

Livelihoods Improvement for Economic Security (LIFE)

Empowering Tribal Small Tea Growers

EVALUATION STUDY REPORT



EXECUTIVE SUMMARY

CARE in collaboration with TEAVANA, initiated the **Livelihood Improvement for Economic Security (LIFE) - Empowering Tribal Small Tea Growers** Project with the aim to support, bring social change and economic security in the lives of 1076 tribal small tea growing households. Goal of the project was to improve the productivity and incomes of atleast 1,000 tribal households involved in tea cultivation in the Kothagiri and Gudalur taluks of the Nilgiris district, Tamil Nadu. For project implementation, CARE partnered with two field organizations – Nilgiris Adivasi Welfare Association (NAWA) and Centre for Tribals and Rural Development (CTRD).

A baseline survey was carried out in 2011 to understand the impact tribal population. In December 2013, to understand the impact of project activities an end line evaluation study was conducted. Main objective was to provide a comparison, change in situation of the tribal households with reference to baseline and end line information. A structured questionnaire was used as the instrument for data collection from tribal households. In addition to capture the qualitative annotations, observation during field visits and in-depth discussion with project staff and partner organisation staff was done. As similar to baseline about 30 per cent of the total population covered under the intervention were taken as sample (320 tribal households).

Endline observation of household data reveal a positive change interms of increase in productivity, income and higher price realisation for tea. Adoption of savings practises through VSHG, diversification of livelihoods options instead of single crop (tea) dependence is also observed among the households. Changes is also observed in terms of food habits (inclusion of milk and vegetables in the daily diet), adoption of best practises in tea cultivation – income and adopting silver tip cultivation and organic tea cultivation practises.

Discussion and observation from household highlight that institutionalisation of small tea farmers has facilitated equal opportunity and also increased their negotiation power in pricing the products. LIFE project negotiated and advocated with government line departments so that tribal tea growers were facilitated to register with Tea Board and at present are in better position to access government inputs, and services.

Evaluation study also highlight the challenges in sustaining the success achieved through the project activities. Market integration for selling the tea leaves or developing a niche market for silver tip tea and for organic tea remain a challenge to be addressed in the coming days. In spite of the issue of gender bias and discrimination it is important to work further in the project location mainly to enable access to land titles or promote joint title for women members of the households that will help in empowering the tribal women and also facilitate in availing entitlements of tea board and various government schemes.

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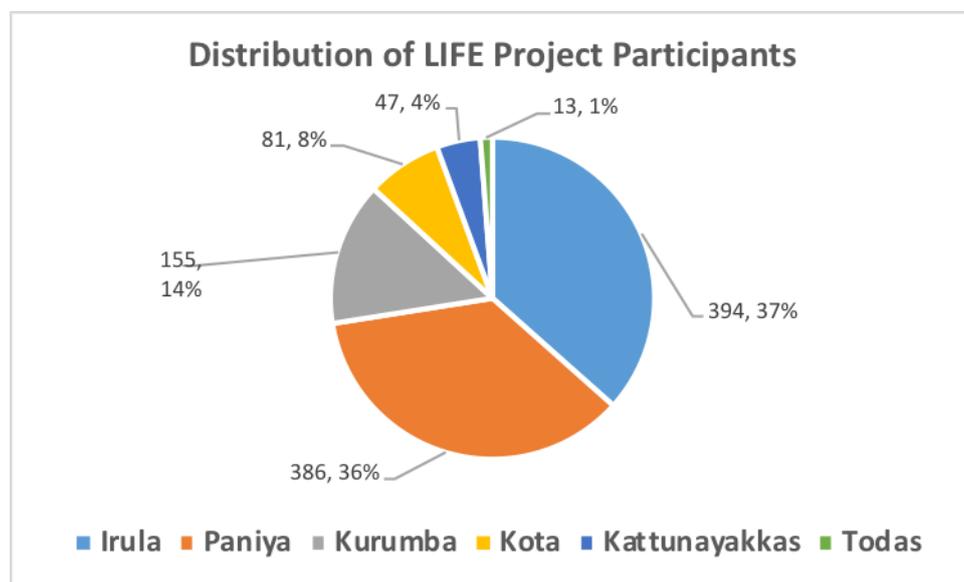
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1.0 INTRODUCTION

CARE in collaboration with TEAVANA, in 2010 initiated the **Livelihood Improvement for Economic Security (LIFE)** Project with the aim to support, bring social change and economic security in the lives of 1076 tribal small tea growing households. While the entire family was benefited from the project, CARE focused mainly on working with women, not only because they are disproportionately affected by poverty, but also because they serve as powerful agents of change within their families and communities when equipped with the right tools and resources.



For the project, the identified tribal households represented six types of tribal communities namely Irulas, Paniyas, Kurumbas, Kotas, Kattunayakkas, and Todas from across 100 hamlets and hillocks in Kotagiri and Gudalur blocks of Nilgiris District, Tamil Nadu, India.

For the implementation of the proposed project activities, CARE partnered with two field organizations – Nilgiris Adivasi Welfare Association (NAWA) and Centre for Tribals and Rural Development (CTRD) who has long presence in the district and primarily focused their activities for tribal development.

In addition the project closely worked with different line departments of Government institutions (Agriculture and horticulture departments, Tamil Nadu Tea Growers Associations), research institutions (Tamil Nadu Agriculture university, Horticulture college and Research Institute) and training organization (UPASI) to take forward the LIFE program

objectives to tribal community, Further formal financial institutions like banks were sensitized about the initiative to ensure their support and access is reachable to the tribal impact population of the LIFE program.

Project Goal

To improve the productivity and incomes of 1,000 tribal households (some 5,000 people in total) involved in tea cultivation in the Kothagiri and Gudalur taluks of the Nilgiris district, Tamil Nadu.

Project Objectives

1. To organize 1,000 tribal tea producers, including 50% women into groups through which individuals can gain access to inputs such as bank loans, access to extension services and material inputs and obtain better prices.
2. Increase productivity of 1000 tribal tea farmers
3. Diversify the livelihoods of 450 tea growing tribal households to reduce dependence on a single crop and promote more balanced nutrition.
4. Pilot organic tea cultivation with 100 tribal tea growers to explore possibilities for expansion and links to niche markets.

Based on the expected project outcome the key result areas in terms of change are identified as follows.

- **Promoting and strengthening** of Peoples Institution
- Increase in **income**
- Increase in **productivity** of tea
- Increase in **production**
- Change in **cultivation practices**
- **Livelihood diversification** through uptake of other livelihoods
- Change in **dietary patterns**
- Better **access to government schemes** and entitlements particularly those from the tea board

The evaluation report aim to provide a comparison, change in situation of the tribal households with reference to baseline and end line information over a period of three years.

2.0 DESIGN OF THE STUDY

For the LIFE Project, baseline survey (benchmarking exercise) was carried out in 2011 with the objective to understand the status of the tribal households and to identify the key indicators and main intervention points for the project. Based on the identified intervention points, the project implementation process and activities were designed in-line with the overall objective of the project. Over the period of three years, various activities were carried out to address the objectives. To understand the impact of the activities it was decided to undertake an end line study in November 2013.

A quantitative study was conducted using questionnaire as the instrument for data collection. Further within the baseline questionnaire different activities covered under the LIFE project were included mainly to capture the changes, outcome and impact of the activities for the end-line data collection. (Annexure 1 for the end-line questionnaire).

Sampling

For the baseline survey, 30 per cent of the total population / tribal households covered under the intervention were taken as the sample. From the 1076 tribal households representing six primitive tribal groups spread over the two blocks of Nilgiris district namely Gudalur and Kothagiri, about 320 tribal households - *156 households in Gudalur and 164 Households in Kothagiri Block* were selected as sample for the study. For end-line study the same population was considered for data collection.

Summary of Sampling Design

Details	Gudalur	Kothagiri	Total
Total tribal households	520	556	1076
Total number of villages covered	78	31	109
Sample selected (30 % of the total HHs)	156	164	320
Sample spread across geography			
Rural Households	98	150	248
Town Panchayat Households	33	14	47
Municipality Households	25	0	25
Total number of households	156	164	320

For end line survey, information from all the 320 tribal households covered in the baseline study was collected and analysed. Of the total in seven households the person interviewed for

baseline was replaced with other family member because of death and in case of 9 households due to migration to distant place. Care was taken to ensure avoiding any drop in the total number of households covered in end-line survey through repeated field visit.

