Review Report

Role of Small Tea Planters in the Tea Industry with particular reference to Indian Scenario

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Tea is an important agro based industry in India employing directly at least one million people and giving indirect employment to another million persons. Indian scenario in this regard, is no different to the one in most of the other tea growing countries in the world. As a highly labor intensive industry, tea plantation provides employment for roughly seven hundred man days per hectare, which no other land based activity is able to generate. The labor employment in tea is at least seven to ten times more than that in the general agriculture and 12 to 15 times more than that in forestry. Women constitute almost 70% of the labor force on these plantations.

Tea plantations also contribute to the ecological balance. Tea develops congenial micro climate by providing green cover to the ground much faster than any of the forest plantation species. Besides, planting of shade trees serves the purpose of providing fuel to the labor force. Due to quicker coverage, the plantations are effective in checking soil erosion and add at least 2,000 kg. of organic matter per hectare to the soil every year by way of prunings and leaf drop.

Historically, before 1920 there were hardly any small tea growers having less than 25 acres (10 ha) of holdings. Their origin in South India is traced to a crop-switch over -- some potato growers in the Nilgiris took tea saplings from

nearby tea gardens and started small tea plantations to overcome the seasonal fluctuations in income from their only cash crop. Subsequently the culture of small growers spread to Kerala and it was established as an important player in South Indian tea industry. In the more recent past, in North India, Terai farmers in West Bengal, resorted to cultivation of tea as small growers due to un-remunerative prices of pineapples. The phenomenal rise of small growers in Assam during the last quarter of a century was a conscious decision of the State government (see Hazarika in chapter 6 of this issue: Editors) to settle farmers on the marginal tea land declared surplus by the large tea plantations. Small tea growers in Himachal Pradesh owe their existence to the fragmentation of large tea estates after the Great earthquake of 1904. In Uttatarakhand partitioning of defunct plantations of the 19th Century and the two decade old state policy (see Tamang in chapter 4 of this issue: Editors) to promote cultivation of tea by local farmers to raise their economic status. are the contributory factors to the fast increasing small grower tea sector However, the reported number, yield and production of smallholder growers of tea in different parts of India vary according to the source and time of collection of data. The following presentation and discussion on the subject are, therefore, only indicative of the trend of increasing importance of the smallholder sector in the country's tea industry.

As per the 2000-published Tea statistics of the Tea Board, North India had around 6749 tea estates and South India 31,958: out of which

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North had 5,565 estates below 8 ha., while South had 31,505. In the northern parts of the country total number of estates above 200 ha are nearly 643 and in the south only 145. In terms of productivity the small estates then contributed only 1.74% in the north and 25.24% in the south. In other words, in the north 82.46% estates contributed only 1.74% to the productivity, whereas, 9.52% estates contributed 87% of productivity. In the south 98.58% estates are contributing 25.24% tea crop while 0.45% estates contribute nearly 61.11% production.

Of late due to un-remunerative prices of paddy, vegetables and pineapples, many crop farmers have resorted to tea cultivation as small tea growers. There is now an ever increasing trend in the area under this sector. Latest figures show that in North 9903 small growers are registered with Tea Board while in the South the figure is 61773. However, the actual number seems to be much larger figure. Small Growers' Associations have put this figure at 58256 in the North and 68000 in the South. The statewise detailed list is as under:-

STATEWISE SMALL GROWERS IN INDIA

(Source: Tea Board Statistics 2007, mutatis mutandis)

State	Number	Area (Ha)	Yield(Kg/Ha)		
Assam	50795	80445	1237		
West Bengal	8708	11094	5456*		
Tripura	1509	1956	274		
Arunachal	36	108	1500		
Manipur	427	1200	39		
Sikkim	3	17	О		
Nagaland	1451	1800	141		
Meghalaya	38	112	O		
Mizoram	269	388	O		
Uttrakhand**	600	450	300		
Himachal@	3695	1660	239		
Bihar	980	1973	551		
TOTAL NORTH	68511	101204			
Tamilnadu	67147	47774	1779		
Kerala	5402	4762	408		
Karnataka	14	64	3344		
TOTAL SOUTH	73568	52600			
ALL INDIA	142074	153804			

^{*}Small growers green leaf is processed in bought leaf factories of Terai. The crop yield data is derived from the production of bought leaf factories. Apparently bought leaf factories are obtaining unaccounted leaf from estates which inflates yield levels of small growers. Exact figures about green leaf are not available for small growers.

Tea Processing

For tea processing North India has 856 garden factories, 305 bought leaf factories and 5 cooperative factories. In south there are 184 garden factories, 249 bought leaf factories and 19 cooperative factories. Bought Leaf tea factories

came up on the demand of the small tea growers but they usually exploited their situation. Though the numbers are not definitive, the tea factories in India as registered with Tea Board are given state wise, in the table below.

