CHAPTER IX

SUMMARY OF FINDINGS AND CONCLUSION

The most challenging problem for our country is to provide food, health and economic security to millions of our population, without compromising ecological integrity. We need a ‘Double Green Revolution’ which will be as productive as the earlier green revolution, but also environmentally, friendly. This is the concept of sustainable development, which has been defined as development that meets the needs of the present. Without compromising the ability of future generations to meet their own needs.

The concept of sustainability is particularly relevant to Hill areas, which have fragile ecosystems. Hill contain a diversity of valuable flora and fauna. Forests in the hill areas affect climate and rainfall of the plains also. Rivers originating in the hills provide hydel power and water for drinking and irrigation in the plains. While economic development of people living in hill areas is necessary, such development should be on sustainable lines, so that the forest and vegetative cover and variety of animal and plant life in the hills are preserved.

The Union Planning Commission has been monitoring and funding a special programme for development of selected hill districts. The programme is called the ‘Hill Area Development Programme’. Guidelines for implementation of the programme have been evolved and elaborated by the Planning Commission in successive Five Year Plans.
In the State of Tamil Nadu, the HADP is being implemented in the Nilgiris District. This district is endowed with such a large diversity of flora and fauna that it has been chosen by UNESCO under its Main and Biosphere programme. Its excellent climate and enchanting scenery created by lofty peaks, natural forests and grasslands attract a large number of tourists. The HADP has been implemented in this district for over two decades. The HADP in the Nilgiris pursues the goals of eco-restoration, eco-preservation and eco-development through development schemes covering many sectors of the development. However, the three most important sectors are Forestry, Soil Conservation and Horticulture. Outlay on these sectors has accounted for about 54 per cent of the total outlay in recent years. Horticulture alone has accounted for over 14 per cent of the outlay.

Cultivation of vegetables and seasonal crops is practiced over a considerable area of Nilgiris district. Cultivation of seasonal crops involves ploughing of the land every year. Such ploughing leads to disturbance of the top-soil. Subsequent rain tends to carry away large amounts of top-soil. Nilgiris district is witnessing a great deal of soil erosion. Many programmes have been taken up to arrest soil erosion. Among them, the most important is one of substituting seasonal crops by tea, which is a perennial crop. Once the tea bushes are established, there is no need to plough the soil. The root system of the bushes also holds the soil together and minimizes soil erosion. Hence, there is significant reduction in erosion when cultivation of a seasonal crop is substituted by cultivation of tea. For this reason, HADP has laid great emphasis on tea cultivation.
Farmers wanting to shift to tea cultivation are assisted in many ways by HADP. For contour bunding and staggered trenching of the land to suit tea cultivation, a small farmer can avail himself of schemes under Soil Conservation sector of HADP. He can obtain vegetatively propagated high yielding tea clones, fertilizers and plant protection chemicals through schemes under the Horticulture sector. HADP has also provided assistance to industrial cooperative societies of small farmers for improvement of tea factories and marketing of tea. This is booked under the INDCO tea factories sector. Thus HADP has invested in a number of schemes to promote shift from cultivation of seasonal crops to cultivation of tea. Expenditure on soil conservation, Horticulture and INDCO tea factories sectors can be regarded as tea related expenditure by HADP.

HADP is in operation in the Nilgiris district since 1975. Starting from the 1980’s, there has been a steep increase in the area under tea cultivation in the district. Based on availability of reliable data, the years 1986-87 to 1996-97 have been chosen as the reference period for this study. During this period, the area under tea increased from 38,454 Ha to 48,954 Ha. During the same period annual expenditure by HADP on tea related schemes increased from Rs.187.77 lakhs to Rs.576.26 lakhs.

Credit has to be given to HADP for the increase in tea area mentioned above. However, there have been some other favourable factors also, which assisted to increase the area under tea. One of the important factors was the boom in tea, leaf prices, which was witnessed during some years within the reference period. The price of tea leaves, which was Rs.3.20 per Kg. In 1986-87 increased in a fluctuating manner to Rs.6.60 in 1996-97. In-between it had touched Rs.7.66 in 1995-96 and crossed
Rs.6.60 during the years 1989-90, 1990-91 and 1991-94. This has to be recognized as a very important factor motivating farmers to switch over to tea.

There are also other factors like steady income provided by tea for about 10 months of the year, as against one or two harvests of seasonal crops. Tea is also less prone to disease than potato and vegetable crop. Un-remunerative price fetched by potato, coffee and vegetable could have motivated some farmers to switch to tea. Menace due to animals attracted by potato could have been motivated some to change over to tea. There could be other factors like promotional activity by tea Board and UPASI.

OBJECTIVES OF THE STUDY:

The purpose of the present research study is to estimate the role played by HADP in bringing about the increase in area under tea cultivation during the period 1986-87 to 1996-97.