3.0 SOCIO DEMOGRAPHIC PROFILE OF STUDY HOUSEHOLDS

Out of the 320 families who were actually surveyed for end-line study 83 % were from areas designated rural while the rest were from Town Panchayat and Municipality areas designated rural.

Family size

The total number of family members in the surveyed household was found to be 1302 members making on an average the family size to be approximately 4.3. Similar to baseline survey, overall it is found that small families predominate among the study households.

This has a cultural significance with reference to the study area. In tribal communities when a couple get married they live in a separate household though the parents / in-laws are living in the same village. Therefore there are no extended or joint families but it is observed that people belonging to the same family usually have their houses close to each other. Further the high predominance of families with fewer members indicates that the family members are probably young - either newly married or with young children.

Gender and Age profile of the households studied

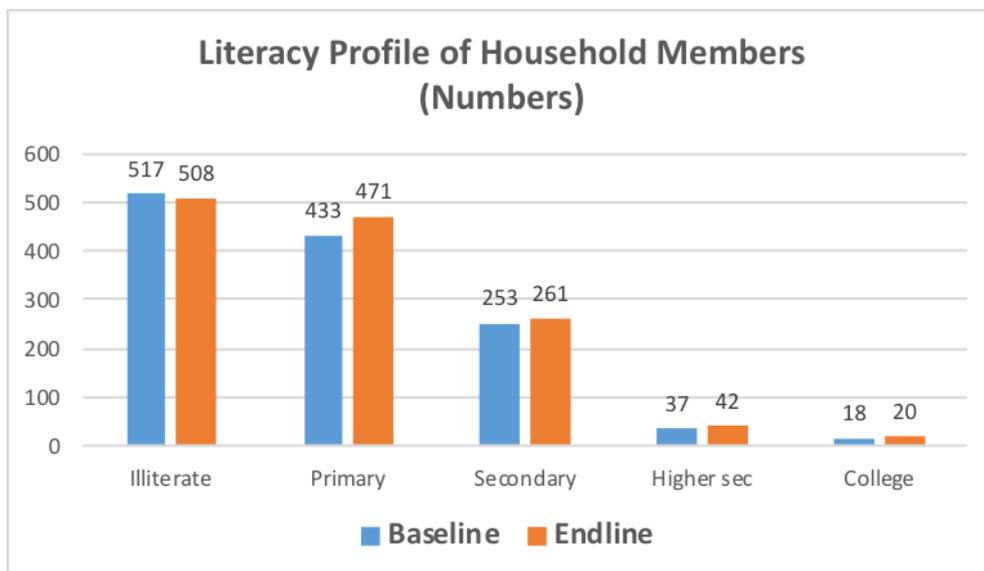
An analysis of the gender profile of the families shows that out of 1302 members in the sample of 320 families, 612 or 47% are males while 53% are females (690 numbers). With reference to age group most of the members surveyed are either below 18 years of age or adults between the ages of 19-40 years. Elderly people of over 60 years are minimum and the middle aged family members (40-60 years) are also not many in number. This supports the earlier finding about the small family size.

Literacy profile of Household Members

Literacy status	Baseline	Endline	%
Illiterate	517	508	39.02
Primary	433	471	36.18
Secondary	253	261	20.05
Higher sec	37	42	3.23
College	18	20	1.54
TOTAL	1258	1302	100

In terms of the literacy profile, in baseline survey of the total members surveyed (1270 members) only about 1258 responded to the questions.

During end-line study care was taken to collect the literacy profile of all the household members surveyed. Overall about 40 per cent of the household members are illiterate and never went to school. Majority of them are in the age group of 35- 60 Years. When compared with baseline information the number of households with primary education shows a positive trend from 34 to 36 %. Similar small but positive trend is observed in case of higher secondary and college education information. The slight positive change can be attributed to the awareness about the importance of girl child education and counselling by project staff on dropout of girl child after secondary school education.



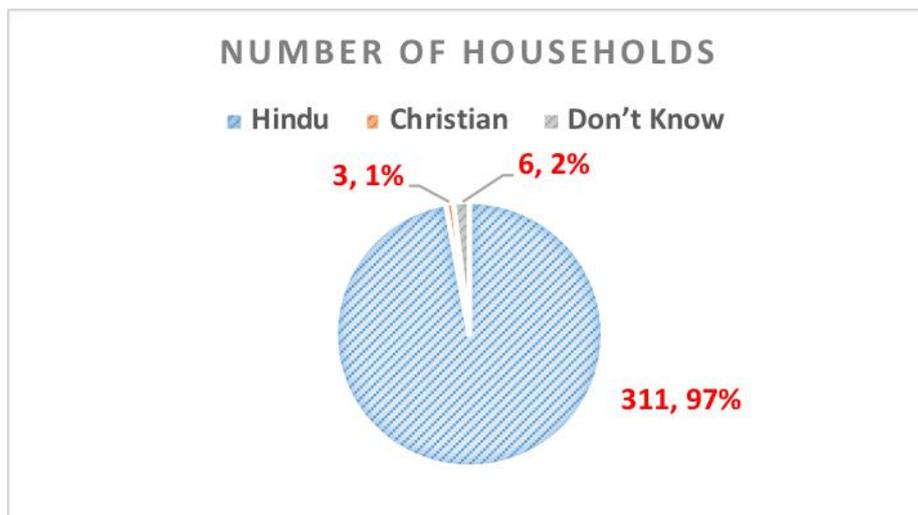
At block level the level of literacy of household members is better in Kothagiri as compared to gudalur block. Presence of urban region within the sample in Kothagiri block and better presence of Christian missionary school and Government Tribal Residential School (GTR School).

Above graph also highlight that there is a sharp drop out after completing secondary school level education, discussion reveal that it is considered as the right age for job enrolment, for girls in plantation and for boys outside the village as non-farm labourers. In case of girls, responsibility to take care of the younger siblings and early marriage are the quoted reason for the above. FGD reveal that girls are married at very young age mainly to avoid the practise of love marriage / eloping with other community.

Religion

Of the total 320 households surveyed 97.21 % of the respondents stated their religion as Hindu while 0.93 % stated that they were Christian. Rest (1.86 %) were non respondents. It is noted that often these households (under don't know category) are classified as Hindu by the Government notification.

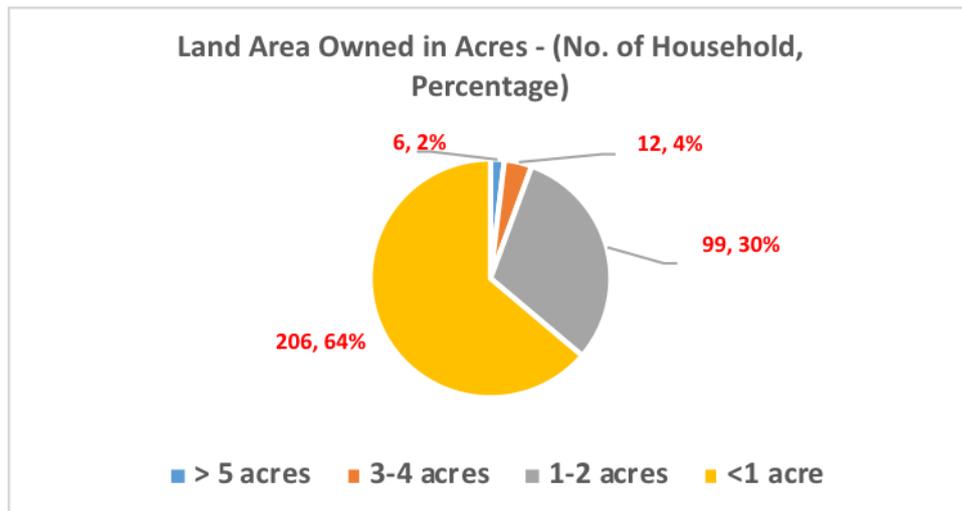
Discussion reveal that traditionally tribal community don't follow any set religion and practice the custom of worshipping nature and their forefathers. But in recent years due to government norms for supply of ration cards (Public Distribution system), households are often forced to choose any one of the religion as their identity. Further in few instance the tribals are adopting Christianity as their religion due to the presence of missionary in the region.



Agriculture Land Owned

For the project, only those who own land and cultivate tea was selected as the project participant. Care was taken to ensure small and marginal farmers are the major part of the LIFE initiative. In the following graph distribution based on household's land size is presented below.

