

Tea as a crop for the small farmer and the scope for increased production*

by
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Synopsis: The present position of small grower of tea as found in the Nilgiris and the causes for the low yield and poor quality of tea are described in this paper. The ways and means of tackling the problems is discussed and suggestions given to have a sound footing to its future.

Introduction: Tea (*Camellia sinensis*) is cultivated as a plantation crop to an extent of about 70,950 acres in Madras of which Nilgiris district accounts for 42,010 acres. In the Nilgiris, it is cultivated throughout the district from an altitude of 3000 feet to about 8000 feet. Tea flourishes best in hot moist climate. It was introduced in the Nilgiris in the year 1839. The area under tea in the different periods is shown below:

Year	Area in acres	Year	Area in acres
1897	2,000	1943	22,000
1920	7,000	1956	41,756
1930	13,000	1958	42,101
1940	19,000	1959	42,010

Out of the above area, a major portion is owned by plantation companies and big planters. The area owned by the small growers is estimated to be about 15,000 acres with different sizes of holdings ranging from 0.50 to 50 acres scattered around the villages. The yield from these small estates is comparatively low. Due to the enforcement of the Madras Hill Station (Preservation of trees) Act, 1954 and the uncertainty of potato crops due to vagaries of monsoon, pests and diseases, the majority of farmers are being induced to switch over to tea cultivation.

Present yield position as compared to others: The yield of trade tea obtained by the small grower as compared to yields in other places is given below:

Name of the place	Average yield of made tea per acre in lb.
Japan	4,000
North East India	1,500
South India	900
Pakistan	608
Small grower in the Nilgiris	500

(4 lb. of green leaves are necessary to make 1 lb. made tea)

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Causes for the low yield and scope for improvement: The present low yield of the small grower can be attributed to the following causes :

1. **Seed material:** At present, the farmers purchase their seeds either locally or from Assam at a price varying from Rs. 100/- to Rs. 300/- per maund of 82 lb. For want of finance, only the cheap quality is preferred. It has been estimated at Assam that by planting clonal seedlings, the yield of tea can be increased to 4,000 lb. per acre while the average is only 1,500 lb. Tea being a perennial crop with an economic life of about 50 years, greatest care should be bestowed on the selection of seed material.

2. **Manures and manuring:** The small grower is not in the habit of manuring tea which is highly responsive to fertilisers. It has been estimated that 1 lb. of nitrogen applied in the form of ammonium sulphate has given an increased additional yield of 8 lb. made tea. In Japan, the crop is fertilised up to 400 lb. nitrogen per acre. In the Nilgiris, it has been found that a fertiliser mixture to supply 60 lb. nitrogen, 30 lb. phosphoric acid and 30 lb. potash is found to be optimum by the scientific section of the United Planters Association of Southern India.

3. **Pest and disease control:** Tea-mosquito (*Helopeltis antonii* S.) bug among the pests and blister blight (*Exobasidium vexans*) among the diseases cause great damage to the crop. Increased yield in the order of 200 lb. made tea per acre can be attributed to the control of the bug. The pest can be controlled by DDT 5% dusted twice. The loss estimated by blister blight disease is about 20-25%. This disease can be controlled by the adjustment of pruning time of bush, shade management and spray of fungicide.

4. **Need for careful plucking of leaves:** Plucking of fine even leafed shoots from the tea bush is a highly selective process. Severe plucking results in steady deterioration in the condition of bush. Fine plucking determines the quality of tea also to some extent, besides other factors like inherent quality of a bush, altitude, manufacture process etc.

5. **Proper cultural practices:** Excessive growth of weeds, a common sight in the holdings of small grower for want of sufficient finance and time, leads rapidly to enormous loss of crop.

6. **Control of soil erosion:** The small grower is usually indifferent to the different soil conservation practices such as terracing. After every sharp shower of rainfall, huge quantity of precious top soil is washed away depleting further the fertility status of the soil.

Necessity of shade tree: The holdings of a small farmer is usually devoid of shade trees and cover crops, which not only add organic matter by their leaf fall but also reduce the number of weedings. About 5 tons of leaf material can be obtained from shade trees like silver oak (*Grevillia robusta*).

Proper maintenance of Estate: The poorer the peasant, the stronger the urge to grab any leaf produced by the bushes and this in turn leads to poor growth of plants and more of soil erosion.

Means of tackling the problem: It can be seen, that the above factors contribute to the low yield of tea in the holdings of the small grower and the problem can be successfully tackled by the following ways:

(i) *Advisory service:* The small holdings are scattered throughout the district. The success of improving the yield of tea in these small holdings depends on the amount of enthusiasm and keenness that can be instilled into these small holders, who had not the benefit of advice hitherto by the technical staff as in the case of large growers, who maintain their own research station and staff. These staff may visit small holdings, advice and assist the farmers on the scientific method of tea cultivation, assist them in pruning and demonstrating the best methods. They can help them in the opening of new lands for tea, help in adopting soil conservation methods and in getting quality seeds.

(ii) *Financial and marketing help:* At present the small grower sells his produce usually to the small factory owner at a price varying from Re. 0.50 to Re. 0.75 per kilogram of green leaves. The factory owner manufactures tea and sells locally to private bankers from whom they would have obtained financial assistance. When the export market price at Cochin auctions range from Rs. 6 to 8 per kilogram of quality tea, the small factory owner is forced to sell the produce at Rs. 3 to 4 only. This results in the reduction of producer's value. The causes for these deplorable variation in prices can be attributed to want of financial and marketing assistance and can be solved by help in organising marketing and advisory services.

(iii) *Necessity of Co-operative organisation and its function:* The need for co-operatives is felt for credit, supplies of farmer's requirements of seeds, manures and implements and for processing and for marketing of agricultural produce. These multi-purpose co-operatives can admit all the small growers and provide them with adequate credit on the basis of their production, requirement and repaying capacity. They can market their

produce on terms favourable to the producer and distribute articles required for agricultural production. Co-operative processing societies can also be formed linking them with credit and marketing.

Recently, at Kunda, in Ootacamund taluk, Government had helped in organising a co-operative tea-factory for the benefit of small growers. Another co-operative tea factory is to be opened at Kotagiri also. Loans are being advanced through the Revenue Department to small growers for establishing new estates and for proper maintenance.

(iv) *Need for separate organisation*: The above help given to the small growers is only a beginning and it has touched a fringe of the problem. What is needed is an organisation with powers to arrange and co-ordinate research, advisory, finance and marketing facilities. Unless these facilities are given, the small grower cannot hope to get his due returns both in yield and quality of tea.

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