Tea Growing System, North Bengal, Reasons, Tea Leaf Agents, Socio-economic Status.

INTRODUCTION

India ranks largest consumer of global tea and second largest in production and export. Although, the history of tea cultivation in estate form started in India by the British long back in around 1837, but cultivating tea individually in small holding in a commercial mode is a recent phenomenon (Hannan, 2013). In North Eastern India, it was started in Upper Assam only during the late seventies and early eighties. A number of youth in the region initiated the process of cultivating tea in abandoned upland areas on a trial basis. The initial endeavor was highly successful and attracted others to enter in similar ventures. Blessed by relatively low cash capital required for investment, favourable climate, technical support from marginally surplus labourers from nearby big tea gardens and an assured market for green tea leaves turned this new effort into a huge success story (Baruah and Taparia, 2004; Mansingh and Johnson, 2012). History of small tea growing

started from northern part of the west Bengal state converting erstwhile pineapple orchards into tea plantation due to sudden drop in price during the successive years of 1990 due to lack of processing factories, cold storages and problems of marketing. On the other hand the tea industry was prospering well and thereby emerged a demand pull for extension of plantation by corporate sector. The majority of the pineapple growers of these areas opted advantages of this situation and shifted their land from pineapple to tea plantations (Tea Board, 2011; Kadavil, 2012; Hannan, 2013). Afterwards, gradually, based on comparative economic advantage, the traditional crop areas had also been shifted to small tea growing sector in this zone as the rate of return of tea was attractive than the traditional crops. At present in northern part of West Bengal there are approximately 40,000 numbers of small tea growers in the said sector where almost 50,000 numbers of agricultural labours are engaged (ABP, 2014). From

¹ Sr. Technical Officer, ICAR-Central Plantation Crops Research Institute (Research Center). PO. Mohitnagar, Dist. Jalpaiguri, WB. India., ² Assistant Professor (litandasiari@gmail.com), Dept. of Agril. Extension, UBKV. Cooch Behar. WB., ³ Professor (pkpalubkv@gmail.com), Dept. of Agril. Extension, UBKV, Cooch Behar. WB. India, ⁴ Professor, Dept. of Agril. Economics, UBKV, PO. Pundibari, Dist. Cooch Behar. WB. India, ⁵ Pr. Scientist (msnain@gmail.com), ICAR-IARI. New Delhi. India

the entrepreneurial point of view, tea cultivation provides employment and income round the year and it does not require substantial investments once the plantation get established. The risk of crop failure is very occasional out of pest attacks and natural calamities (Tea-Board, 2009). With this backdrop the present study explores the perspectives of resorting tea cultivation in individual farm level in North Bengal areas.

METHODOLOGY

Presently, in the state of West Bengal, cultivation of tea is mainly concentrated in four Northern districts namely Darjeeling, Jalpaiguri, Uttar Dinajpur and Cooch Behar. Out of these four districts, 80 per cent of small tea growers belong only to Jalpaiguri and Uttar Dinajpur (Tea Board, 2009), and for this dominance, the said two districts have been primarily favoured to record the primary field data. Again, within the districts, on the basis of higher concentration of growers' cluster (Tea Board, 2009), one sub-division from each district namely Jalpaiguri Sadar and Islampur respectively were chosen. Finally hundred farmers from each district were selected. Data were collected through group and individual interview method with the help of interview schedule. The schedule was purposively prepared keeping in view the focused objectives and variables concerned. The draft schedule was pre-tested with non-sample respondents from each district before administering over the actual respondents. On the basis of the analysis of pilot data and suggestions, the schedule was revised and modified with appropriate wordings and contents.

Reasons for resorting STGS were collected from literature and in consultation with experts. Twelve reasons in the form of statements were placed before respondents regarding the advantages of tea cultivation in comparison to other traditional crop husbandry. A Likert scale with responses as 'strongly agree', 'agree', 'undecided', 'disagree' and 'strongly disagree' with corresponding scores of '+2' to '-2' was used for measurement. Socio economic variables like age, family size, family education status, media communication behaviour, organizational participation, outside contact (cosmopolitaness) and economic status were taken into account for the study. Scores were assigned following the scales proposed by Nandapurkar (1985), Supe (2007) and Bhiramkar (2009) wherever necessary.