^{**} Uttarakhand figures have been obtained from Dr. M.B. Tamang, Director Tea Development. The yield level of 10 year old plantation is approximately 750 kg made tea per hectare.

[@] In Himachal the sudden increase in the number of small growers is due to fragmentation in the families. The plantation area has decreased due to uprooting of the bushes for various reasons.

NUMBER OF TEA FACTORIES IN INDIA (STATEWISE)

State	Garde Factorio		Coop. s Factories	Instant Tea s Factories	Total Factories
Assam	520	179	1	1	701
West Bengal	273	81		2	356
Bihar	1	1			2
Tripura	28	3			31
Uttaranchal	3	2		1	6
Arunachal	7	6			13
Himachal	21	31	4		56
Nagaland	1	1			2
Meghalya	0	1			1
Orissa	1				1
Sikkim	1				1
TOTAL	856	305	5	4	1170
NORTH INDIA					
Tamilnadu	90	218	16	8	332
Kerala	85	29	3	2	119
Karnataka	9	2			11
TOTAL SOUTH	184	249	19	10	462
ALL INDIA	1040	554	24	14	1632

Labour requirements:

Normally for a small grower the labour requirements are comparatively high since most of the work has to be done manually and is not in a position to go for better mechanical cultivation

practices. In general the labour requirements for various operations in starting a new plantation are as follows:

Labour requirement (per ha.) for Planting tea by small tea growers

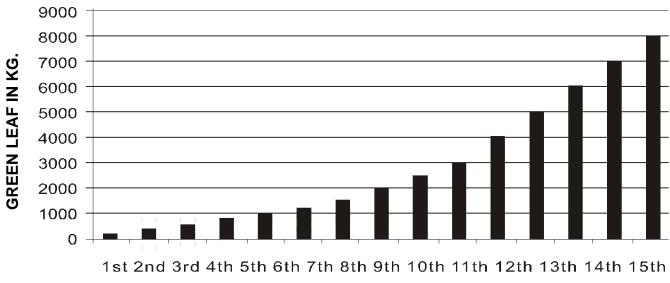
Operations to be done	Man days required in the year					
	1 st	2 nd	3^{rd}	$\mathbf{4^{th}}$	5 th	6 th
Land preparation	50	5	-	-	-	-
Drains, layout etc.	30	10	5	5	5	5
Pits digging	60	5	_	-	_	-
Filling back of the pits	25	2	_	-	_	-
Planting and staking	10	1	_	-	_	-
Application of manures&	8	8	8	10	8	8
Fertilizers						
Application of PP chemicals	6	6	6	8	8	8
Interculture operations	30	30	20	20	15	15
Pruning and training	5	5	5	8	8	10
Creation of shade	5	3	2	-	_	-
Irrigation	5	3	2	4	4	4
Plucking	1	2	2	5	8	12
Miscellaneous	50	30	20	20	20	20
TOTAL	270	110	70	80	76	82

In addition to this the cost of plants, manures and fertilizers, irrigation, plant protection chemicals, shade plants has also to be computed.

Tea Production:

Estimated yields from a young tea plantation are represented in Figure 1

Figure 1:
The projected yield of green leaf in successive years after planting:



YEAR AFTER PLANTING

The earliest yield after the payback will come by the 6th year only depending upon the climatic conditions / altitude and levels of management. In the higher elevations this might be further delayed, whereas, for lower elevations it might be earlier. Pinching and frame formation will start production in the second year. Another change often observed is a dip in production in 6th or 7th year due to a frame forming pruning operation.

Constraints:

Small growers are invariably faced with a number of problems, which are enumerated below:-

1. They have limited resources with the result they are not able to get the optimum level of out put. They generally depend upon their own resources or borrow the funds at higher costs from the village money lender or from the factory to wich they sell the crop. Borrowing from the local money lender they have to pay exorbitant rate of interest and that too in advance, deducted at the time of giving loan.

- 2. The bankers, in general, are reluctant to lend money to the small farmers. Moreover they expect at least 15 to 20% as the growers' contribution. The delay in the sanction of the loan is another reason which needs to be resolved. Timely disbursement of loan instalment is a big problem for small growers.
- 3. Since the holdings are small and fragmented due to family circumstances, in absence of clear titles the mortgage of the property is major hindrance for bank loan.
- 4. The small grower is unable to employ the labour on permanent basis and hence the labour cost varies according to the availability and season. The problem gets aggravated particularly during the plucking season resulting in the cost escalation. As a result he has to compromise on the quality, maintenance and other operations.
- 5. He has to usually to sell the leaf to bought leaf factories of the area or to a neighbouring tea factory, which dictates therir own terms and conditions of payment. These factories are normally not bothered about the quality of the leaf and

- the price realization is also low.
- The cooperative factories are no better in this matter. They are also guided and dictated by the influential members.
- 7. Small farmers are invariably handicapped by the non availability of the technical support. Often the tea carries an excessive pesticide load due to the indiscriminate use by the ignorant growers who do not have access to technical expertise.
- 8. The bought leaf factories do not start their operations until they get sufficient quantity of leaf. As a result of this the grower has to carry the small quantities of leaf to a long distance thus incurring avoidable higher transportation costs.

