

A Study On Occupational Health Hazards And The Safety Measures Taken By The Tea Plantation Workers Of Kerala

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Abstract- Occupational Health Hazards refer to the potential risks to health and safety of tea plantation workers in their workplaces. The stressfulness of manual activities of an occupational worker is evaluated by comparing job-demands to human-abilities or norms established in the scientific literature. If demands of a job exceed capabilities or published norms, it is perceived to be a severe job as it leads to risk of occupational health hazard.. Departures from the capabilities or the norms are not uncommon in a developing country like India wherein an occupational worker is available at lesser cost with limited job opportunities. Moreover, a worker, in general, aims at maximizing his earnings by subjecting himself to extreme work conditions due to economic reasons. Factors like long working hours, improper rest breaks etc. severely affect workers' health. Tea plantation workers are facing a number of hazards in their workplaces due to physical, biological, mechanical, chemical and Socio-psychosocial factors. The present study tries to identify the various occupational health hazards faced and the safety measures taken by the tea plantation workers of Kerala. The tea plantation workers had to pass their livelihood in a hygienic and inhumane conditions and such livelihood pattern would inflict them with severe diseases frequently. Most of the tea plantation workers were migrated from Tamil Nadu and Karnataka and from various parts of India; they were not in a position to go against the orders and rule of the management. They are various factors such as income, educational levels of the workers, availability of medical facilities, Personal hygiene and sanitation, general awareness about the different occupational health hazards have been taken into account while arriving at the findings of the study. The study has been conducted mainly with the help of primary data collected with the help of a questionnaire. Altogether 225 workers, both male and female of Tea plantation workers have been surveyed by Random Sampling Method. In addition, secondary information has been collected from sources such as books, journals and the Internet.

Keywords- Accidents, Hygiene and sanitation, Medical facilities

I. INTRODUCTION

Tea is an indispensable beverage and is used all over the world. It is brewed from the tea plant *Camellia sinensis*. The tea (*Camellia sinensis*) has been cultivated in China about 2000 years ago, where its leaves were processed and its infusion used as a edible drink . Nowadays tea is the most widely consumed plant-based beverage in the world. Tea is cultivated in over 30 countries/areas of the world including Bangladesh, China, Georgia, India, Indonesia, Iran, Japan, Kenya, Malawi, Malaysia, Sri Lanka, Taiwan, Tanzania, Thailand, Turkey and Uganda .

Agriculture is a hazardous occupation carried out in difficult and sometimes dangerous working conditions. The specific occupation hazards facing by the plantation workers vary from one plantation to another. Tea is among the most labour-intensive of all the plantation crops. On an average, around 60 per cent of the cost of production is incurred on labour. Work at the plantations is basically manual in nature. The tea plantation workers are engaged in plucking and activities related to the maintenance of the plantation and its tea bushes. These include hoeing, weeding, pruning of the bushes, and drainage. Women workers are mainly engaged in plucking of tealeaves and in light maintenance work. The men too pluck tea leaves, but in addition they are engaged in hard agricultural activities. Adolescents more or less do the same work as the adults, and are also engaged in spraying of pesticides, which can be harmful to their health. Manufacture of tea involves several labor intensive processes. Like in any other employment sector, workers in the tea plantation have to face various occupational hazards. The main risks to the tea plantation workers of this tea industry are chemical and biological factors as well as unfavorable working conditions. The tea plantation workers faces challenges in ensuring occupational safety and health hazards and also inhaling tea dust causes to both acute and chronic respiratory symptoms. Accidents are caused due to unsafe acts or practices adopted by the tea plantation sector. They are also caused on account

of unsafe conditions of equipment or materials by not provided to them. The health and safety of the workers are closely inter-linked to the productivity of the tea plantation. A main attention is paid on taking maximum output from the workers and they are not caring and the management thinks about their safety measures.

Workplace safety and health has a great impact on the productivity of the entire manufacturing activity. For a labor intensive techniques like tea industry, where the workers are illiterate, unskilled and malnourished and also striving for enhancing productivity, safety and health of workers need to be given more priority. Workers in the tea plantation industry are exposed to a variety of occupational health and safety hazards. The tea plantation workers are not properly trained to prevent any contingency situation. Even they do not know what type of risks is involved in their working environment. In spite of creating a healthy and risk-free working condition, the management is focusing more on how to take maximum output from workers within the working hours. Even the Government authorities are not given more importance dealing with the environmental issues they do not force the management to take precautionary measures for the safety of their workers

Occupational health aims at prevention of disease and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations. The Joint ILO/WHO Committee on Occupational Health, gave the following definition. "Occupational Health should aim at the promotion and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations, the prevention among workers of departures from health caused by their working conditions; the protection of workers in their employment from risks resulting from factors adverse to health; the placing and maintenance of the worker in an occupational environment adapted to his physiological and psychological equipment, and, the adaptation of work to man and of each man to his job" (ILO/ WHO, 1995). One of the basic aims of occupational health is to provide a safe 'occupational environment' in order to safeguard the health of the workers and to step up industrial production.