RESULTS AND DISCUSSION

The result discusses the scenario of tea resort by the farmers of North Bengal. It includes analysis on the year

wise number of farmers resorted tea cultivation, the influence of different actors responsible for attracting farmers for tea cultivation, causes of tea resort in general with a comparison between two districts.

Table-1 reveals the distribution of the respondents resorted and sustained to small tea cultivation from 2000 to 2013. The maximum resorting to small tea growing system observed from 2005 to 2009, whereas, 70% of the participation was observed during this period. The resorting was observed to be decreasing from 2010 to 2013.

The conversion from cultivation of traditional crop or pineapple to tea was caused by a two pronged force acted upon the decision analog of rural farm community. In the late 90s' or early years of 20th century, the estate gardens faced acute trade-union problems and became sick or closed. The processing units of those gardens at that time were starved and thereby hungry to get green leaves from the surroundings and thus created an opportunity before the farmers for green leaf supply. On the other hand a section of farmers who were already dissatisfied with the performance of their field crop cultivation or some other cash crops like pineapple due to poor market return, readily grabbed the opportunity created so far. It was also observed that in earlier period the new participation was more which decreased marginally in later period. This was because in the earlier years the scope of resorting was higher and with the passage of time reduced due to saturation attaining with optional balancing amongst alternative enterprises.

Table 1: Number of farmers resorted tea (year-wise)

Year	No. of farmers		Cumulative number	
	Frequency	Percentage	Frequency	Percentage
2000	07	3.50	07	3.50
2001	03	1.50	10	5.00
2002	07	3.50	17	8.50
2003	11	5.50	28	14.00
2004	06	3.00	34	17.00
2005	17	8.50	51	25.50
2006	14	7.00	65	32.50
2007	29	14.50	94	47.00
2008	39	19.50	133	66.50
2009	42	21.00	175	87.50
2010	19	9.50	194	97.00
2011	04	2.00	198	99.00
2012	01	0.50	199	99.50
2013	01	0.50	200	100.00

Table 2 indicates the relative role of different actors influencing the farmers to come into tea cultivation directly or indirectly. Among the major were neighbours, relatives, friends, leaf agents, Tea-Board through their field personnel, factory personnel, and others. The relative role was

assessed through percentage of farmers influenced by the particular type of agents which has been mentioned in the parenthesis under each frequency in the table. From the table, it is clear that neighbours played the main role for influencing tea cultivation with visually verifiable demonstrational impact. Overall 67% respondents were influenced by neighbours. Respondents of Uttar-Dinajpur district were more influenced by neighbours than Jalpaiguri district.

The second, among important agents were the relatives. Leaf agent was also another influencing agent in this area. The respondents of Jalpaiguri district were more influenced by leaf agents than the respondents of Uttar-Dinajpur district. The agents collect the green leaf from STGs and supplied it to the processing factory. There were several factors that make leaf agents a powerful player in this value chain. The agent gave an impression that he is bearing the market risks. By relying on their assurance for buying of green leaves, more number of farmers were influenced to resort to small tea cultivation shifting from their traditional practices (Mansingh and Johnson, 2012). The other influencing agents were friends, government extension agents, tea-board and factory personnel, but very less number of respondents were influenced by them. Rank order correlation value (\tilde{r}) between districts is significant which means that both the districts were at par in being influenced by the types of influencing actors.