In terms of land ownership it was found that 64 % have land below 1 acre while 30% own land that is between 1-2 acres while 4% own land in 3-4 acres category. Only about 2 % own land that is above 5 acres. It is observed that the maximum number of households that own more than three acres of land are in Kothagiri block.



Discussion with households members reveal that due to small land holdings the income generated from tea farming is low and hence they invest less in their own farm and prefer to work as labourers in others farm for wages. A typical vicious cycle of low investment and care of tea plantation resulting in low productivity is observed among the project participants and it is also highlighted in Understanding low productivity of small tea farmers study conducted by CARE.

Ownership of land

In terms of ownership of land titles it is observed that only about 36 % have the land title or ‘patta’ (Government approved document of land ownership) in their own names. The remaining 64 % have the ‘patta’ in their family member’s name. Further analysis of land ownership reveal that around 43 per cent of the households who claim to have patta are actually cultivating tea in forest department land and usually pay fine incase of any action taken by the department.

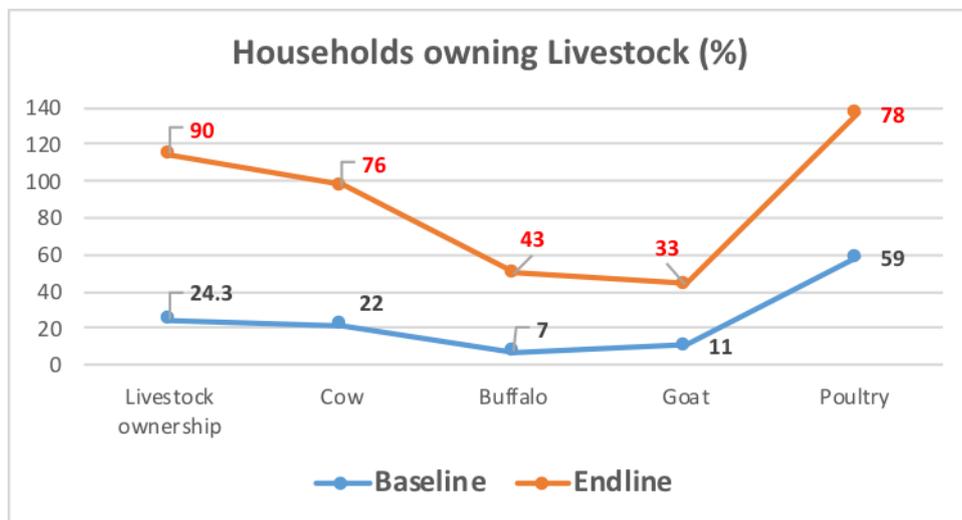
Ironically though the Forest Rights Act (2006) talks about the land rights of the tribals in the region, the act is not implemented effectively to distribute the land entitlement due to various complex issues. For instance in recognising the land ownership different stakeholders are involved mainly two governments administration (Tamil Nadu and Kerala), different line departments (Forest, Revenue) and ministries (SC and ST Welfare), District administration and political parties. Further individuals have counter law suit filed against distribution of the land in courts. This litigation has resulted in the district administration banning the distribution of land deed in areas declared as forests. Further in the above scenario the tribal

communities without the land titles are unable to access any of the existing government schemes.

Through LIFE project CARE organized a workshop and panel discussion in Kothagiri block that provided a platform and opportunity to government departments and district administrative officials, like mined NGOs and 235 tribal representatives. The Tamilnadu State Joint Director of SC/ST welfare ministry participated in the panel discussion and coordinated and urged the forest department and tribal community members to submit the individual and community rights claims forms with acknowledgement. As part of this activity, LIFE project initiated land survey for all the 1076 project participants to know the actual land holding size, cultivable land in use and empty land.

Livestock Ownership of study household

Baseline survey indicated that about 24.3% of the study household own some kind of livestock assets. Across block, when compared the percentage of household owning livestock was more in Kothagiri (31 %) than in Gudalur (17.8 %) – indicating the difference in economic status of the households. Further analysis of ownership reveal that in most instance these household own poultry in the homestead followed by goat and to very less extent milch animal.



Endline information reveal that of the total household surveyed about 90 % owned some kind of livestock and about 76 percent specifically owned milch animal.

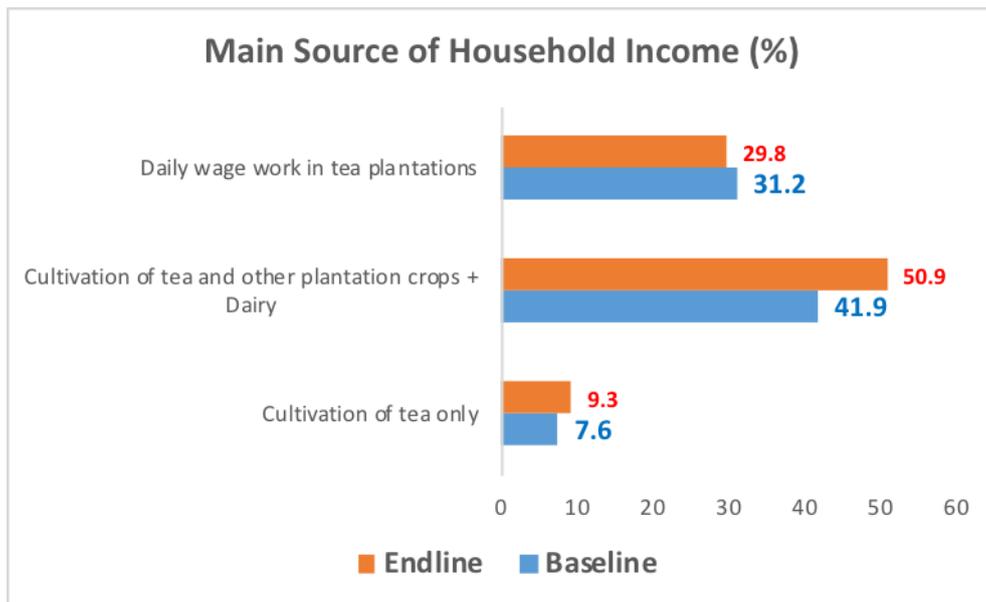
Huge positive shift in livelihood ownership among the study household is attributed to the legal status of the VSHG under registered societies form that has made significant changes

and elevated the position of tribal tea growers in accessing government programs and services like HADP (Hill Area Development Program), state government free cow and goat schemes and facilitation of bank loan for livelihood diversification purpose.

Discussion reveal that earlier the households preferred mono cropping – particularly tea in the available land, whereas the project activities focussed on diversification of farming along with livestock rearing. This has positively influenced the income generation capacity of the households. Comparison of household income over the project explains the positive trend and the same is discussed under the topic annual income of household in the following paragraphs.

Main Source of Household income

In the baseline survey out of the 1270 family members surveyed only 1242 had responded to questions on occupation. Of these 786 are economically active the rest being children and those with no occupation.



Above graph in detail compare the main source of household income on the basis of identified primary occupation of the household at the end of the project period. As adopted in the baseline the information is only for the economically active family members of the household and do not consider children, old people and others with no occupation.

It is observed that there is a significant shift from 41.9 % to 49.2 % in case of those getting income from occupation that includes cultivation of tea, other plantation crop – coffee,

pepper, ginger and turmeric and rearing milch animal. Also the percentage of household earning income from cultivation of tea alone has increased over the project period from 7.6 to 9.3 % - adopt silver tip cultivation. Also it is noted that the source of income for the households like working as daily wage labour in corporate and non-corporate tea plantation has come down from 31.2 % to 30 % among the households studied.

In addition to the above, household members to earn income are also involved in collection of forest produce (3.8 %), Non Agricultural wage labourers (2.5 %), salaried employees (3.4%) and pensioners (0.3%). Working as daily wage labourer (both men and women) in corporate and non-corporate tea plantation is common among the households studied. Further analysis of daily wage income from the source reveal that the maximum income comes from working in non-corporate plantations which further ascertain that they are not covered under any kind of safety, benefits, entitlements and work for long hours with low wage.

Discussion with partner organisation staff revealed that tea plantation acts note that safe housing and other facilities (safe enabling working environment) are to be provided to the permanent tea plantation workers. On the other hand tribal households prefer to work from the houses and don't prefer to stay within the estate resulting in temporary work titles and don't avail any facility. Staffs highlight that necessary policy amendment within the act is required in such a way that the tribal who work from the home will get benefits.