More specifically, the objectives of the study are as follows:

1. Identify the size profile of small farmers who have switched from other crops to tea.

2. Identify the crops, which were substituted by tea.

3. Estimate the role of good tea price in motivating the shift to tea.

4. Test awareness among tea-farmers regarding ecological benefit of tea cultivation.

5. Estimate the segment of small tea farmers who have availed assistance from HADP tea scheme.
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6. Compare the role of HADP assistance and tea price as factors motivating the shift to tea cultivation.

7. Quantify the role of HADP in bringing about substitution of seasonal crop by tea.

HYPOTHESES:

1. There is a positive linear correlation between HADP and expenditure on tea related schemes during a year and the area under tea cultivation in the next year.

2. There is a positive Linear correlation between the average tea-leaf price in a year and the extent under the cultivation in the next year.

METHODOLOGY:

The required data have been collected from Primary and Secondary sources. The primary data have been collected from the respondents through a well designed, pre-tested questionnaire. The secondary data have been collected from published and unpublished sources. The collected data have been analysed using appropriate statistical tools like correlation, regression, percentage and tabular analysis.
MAJOR FINDINGS:

1. Both tea-leaf price and tea-related HADP expenditure in a year, affect the Tea area in the next year in a significant and positive manner.

2. Tea-related expenditure by HADP can be estimated to be responsible for 12.01 per cent of the increase in tea area.

3. Good tea leaf prices can be estimated to have caused 9.6 per cent of the increase in the tea area.

4. A large part (78.39 per cent) of the increases in the tea area is due to factors other than the above.

5. All sub-classes of small farmers are fairly represented among those who have shifted to tea cultivation. About 27 per cent have holdings of 1 ac. Or less. About 25 per cent hold 1.1 to 2 ac. About 31 per cent hold 2.1 to 5 ac. Only about 17 per cent hold more than 5 ac.

6. About 45 per cent of the small farmers are cultivating tea in less than 1 acre. About 26 per cent are cultivating 1 to 2 acres. Another 21 per cent are cultivating 2 to 5 acres. Only 9 per cent are cultivating tea in extents over 5 acres.

7. HADP is now over 23 years old. About 31 per cent of the conversion to tea took place over 15 years ago. 37 per cent took place 10 to 15 years ago. Another 25 per cent is 5 to 10 years old. Only 6 per cent of the shift is less than 5 years old. The shift to tea-cultivation seems to be slowing down.

8. The crop substituted by tea by 46 per cent of the farmers, is Potato. Coffee was the earlier crop in 18 per cent of the cases. Other vegetables accounted for 12 per cent
of the cases. Crops other than the above were cultivated in 24 per cent of the cases.

9. Regarding reach of HADP, it is observed that 29 per cent of farmers are unaware that HADP provides assistance for tea cultivation. 53 per cent knew about HADP, but did not apply for assistance. Only 18 per cent applied for assistance. All of them received the assistance.

10. A major observation is that 82 per cent of the farmers did not receive any assistance from HADP. They were motivated by 'Good Tea Price' (60 per cent) and by 'Other reasons' (40 per cent).

11. Nearly half (56 per cent) of the farmers are aware of the effect of reduction in soil erosion, brought about by shifting from seasonal crops to Tea. Less than half (44 per cent) are not aware of this significance

12. Only 18 per cent of the small farmers have availed themselves of HADP assistance to shift the seasonal crops to tea. However, they consider the assistance as a factor only as important as Good Tea Price’ and ‘Other reasons’ in motivating their shift.

13. Since only 18 per cent availed HADP assistance and even they consider it as one cut of 3 equally important motivating factors, the empirical study returns a finding that 6 per cent of the credit for conversion to tea can be given to HADP assistance. However, the econometric study has estimated that 12 per cent of the increase in the area during 1986-87 to 1996-97 can be regarded as the result of expenditure by HADP on tea related schemes. Both the studies suffer from a number of limitations, which have been listed above. Between the two methods, the limitations of the empirical method are more severe and the results subjective.
limitations of the empirical method are more severe and the results subjective. Hence, it would be reasonable to place the final figure closer to that provided by the econometric study rather than the empirical study. On this basis, the contribution of HADP assistance to increase in tea area in the Nilgiris during the period 1987-87 to 1996-97 may placed at 10 per cent.

CONCLUSION

During the years 1986-87 to 1996-97, the area under cultivation in the Nilgiris District increased from 38,454 Ha to 48,954 Ha. Out of this increase of 10,500 Ha, HADP assistance alone can be estimated to have accounted for 1050 Ha. In addition to making a contribution as above, HADP has created a good demonstration effect. It has acted as a catalyst in promoting shift from other crops to tea cultivation in a much larger area. In all about 10,500 Ha. of land which was earlier cultivated with other crops has come under tea cultivation during the period 1986-87 to 1996-97. Shifting of cultivation from seasonal crops to tea, has beneficial effect on the ecology of the district, by reduction in soil erosion. Farmers also get better economic returns through tea cultivation. Hence, HADP has played a significant role in the sustainable development of the Nilgiris District by encouraging substitution of seasonal crops with tea.