An experiment worth mentioning:

Due to limited land resources, it is important to lay emphasis on those projects of the small growers that increase their productivity. With the technical supervision and proper management practices the yield in these small growers' fields can also be increased significantly. This was proved in the fields of Kangra Valley growers during 1986 to 1991 when the then newly established Council of Scientific and Industrial Research Complex at Palampur (H.P) started work on the development of smallholder tea growers. There was total involvement of growers and Complex's technical staff. Monthly meetings were conducted in the field and Farmers' Field demonstrations became the focus of the development programme. The average yield of the 28 demonstration plots was 504 kg/ha at the start in 1986, which was raised to 1862 kg/ ha in 1991. Individual growers who participated in the demos, recorded a potential of over 3500/ ha made tea yield from these over-100 year old tea bushes. Production apart, the price realization had also gone up tenfold for the tea produced in the entire State of Himachal Pradesh.

This all was achieved by providing guidance to the growers in field on management prac-

tices and other technical matters. Stress was laid on the plucking quality of the leaf to obtain optimum percentage of fine leaf and benefit from the resultant high market price of the produce. This advice met with some initial resintnace but it was overcome by the better returns received by the farmers. The same experiment can be replicated in other small growers' areas.

Positive contribution of the small growers:

The small growers have a positive role to play in the tea industry, the constituents of which can be enumerated as under:

- 1. Small growers can make otherwise uneconomic holdings productive.
- Flexibility of the small holder growers makes them adapt to changing physical and policy environment and quickly respond to incentives like availability of factors of production like irrigation, technical advice, improved price situation, or subsidy.
- 3. Women empowerment, since most of the work on farms is done by the women folks.
- 4. Better utilization of the family labour
- 5. Generate employment opportunities for others in the area.
- In hill areas planting of tea in small holdings will help in checking the soil erosion and water runoff.
- 7. Reduce the pesticide load by adopting the local/traditional package of practices.
- 8. Help in production of organic tea which is a value addition.
- 9. Better management of small units.
- 10. Check the migration of labor force from the area
- Can maintain a better product quality, these being easily manageable units, provided they are given proper technical inputs/ incentives.
- 12. Small grower sector will add to an inclusive growth of the national economy.

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- 13. Overall this will improve on the quality of life for the farmers involved in this enterprise.
- 14. Small sized factories can be set up for manufacture on tea holding as small as 10 to 20 ha [Please see chapter 9 in this issue: Editor]

Suggestions for an action plan:

Based on the above experience, a plan for 200 to 250 ha can be developed involving the small growers of the area, to set up a viable tea factory to get better returns to the growers. The general approach will be as under:

- 1. Self help groups (SHG) may be organized for every 10 ha of area which may comprise of 10 to 25 members depending upon the size of the land holdings. Every 5 SHGs can form a Nodal group and such 5 Nodal groups will form an Apex Group
- 2. Each SHG will have a managerial group of 5 elected members out of which one will act as Secretary. Five SHG secretaries will form the managerial group of the Nodal group and one of them will be elected to act as a Secretary. Secretaries of Nodal groups will form the management of Apex group and one of the Secretaries can function as Secretary for the Apex group. These Apex groups may be Federated to a State level Federation and one of the Secretaries of the Apex groups may function as the Secretary of the Federation.
- 3. For Technical supervision a Field Supervisor can be provided for every 5 SHGs (comprising of nearly 50 ha of plantation).

All the supervisors will be put under the charge of a Technical Manager for 250 ha. Area.

- 4. The funds can be arranged by levying a token annual membership fee of say Rs. 100 to 200 per ha at the nodal group level. The funds thus generated can be shared on 50:50 basis at the Apex group level. In case the Apex groups are federated at State level, the funds of Apex group will be shared on 50:50 basis with the Federation.
- The Federation will be the coordinating agency and have effective liaison with the state government, financial institutions, Tea Board and other relevant authorities.
- 6. The Federation will also organize the technical support as mentioned above.

The models can be modified according to the local conditions to make the small growers a viable force in the development of tea in their areas. Since this will be a set up by the growers themselves, managed by them with their own supervision, the chance of its delivering the results are high.

Acknowledgment:

Sincere acknowledgments are due to various sources from where the information has been obtained. Particular thanks are due to Shri Chinmoy Bandopadhya of Tea Board; Dr. M.B. Tamang, Director Tea Development, Uttarakhand; Dr. N.K. Jain, Editor IJTS, and the Contemporary Tea Times.