Annual Income of Households

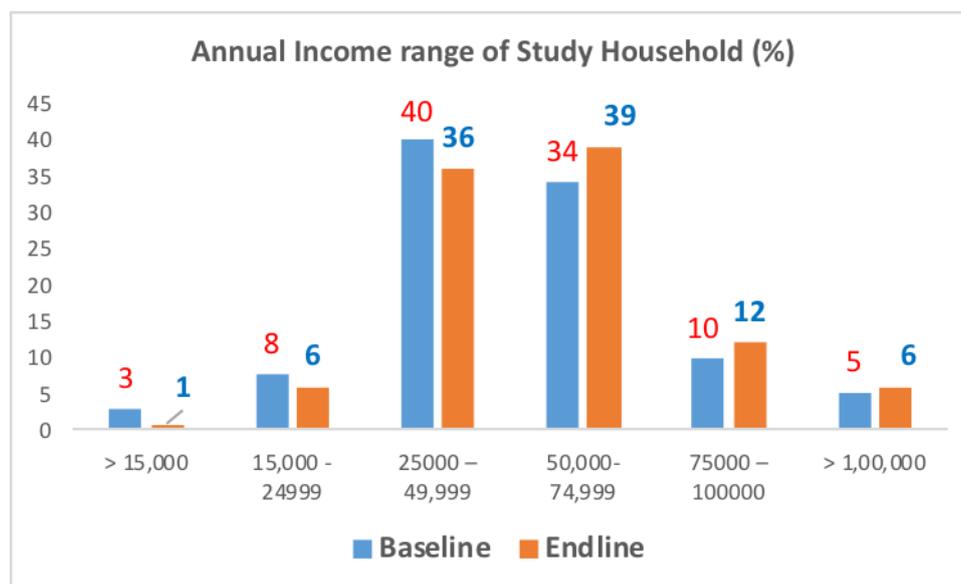
Comparing the annual income of the household using baseline and end line data collected for the study, help understand the difference in earning capacity of the household over the period of three years.

From the following table it is clear that the income of the households has increased in the period of three years. Increased income from tea cultivation due to adoption of best practises, income from milch animal rearing, income from vegetable selling from home gardens and adoption of silvertip techniques are quoted as some of the main reason for the positive change in income. It is noted that the percentage of households earning Rs 50,000- 74,999 increase from 34.07 % to 39.94%.

Annual Income Range (Rs)	Baseline		Endline	
	Actual Numbers	%	Actual Numbers	%
> 15,000	10	3	3	1
15,000 - 24,999	26	8	20	6
25,000 – 49,999	129	40	116	36
50,000- 74,999	108	34	125	39
75,000 – 100000	31	10	38	12
> 1,00,000	16	5	18	6
Total	317	100.00	320	100.00

Also it is noted that the income of households which is less than Rs 15,000 decreased significantly between baseline and end line survey period. Percentage of impact population households with less than Rs 25,000 annual income changed from 11 % to 7 % during the project period. LIFE project success on improving the income of the poorest section of the community, who are hitherto neglected, is highlighted in the above observation.

The chart below gives a visual distribution of the income distribution across the sample



Membership in Self Help Groups / Village Level Groups

Membership in a SHG provides opportunities to save a minimal amount within the group and to access formal financial linkages through bank loans. Baseline survey indicated that of the total households surveyed (n=320), only about 21 % are part of the SHG initiative. Further within the 21 %, the number of households availing any bank loan through SHG was nil / absent.

Whether anyone in the Household is a SHG member	Gudalur	Kothagiri	Total	%
Yes	39	28	67	21
No	118	135	253	79
Total	157	163	320	100

Institution building was one of the main objective of the LIFE program. Various efforts were taken under the project to form informal and formal institutions mainly to build community based collective organisation at village level (82 numbers of VLG), 19 numbers of Village SHG at Panchayat level and Societies at district level.

Endline survey revealed that in all the households surveyed one or more member of the family are part of these institutions. Regular functioning of group and savings by members is considered as one the great success of LIFE program. It is revealed that through institution building and regular savings behavior the households are now able to access government schemes and benefits.

Household Savings behaviour

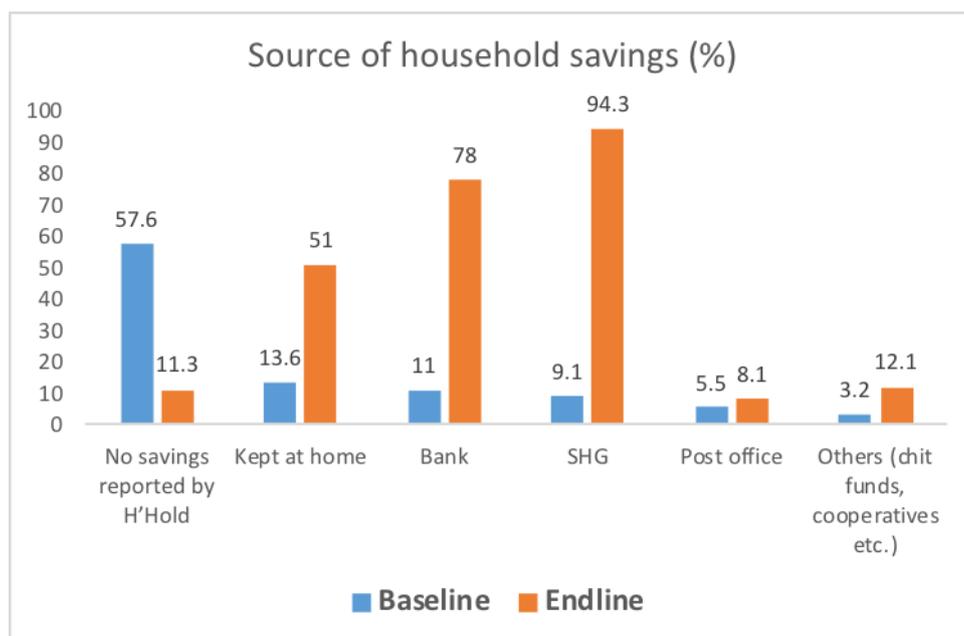
Savings are an indicator of the economic status of the family, where the household save part of their income to take care of the future requirements and not to fall in debt during emergencies.

Baseline survey indicate that about 57.6% of the household (n=309, who responded to the saving question) don't have any kind of saving – which is in line with the cultural observation of the tribal households, where they traditionally don't have saving among households. Efforts have been taken to address the above behaviour. VSHG was promoted with the main objective to improve saving pattern among the tribal households. Endline survey indicate that the effort was successful and at the end of the project period about 94.3 % of the households have saving with the VSHG. Discussion with the project staff reveal that in order to create awareness and regularize savings among the LIFE participants, Information Education and Communication (IEC) manual on savings was used. Above material was developed in consultation with different stakeholders including partner agency of the program.

Different sources are used for saving purpose, which includes in-house saving, in banks, post office, others that include chit funds and cooperatives. In the following table the number of households responded to the question and the percentage of households using different sources for saving is presented.

Source of savings	Baseline	Endline
	%	%
No savings reported by H'Hold	57.6	11.3
Kept at home	13.6	51.0
Bank	11	78.0
SHG	9.1	94.3
Post office	5.5	8.1
Others (chit funds, cooperatives etc.)	3.2	12.1
Total households responded	100.00 (n=309)	100.00 (n=320)

Multiple sources are mentioned by the households for savings purpose in end line survey and it is pictorially depicted as follows.



Discussion reveal that one of the main reason for households not able to save more is alcoholism.

Household loan borrowing behaviour

In baseline survey it is observed that only 16% of the respondents or 51 households stated that they have borrowed loan during the last one year period. In end line survey among the household surveyed about 96.4 % of the household have borrowed loan from any of the formal and informal sources in the last one year period.

Multiple loan borrowing / loan outstanding is observed across the households. It is noted that the household have borrowed loan mainly to meet out the consumption requirements, economic investment activity and to take care of the social obligation of the household. Sources of loan include mainly VSHG, bank, chit funds, tea factory, friends and relatives, middlemen/ agent and money lenders. Discussion with the members of the household reveal that though their access to bank and revolving fund assistance has improved after the intervention, the dependence on money lender has not significantly reduced. This is mainly because the amount saved in the VSHG are very low and it cannot take care of all requirements of its members.