Table 2: Relative Role of different Agents for influencing resort to tea cultivation

Agents of change	North Bengal	Jalpaiguri	Uttar Dinajpur
Neighbour	133 (66.5)	60 (60.0)	75 (75.0)
Relatives	34 (17.0)	20 (20.0)	13 (13.0)
Friends	6 (3.0)	5 (5.0)	0 (0.0)
Leaf agent	13 (6.5)	8 (8.0)	5 (5.0)
Government extension agent	7 (3.5)	4 (4.0)	3 (3.0)
Tea board	1 (1.0)	1 (1.0)	0 (0.0)
Factory personnel	1(1.0)	1 (1.0)	0 (0.0)
Others	4 (2.0)	1 (1.0)	3 (3.0)

NB: figures in the parentheses indicate percentage

It is imperative to analyse why the farmers were resorting tea cultivation replacing traditional crop cultivation. From the scale, it is evident that the causes which scored positively were considered as the important causes of resorting tea. It is revealed from Table-3 that the main reasons for resorting to small scale tea cultivation in North-Bengal area was that the tea cultivation gave pre-planned expenditure support to the family (mean score 1.87). Every family had a planned budget for living throughout the year and farmers were dependent on the return from their farm to meet this budget. Any sudden

failure may hamper the living of the family. Tea cultivation was thought to withstand this failure and so preferred by the farmers accordingly. It also gave additional economic stability to the farm families.

Tea was perceived as the best substitute of existing niggling farm based enterprise (mean score 1.83) and scored as second best reason. Niggling farm based enterprise was the pineapple cultivation. This finding is also supported by Majumdar (2008) and Hannan (2013). Some of the respondents started tea cultivation observing the success of other farmers and secured third best score (1.66). Success of the peer farmers was one of the strongest factors in motivation for new technology. The next reason for resorting was that the net profit was low in other crops in comparison to tea with a mean score of 1.43. It is supported by study of Baruah and Taparia (2004). Competitive market is not available in other crops in comparison to tea, for which some of the respondents resorted to tea. This reason was considered the fifth reason for resorting to tea with mean score value of 1.29. This reason for resorting tea is well supported by Majumdar (2008). Next reason for resorting was to come up from climatic and uncertainty associated with cultivation of other crops (mean score 0.49). Tea, being a perennial crop in nature, hardly fail after establishment and also resistant to uncertain climatic hazards, it became an important consideration for resorting tea. Tea is a labour intensive crop and requires year-round engagement of human labour. Besides that, paid-out cost of other inputs like irrigation, fertilizer, plant protection chemicals etc. are also regular. This keeps the input market including labour quite vibrant. On the other hand, periodic harvest gives the farmer a regular return flow that also keeps the producer reciprocative to hold the enterprise on full run. Thus, the tea enterprise keeps the farm livelihood of the said area stimulated over time-frame. So, it emerged as one of the strongest causes for resorting tea (mean score 0.27). Uncertainty associated with traditional crop cultivation, assurance of economic security, a steady flow of farm income, a fairly low risk of disease and a relatively little amount of investment motivated the peasantry class to switch over to tea.

Some reasons like governmental support in STG system, encouragement from tea board and other agencies, unavailability of quality planting materials, insufficient infrastructural facilities like transport or storage facilities, subsidy from Tea-Board or SHG were although considered important by some of the respondents, but in totality did not find place among important (Mean values are negative) for resorting tea.