Informal sources like middle agents who buy tea from the farmers, factory owners, shop keepers, relatives, friends, employers, money lenders dominate the loan sources interms of easy access and preference by the household. Formal sources are used in most instance through facilitation of the LIFE project staff and in most instance used for investment purposes. Revolving fund assistance availed through bank and government schemes are utilised by many of the household studied.

With reference to borrowing the program intervention was successful in educating people to buy receipt for the payment, keep track of the records and informed borrowing from sources with low interest rate. Further it is highlighted that LIFE project has educated the community in repaying the bank loan taken by the community and avoid the behaviour of non-repayment.

4.0 PROJECT OBJECTIVES – ANALYSIS

Following section in detail evaluate the change brought about by the LIFE program activities among the tribal small growers based on the four main objective of the project.

A. Institution Building - Improved levels of collectivisation

The geographic isolation and lack of organization among tribal communities is a major impediment to economic and social progress. Operating as individual families, they remain vulnerable to low prices and heavy debt burdens.

Baseline information revealed that only about 21 % of the study households are part of some collective mechanisms and in most instances these groups are not functioning effectively. To address the above issue mainly to increase their negotiating power in the market and improve their access to fair credit different efforts are taken by the LIFE project.

Over the three year period, community organizations was promoted under LIFE project as an effective means to strengthen and empower the tribal small tea growers. The initiative helped in brought forwarding the impact population into mainstream system to access government entitlements and services. It is observed that based on the needs of the community different types of groups and institutions were formed with clear determined purpose to enhance development of the whole community in a sustainable way.

Endline survey reveal that village level groups are functioning on its own and managing their bank operations, revolving loan, internal loan lending, and save regularly.

Female representation in the groups are based on the land ownership status. Possession of supporting document is compulsory to access government inputs and services- in the absence of proper documents female membership is low but

In practice, LIFE project particularly focused and was very much conscious on inclusion of every women farmer and women cultivator to take part in the group meetings, technical trainings and project activities and bring changes in the family and community as a whole.

Institutions¹ built under the intervention includes Village Level Groups (VLGs) - primary groups at the habitation level comprising 10 – 20 tribal small tea growers. VSHGs are aggregates of VLGs comprising on an average of 50 members from three to five VLGs from one or more habitations. All the VSHGs that were formed and legally registered under the ‘Societies Registration Act’ of Tamil Nadu and were supported with the renewal of their registration by LIFE project.

Endline study reveal that one / two members of the study households are part of the VLG. Discussion with the members reveal that with their registration and legal status, now the households are able to access various entitlements including – receive services and schemes of the Tea Board; members of the VSHG use the service of purchased pruning machine in the field, they also utilise the weighing scale and tea leaf collection bags purchased through the intervention. In addition the project also supported members of the VSHGs (78 %) to open bank account in nearby nationalized and primary agriculture co-operative banks mainly to help them save and access the formal financial services.

B. Technical Training and Productivity Enhancement

Baseline survey information revealed that poor productivity is a major challenge for tribal farmers. Only few are linked with government agricultural services and exposed to training due to their remoteness / geographic scatteredness of the hamlets. In addition, hesitance to meet the officials and interest to attend training organised outside the village often result in lack of exposure to available facilities and trainings. In general, weeding, pruning and manuring are not often practised by the small tea growers. Also they prefer to pluck green leaves through the 3-4 leaves method that does not yield good quality green leaf, often resulting in low grade and poor price in the market.

Also for majority the land owned is less than one acre of land and in general the importance given to management of the farm is very less among the tribals. They prefer to work in other land / estates for earning daily wage mainly to avoid capital investment in field. Over the project period, critical inputs required for productivity enhancement in tea crop was identified by the LIFE project team based on the CARE *Study on low productivity among tribal small tea growers* of Nilgiris District. Further in consultation with specialist from agriculture and

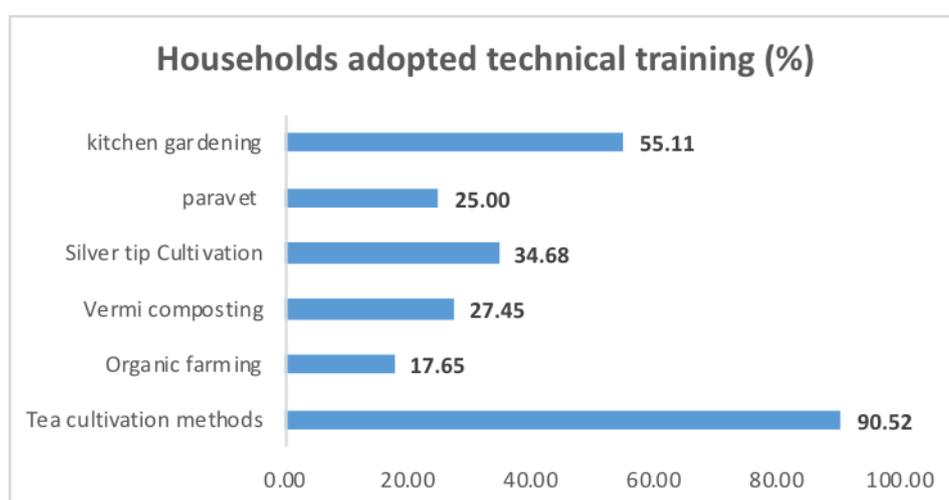
¹ In total about 82 VLGs and 19 VSHG at panchayat level are formed under LIFE project over a period of three years.

horticulture department with technical training institutions including UPASI- KVK five best cultural practises are identified for training. It includes weeding, pruning, irrigation and proper plucking of leaves are essential for a good yield. Over the period of three years, different technical training focussing on subjects close to the objective of LIFE project was given to the project participants.

Baseline study highlighted that the study households (n=320) had less exposure to any kind of technical training due to reasons quoted elsewhere in the discussion. Due to efforts taken by the project team and continuous motivation the members of the VSHG attended the training organised under the project. Also in many instance the training was organised at field / village level to ensure more participation from the women members of the household.

No	Training Type	Trained	Adopted
1	Tea cultivation methods (all five best practises)	306	277
2	Organic farming	119	21
3	Vermi compost preparation	51	14
4	Silver tip Cultivation	124	43
5	Paravet	8	2
6	Kitchen gardening (include cooking of food)	176	97

Of those trained the following graph presents the percentage of household who has adopted the techniques in reality / field - invariably resulting in household income increase.



Tea Sapling Distribution

Baseline information reveal that due to age of the tea plant (more than 20 year old), gap within the field (death of plants) and improper maintenance the average yield / production from the farm is very minimum / less. In LIFE project, facilitation was made with government departments and KVK to distribute free tea saplings to tribal farmers across the village. These tea saplings were used to fill the gaps and for new area plantation. Above initiative helped tribal farmers to increase the plant numbers per acreage and also increase their green leaf production. In terms of source of tea saplings in Gudalur block NGO are the main source while in the Kothagiri area it is UPASI KVK (Tea board and government schemes are routed through the agency) followed by other big farmers in the area and from nearby plantations.

Productivity enhancement practice

Key cultivation practices identified to improve tea productivity among small tea farmers are tabulated below.		
No	Cultural Practise	Recommended practise
1	Pruning	<ul style="list-style-type: none">• Done in a cycle of three – five years period.• Done only during rainy seasons.• Done in a phased manner that will gradually lead to enhanced productivity (bush growth and leafiness leading to good yield)
2	Weeding	At correct interval – once in 3 months
3	Manuring	At correct interval – yearly once or twice
4	Trench maintenance	400 trenches per acre
5	Quality leaf plucking	Two leaves and a bud

Tea productivity depends to a large extent on the inputs used in the farm, the cultural practices adopted and also the land area. Under LIFE project to improve productivity five best cultural practices was trained in tea cultivation. Quality upgradation program organised under the LIFE program are sponsored by tea board, Ministry of Commerce and Industries.

The simplified easily adaptable and cost effective tea cultivation practise was developed specifically for the small tea farmers with the support of tea board and UPASI. The cultural practices include weeding, pruning, trenching, manuring and proper plucking of leaves are

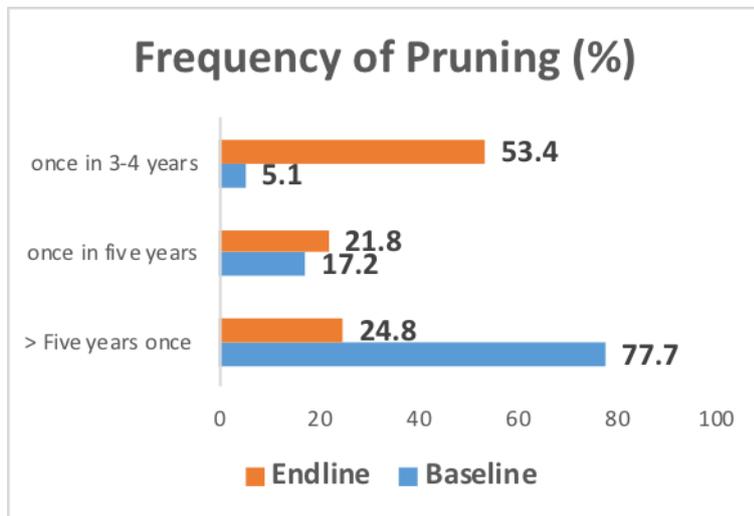
essential for a good yield. The changes brought about by the adoption of the cultural practises is understood and measured by comparing the end-line information with the baseline data collected over three years before.

Pruning

Most of the tribal farmers are not pruning their tea gardens regularly. It is observed that some of them have not pruned for more than ten years too. Various reasons were identified for the same, which includes

- Low interest in own farm due to small size and productivity,
- Affordability to spend on labour charges
- No one known to them used to do pruning in / near to the farm.
- Can use the time to earn income by working in other farms as labourer.

Baseline information highlight that of those who do pruning the frequency (number of times within a time period) varies at large.



Pruning is recommended once in every four years at 45 cm height.

In Nilgiris district - June month is the season for South west monsoon and pruning is recommended during the time.

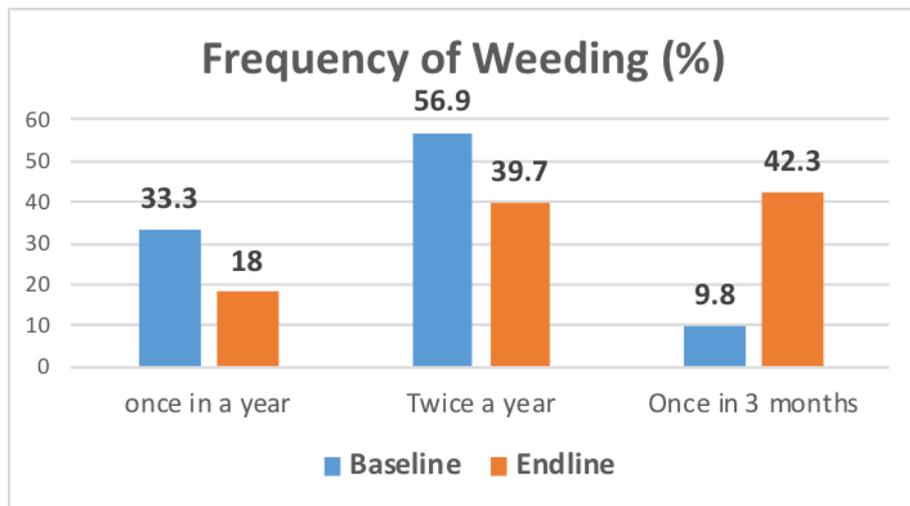
Pruning can be extended to six years once, if it is done at 65 cm height and the technique is called – ‘Skiffing’.

Above chart presents the change in pruning frequency of the study household before and after the LIFE project. Discussion with study households reveal that training program organized with the technical support of the KVK-UPASI has positive influence on understanding the benefits of adopting pruning exercise. Also the access to revolving fund support has

motivated more farmers to take up pruning. Further the availability of pruning machine has positive influence on adoption of the practise.

Weeding

Baseline data (n=320 households) revealed that about 4.4 per cent of the population do not weed their crops. Among those who do weeding (95.6 %) it was found that 33.3 per cent weed it only once in a year, 56.9 per cent weed it twice a year, and 9.8 % used to weed four times a year (@ 3 months interval). Above pattern was observed among the project participants irrespective of the size of land holding. Further it is observed that 84.3% used spade to weed the crop while 8.5 % do it using hand. The remaining use a combination of spade and hand.



Endline information reveal that all the study households are presently practising weeding in the farm and adopted the recommended practise. It is noted that the percentage of household doing weeding at 3 months interval has significantly increased over the three year period (from 9.8 % to 42.3 %), whereas those doing weeding once in a year reduced. Discussion reveal that lack of economic investment in following the practise was the main reason for the households to adopt it completely.

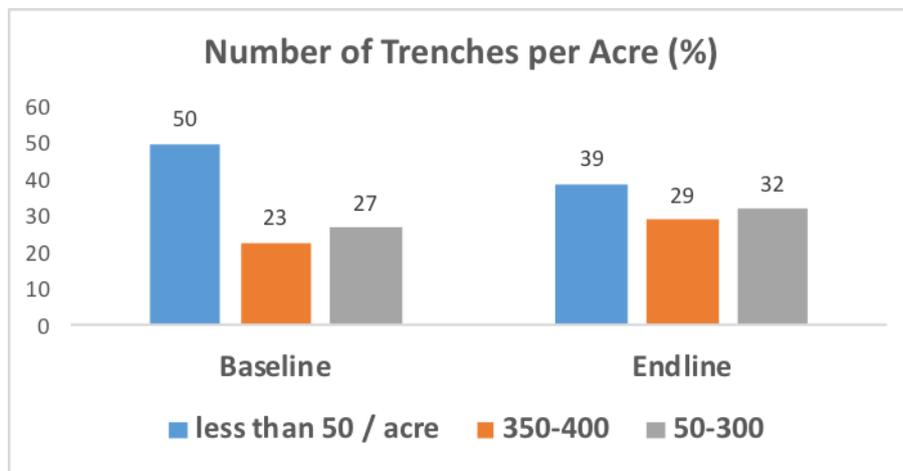
Manuring

Endline survey reveal that percentage of study farmer adopting recommended manuring practise are 40.6 per cent only; as it involves capital investment. Among those who adopt the practise, discussion reveals that the linkages with bank for credit support has positively

influenced adoption of these practise. Further it is noted that promotion of Vermi-compost is fast catching up as an alternative to use for chemical fertilizers among the impact population.

Soil trenching

To arrest run off and encourage water retentions, trenches are made between tea rows. Recommended best practices suggest that per acre there should approximately 400 trenches. Baseline information reveal that only about 18% of the total sampled farmers have undertaken soil trenching practises in their farm.



About 29 per cent of the households adopt the recommended practises of trenching (350-400 per acre). Endline analysis highlight that trenching is a labour intensive activity; small farmers generally see an opportunity cost for their labour and usually prefer to use their labour in other farms / estates to generate income for the household; besides trenching is usually done only after good rains, the deficit rainfall in the last few year has forced many farmers to postpone this activity; but the project envisages that in the coming months this activity will pick up among the project participants.

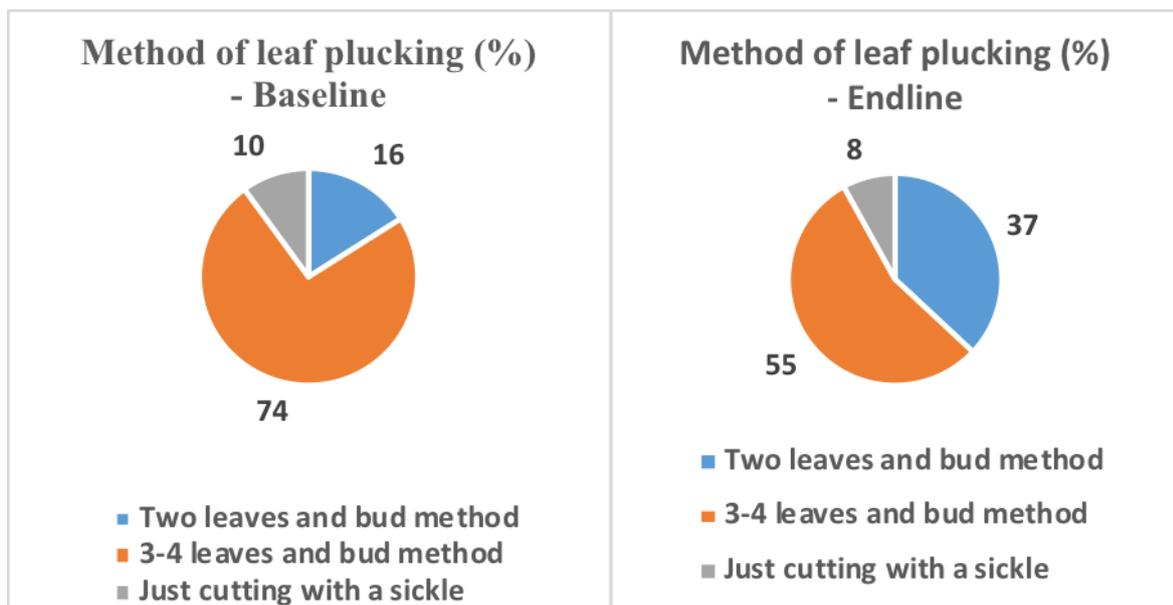
Discussion reveal that farmers in the project area have tried stone bunds within their farm as part of trenching activity.