Table 3: Causes of resorting small tea cultivation

Causes	Strongly disagree	Dis-agree	Un-decided	Agree	Strongly Agree	Mean Score	Rank
Ratio of periodic money back and paid out cost is comparatively high in tea	21(11.50)	43(21.50)	31(15.50)	70(35.00)	34(17.00)	0.27	VII
Relative net profit is low in other crops in comparison to tea	4(2.00)	4(2.00)	3(1.50)	80(40.00)	109(54.50)	1.43	IV
Competitive market is not available in other crop in comparison to tea	6(3.00)	11(5.50)	11(5.50)	63(31.50)	109(54.50)	1.29	V
Quality planting material (seed) is not available in comparison to tea	43(21.50)	58(29.00)	57(28.50)	36(18.00)	6(3.00)	-0.48	X
Infrastructural facilities like transport, storage etc. is not sufficient in comparison to tea.	29(14.50)	92(46.00)	37(18.50)	33(16.50)	9(4.50)	-0.49	XI
Governmental/organizational support is more for tea than other crops	34(17.00)	59(29.50)	70(35.00)	30(15.00)	7(3.50)	-0.42	VIII
Subsidy/ good benefit from Tea-Board and SHG	54(27.00)	66(33.00)	79(39.50)	1(0.50)	0(0.00)	-0.87	XII
Started tea cultivation observing the success of other farmers	0(0.00)	0(0.00)	1(0.50)	66(33.00)	133(61.50)	1.66	III
Encouragement from Tea board/other agency	34(17.00)	54(27.00)	87(43.50)	16(8.00)	9(4.50)	-0.44	IX
To come up from climatic and uncertainty associated with cultivation of other crops	24(12.00)	23(11.50)	50(25.00)	37(18.50)	66(33.00)	0.49	VI
It gives pre-planned expenditure opportunity to the family	0(0.00)	0(0.00)	0(0.00)	27(13.50)	173 (86.50)	1.87	I
It was the best substitute of existing nigglig farm based enterprise.	0(0.00)	0(0.00)	5(2.50)	24(12.00)	171 (85.50)	1.83	II

Wilcoxon Rank-Sum Test: W=30 (p=0.48) between districts

* figures in the parentheses indicate percentage

However, in overall scenario, districts had no effect on strength of perception of causes of resorting tea [Wilcoxon Rank-Sum Test value (W)=30; p=0.48, which is not significant]

Table-4 presents the influence of socio-economic and personal characters on earliness of resorting tea. It was found that respondent's highest family education status, respondents outside contact behavior and media communication score had significant positive correlation with the earliness of resorting tea cultivation; whereas occupational diversity in respondent's family had a significant negative correlation. The result implies that the respondents having high contact with outer world, higher communication with different inter-personal and mass media sources resorted tea earlier; but the farming family with higher occupational diversity, resorted tea late. Adoption of any new technology or system depends on the feeling of marginality in the human mind. Occupational diversity decreased this feeling and consequently decreased the tendency to resort to new system of cultivation. Higher education, media contact or outside contact increased understanding and exposure to new and advantageous systems of cultivation and increased the

Table 4: Impact of socio-economic and personal characters on earliness of resorting tea

Socio-economic and personal characters of STGs	Simple Correlation coefficient (r-value)
Respondent's chronological age	0.034
Respondent's family Size	0.014
Respondent's highest family education status	0.247**
Occupational diversity in respondent's family	-0.271**
Respondent's family economic status	0.116
Respondent's organizational participation score	0.064
Respondent's outside contact behaviour	0.333**
Respondent's media communication score	0.278**

**p=0.01

affinity to such system for further improvement. However, other characters had no significant influence on earliness to shifting/resorting to tea cultivation in the present set of study.

CONCLUSION

Small scale tea growing system is a newly introduced system challenging the estate orientation of tea cultivation. Small scale tea cultivation is mainly dominated by younger and middle aged cultivators in North Bengal area. Various factors were observed responsible for resorting to small scale tea growing practice. The cultivators of other crops shifted to small scale tea growing system as tea was a profitable enterprise. Also tea cultivation minimized the uncertainty associated with climate unlike in other crops. Different actors like neighbours, relatives, friends, leaf agents and Tea-Board through their personnel played a vital role for influencing small scale tea cultivation. Family education status, outside contact behaviour and media communication score had significant positive correlation with the earliness to resort to tea cultivation. On one hand, educated youth were apathetic towards traditional crop husbandry due to peasants' base and non-remunerative output and at other hand tea cultivation is being regarded as the fancy to become entrepreneur and fulfill the gratification of rural youth to be regarded as the uplifted class. Historically also, tea is associated with prestige and dignities in the society. Being estate orientation, people from peasantry background feels an awe to be associated with it. Small tea growing system can take care for this feeling and grab the rural educated youth into it and may be a promising enterprise for attracting rural youth to farming.

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