Leaf plucking

In terms of plucking of tea leaves, two leaves and bud is the recommended method. Base line survey revealed that only about 16 per cent of the households are adopting the recommended practise of plucking two leaves and bud. Most of the study households go for 3-4 leaves and

bud method – mainly because they prefer volume of leaf rather than quality of their plucking's. It is noted that agents are ready to purchase the tea leaf though they know it fetches them low price. Behavioural / attitude change is required at both farmers and agent's level to change the habit of leaf plucking. It is noted that sickle is mainly used to pluck the leaf which is easy and quick and requires minimum labour.

Given below are the findings.



In the project area, most of the ‘bought leaf factories’ generally encourage traditional plucking practices since they process only such produce. Only some of the factories encourage the ‘two leaves and a bud’ method of plucking. LIFE project made efforts to link the farmers with such factories through series of negotiation due to small volume supplied. It may take few more months to ensure all the study farmers will change to improved plucking practice with the assurance of market linkages.

In terms of frequency of plucking twice a month is what is recommended for an average farm. It is observed that about 74 per cent of the study farm do plucking twice a month while 25.5% plucked it once a month. Only about 0.5% did it once in two months. During training awareness was created among the farmers about the plucking cycle. It is highlighted that plucking of leaf can be done in 8-10 days cycle when two leaves and bud method is followed, whereas when sickle is used the plucking cycle increase to 20 days once.

Yield and marketing

Due to continuous training and encouragement from the line department the small tea farmers have started adopting the best practices taught in the capacity building programme. Also the investment required to adopt the practice in the farm was fulfilled through financial support from LIFE project, internal loan from VSHG, savings and bank loan. As a result, there is a gradual increase in the number of small tea growers adopting these improved practices over the project period.

Endline survey of cultivators reveal that about 75 % reported increased annual plucking by 2 to 3 times on an average. Above in-turn result in increased yield of tea leaves and increase in income of the households by 45 %.

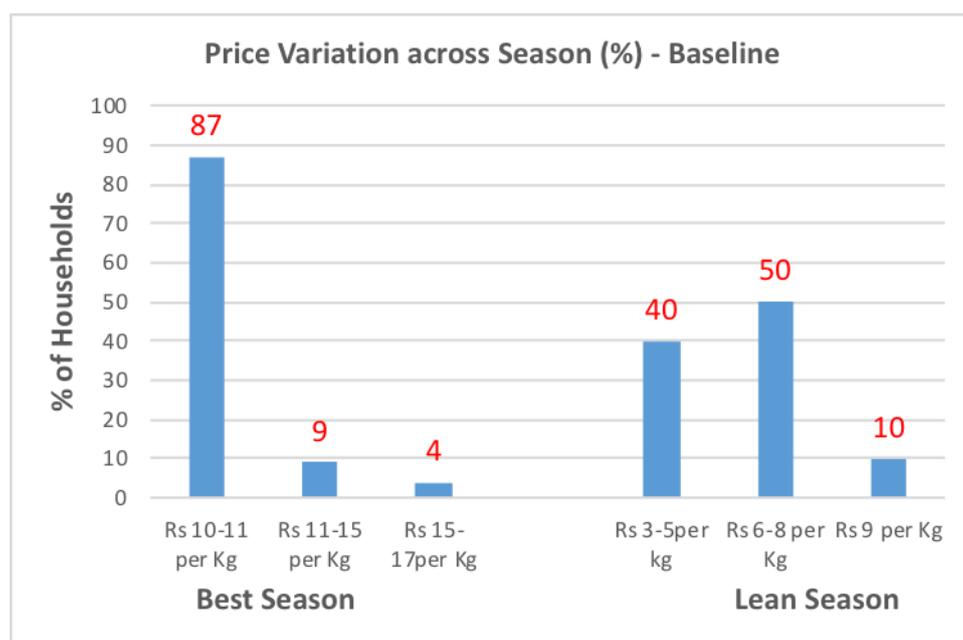
Peak Season: June to September; Average yield – 200 Kgs/ acre / month

Lean Season: November to February; Average Yield – 51- 150 Kgs/ acre/ month

Average yield of the farm – 1200-1400 Kgs/ acre/ year

Price received for tea leaves

During baseline across block studied the best price obtained for the tea leaves was Rs 10-11 per kg for 87 per cent of the respondents while remaining 9 percent have got Rs 11-15 per kg on an average.

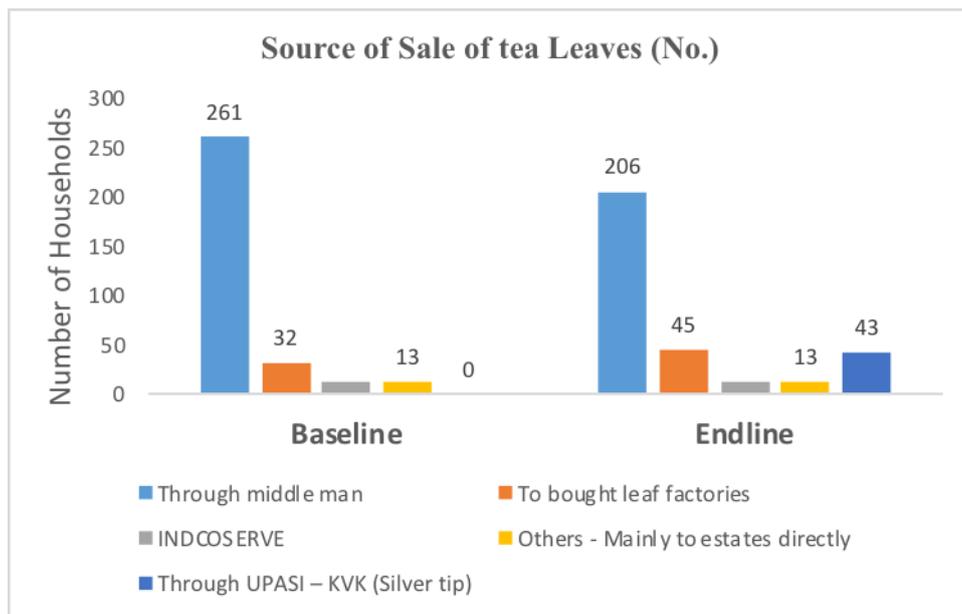


In terms of lowest price obtained it is Rs 3-5 per kg for around 40 % of the respondents and remaining 50 % have got slightly higher prices of Rs 6-8 per kg as the lowest price. The approximate income received from tea farm is Rs 9600-Rs 11200 per annum for the study households. Endline survey of study households reveal that over the period of three years, the price per Kg of tea leaves increased mostly in-line with the market price.

On an average with the adoption of two leaves and one bud technique about 37% of the household received about Rs 25- 27 per Kg, whereas about 55 per cent of the household who usually follow 3-4 leaves and bud method fetched around Rs 17- 19 per kg of leaves. Also it is noted that about 8 % of the study household earn around Rs 14 per kg due to the low quality tea leaves.

Marketing of tea

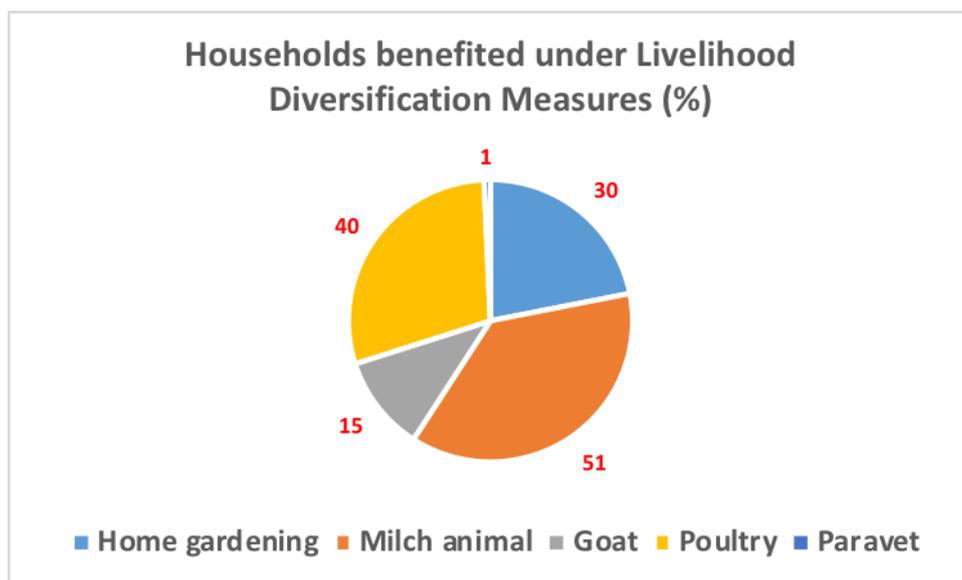
In terms of marketing tea, baseline indicated that most tribal tea growers sell the produce to bought leaf factories. However in the absence of transport facility to reach the factory directly they go through middlemen. It is noted that every day women who harvest the tea keep the bags on the roadside near to the farm, all the tea bags are collected by the middlemen through a common transport system and it is transferred to the distant factory. About 4.1 % of the cultivator sell the tea leaves to Tamilnadu small growers industrial cooperative (INDCOSERVE) and on an average they receive Rs 8.5per kg of green leaf.



Endline survey reveal that promotion of silver tip² tea cultivation in addition to conventional tea cultivation has multiplied the household income significantly by direct selling (through UPASI- KVK). It is observed that in niche market silver tip fetch price as high as Rs.2700 to 3000 per Kg against conventional market prices of Rs. 20- 25 per Kg for normal green tea leaves. Discussion with household reveal that on an average a tribal small tea grower plucks 250 – 400 gm per acre in a month.

C. Diversification of Livelihood Options and Improved Nutrition

During baseline survey community consultations revealed that most tribal families rely almost exclusively on tea production (or on wages from labour on tea plantations) to survive. Absence of other sources of income results in economic vulnerability and widespread malnutrition particularly among tribal women and adolescent girls. To address above objective i.e. to improve family health and economic security, LIFE project introduced vegetable cultivation / home gardening and dairy as a livelihood diversification option among the project households. It was ensured that all family members, particularly women and children, would benefit significantly from improved nutrition, and also the family could sell any surplus milk and vegetable to supplement their incomes.



Above chart highlights the percentage of households (n=320) benefited under various livelihood diversification measures of LIFE project.

² Tea tips also known as "golden tips" or "silver tips" are the small, unopened leaves of the tea plant. These tips are also commonly known as "buds," although they do not form flowers. They are considered to be better quality than the larger, older leaves of the plant. The silver tip tea contains less caffeine, more antioxidants and aid to digestive processes.

A. Improved Nutrition through vegetable gardening

Baseline study of households revealed that in general tribal women are susceptible to anaemic disease. In order to promote balanced nutrition within their diet, the project promoted 'vegetable - home garden' with iron and vitamin (C and A) rich vegetables. About six varieties of vegetables were recommended for the purpose.

Of the total 320 households, end-line survey indicates that 176 households have attended the technical training on home gardening and 97 households adopted the learning in practise. Further during the technical training besides sensitization on the importance of balanced nutrition, especially on how vital it is for the women, the impact population were also given live demonstration of cooking these vegetables, which is almost new to them.

Above initiative helped households to increase intake of fresh vegetables in daily consumption resulting in positive outcome on family health. In addition to increased consumption of vegetables, households also reported that they sell the excess vegetables grown in the farm for income generation.

B. Livelihood Diversification through Dairy

Above initiative was complemented by promotion of dairy and distribution of backyard poultry to the tribal population. This was focussed to reduce the livelihood dependency on single crop i.e. tea and improved the balanced nutrition uptake and encouraged diversity in dietary pattern amongst the tribal community. Tribal households were oriented on milch animal rearing and were motivated to explore this option for livelihoods diversification. Further availability of milk also encouraged these households to include milk in their daily diet and increased income through selling the surplus.

Endline information reveal that of the total study households, 51 percent purchased milch animal through funds mobilized as loan from the banks, through Government departments and Hill Area Development Program / schemes. In addition 15 per cent of the household were benefited by access to goat through the support from Hill Area Development Program (HADP) and Raleigh International agency. Endline information reveal that study households have started selling the excess milk in the milk cooperative society. Also to overcome the challenges of rearing milch animal in hilly areas and to improve the technical knowledge of

milch animal rearing – women and men from the study households were particularly trained. The trained paravet were supplied with first aid kits worth of Rs 1500 for use in field.

Discussion with study household reveal that in addition to milch animal distribution, the households were supported and provided with insurance coverage, cattle feed, dry fodder feed and transportation cost (usually milch animal are purchased from livestock market located far away from the hamlets) in addition to common shed at hamlet level.

LIFE Project helped farmers to access bank loan for milch animal purchase and continuous motivation tuned them to repay the bank loan without any default for the first time. Milk was included in the daily diet of women and small children. Livelihood diversification (dairy, goat and poultry) helped the families to earn additional income and also to meet out the emergencies by way of selling the livestock.

C. Promotion of Organic Tea Cultivation

No or minimum use of chemical fertilizers / inputs by small tea growers often result in low production and low income for the tribal household. During baseline survey it was quoted as one of the main reason for low interest in managing their own cultivated land by tribals. Above weakness was positively addressed by the LIFE project team. Through LIFE Project, orientation program on organic green tea cultivation and production was organised for the project participants with the support of ISCOP (Indian Society for Certification of Organic Products).

This program was organized only in Kothagiri block to keep the intervention more focused. Endline information reveal that of the total farmers trained (n=119) about 21 farmers have commenced organic tea cultivation process. Organic tea cultivation require complete overhaul of existing practices and lot of efforts to change. LIFE project used multiple strategies to achieve the same – where communication is one of the most important aspect used to address the issue. Considerable consultation and energy was spent in developing appropriate Information, Education and Communication (IEC) materials such as posters, wall paintings etc. in the form and manner that they will reach he target tribal communities more effectively.

5.0 CONCLUSION

LIFE project addressed the multiple challenges faced by marginalized and less considered tribal tea growing communities' through aggregation of scattered tribal growers into groups (VLGs / VSHGs/ Society / Tea Producer Association) at various levels. The collectives facilitated equal opportunity and also increased their negotiation power in pricing the products. The program focused on helping the tribals to realise the collective strength and through skill trainings highlighted their role in producing quality tea mainly by adopting cost effective simple and easily adaptable cultivation practises mainly to increase tea productivity in their farm. Further the project focussed on value addition training of organic tea cultivation and silver tip tea cultivation methods, enhanced household income through livelihood diversification (animal husbandry) and promoting balanced diet pattern among women and children to increase and address the issue of malnutrition mainly through home gardens. Further, LIFE project negotiated and advocated with government line departments to simplify the existing rules and regulations; through which the marginalized tribal tea growers were facilitated to register with Tea Board and at present now are in better position to access government inputs, and services.

Observation from the LIFE project activities highlights that small tribal tea farmer when provided with the right kind of social and financial support and taught appropriate skills can overcome barriers and become empowered to achieve their full potential for social change. The project mainly functions in partnership with local organizations, government entities and community-based organizations and follows an integrated approach where women not only gain economic development but also access relevant health entitlements. Over the period of three years, there is more confidence of women while dealing with issues both at household and village level. Further the project has engaged with men around women and other community leaders who exert influence on the lives of women to sensitize them on issues of gender. All of these have resulted in the social empowerment of the women, which is reflected in the recognition and respect they receive at the household and community levels.

In terms of challenge, it is noted that market integration for selling the tea leaves or developing a niche market for silver tip tea and for organic tea remain to be addressed in the coming days. Also the issue of land ownership and enabling access to land titles /joint title for women members of the households will further help in empowering the tribal women and

help them avail the entitlements of tea board and various government schemes. Further in terms of social factors the issue of alcoholism, gender bias and discrimination remains a challenge to be addressed in future too.