1.2 STATEMENT OF THE PROBLEM

The plantation industry which was developed over years has a colonial Origin. It is now a valuable asset to the nation. Plantation industry is a branch of agriculture in the border sense. In recent days they arise lot of problem are faced by the tea plantation workers Such as Wages and remuneration ,Trade union, basic working and sanitation facilities and the one most important problem faced by them

are Occupational health hazards .Most of the tea plantation are suffering from Occupational health hazards . The tea plantation is the labour intensive techniques, The tea plucking activities is a difficult and laborious task and it is done most probably by the female workers and they have face so much risk at their workplace .The present study helps to investigate the effects of work activities and work environment on tea plantation workers by looking from dermatological perspective, detailed dermatological examination was performed on tea plantation workers and clinical backgrounds of the respondents were questioned and all findings were noted. The participants clinically suspected for skin, hair and nail infections have been referred to Government Taluk hospital for testing their samples. The most common diseases found by the tea plantation workers were allergic .The current study shows attention to the health problems of tea plantation workers. The researcher think that, use of protective measures such as by using face masks and gloves during working and receiving of safety training related to their job will decrease work-related health problems of tea plantation workers . By observing it has noticed that some skin diseases occur more frequently to the tea pluckers. and the researcher decided to investigate the reason of this situation. The researcher also analysis the working environment of tea plantation workers and it is found out that tea pluckers is done their work ,with the help of tea scissors and they collect the tea in their tea bags/sack and they may be subjected affected various skin or respiratory diseases .

The tea plantation workers have a safety workplace and working condition is the key to Socio -economic progress everywhere. The wages and working conditions are determined by labour profoundly affect the quality of life of the workers. The Government set workplace standards, such as minimum wages rate and other amenities. But the workers are largely covered by welfare measures. Health and safety standards can improve level of satisfaction of the workers ,welfare measures .

The diseases arising from agriculture work from various factors that can create conditions for these diseases include climate, fauna, population density, living conditions, eating habits, standards of hygiene, education levels, occupational training, working conditions, technological developments, and quality of, and access to, services.

1.3 The Research Gap

From the earlier studies it can be understood that though many studies have been conducted on different aspects of tea industry in India, a study on Occupational health hazards and safety measures adopted especially by the tea

plantation workers in Kerala. Thorough assessment of the prior studies, particularly in Kerala has revealed that most of studies were conducted to look into the contribution of the tea plantation sector for the economic development, problems in cultivation of tea plantation, manufacturing and management practices, tea commodity chain and cultivation practices. But no specific study has been conducted to find out the occupational health hazards and problems faced by the tea estate workers and the causes and consequences of tea plantations workers. This study should be embedded in a well informed assessment that identifies gaps in the current knowledge, acknowledge contradictory theories and notes inadequacies in the existing theories. In this study, the researcher needs to make the case that are proposed research will a significant contribution to the tea plantation sector and it also help to solve the occupational problem faced by the estate workers .

1.4 Objective of study

The objectives of the study are stated as under:-

- To assess the preventive measures adopted for the workers of Tea plantation workers.
- To find out the vulnerability of the tea plantation workers to various health problems.
- To study about the various occupational health hazards faced by the tea plantation workers
- To identify the effects of the health problems of tea plantation workers upon their occupational and social lives,
- To suggest measures for mitigating the occupational health hazards of the tea plantation workers.

1.5 Research Methodology

Methodology and Database

A sample of 225 workers was chosen from three tea producing district of Kerala states of India . The work profile of these workers varies/overlaps, being involved in plucking, fertiliser spreading, pruning, pesticide spraying, supervising plantation activities, and carrying leaves/loads.

A detailed questionnaire was prepared to obtain information on demography, personal habits, exposure history, health hazards of spraying pesticides, and ergonomic hazards and injuries that have occurred while working in tea gardens. All the collected data was analysed with the help of SPSS.

The study is based on both primary and secondary data. Primary data were collected using structured

questionnaire method. The sources of secondary data were State Planning Board Thiruvananthapuram, Department of Economics and Statistics, Thiruvananthapuram, the publications and annual reports of the Tea Board, United Planters' Association of Southern India (UPASI).

Selection of the Study Districts

For primary data collection, three districts-Idukki, Wayanad and Palakkad -were selected from based on the concentration of the tea crops.

Selection of the Sample

From the selected districts of Idukki, Wayanad and Palakkad, 225 workers were selected using stratified random sampling. 225 workers were selected from tea plantations constituting of the sample.

II. DATA ANALYSIS AND INTERPRETATION

1. PERSONAL VARIABLES

TABLE NO.1 GENDER WISE CLASSIFICATION

Gender Wise classification			
Gender Wise	Frequency	Percentage	Cumulative Percent
Male	95	42.2	42.2
Female	130	57.8	100.0
Total	225	100.0	

Source: Primary Data

Interpretation

From the table it shows majority of the respondent are female ie,57.28% and only 42.22% are male.

Table No 2.Martial Status of tea plantation workers

Martial Status of the tea plantation workers			
Martial Status	Frequency	Percentage	Cumulative Percent
Single	60	26.7	26.7
Married	142	63.1	89.8
Widow	17	7.6	97.3
Widower	6	2.7	100.0
Total	225	100.0	

Source: Primary Data

Figure No 2.Martial Status of tea plantation workers

Interpretation

From the above analysis can found out that majority of the tea plantation workers are married ie,142 of the workers,17 are widow and rest 6 are widower.

TABLE NO 3 Age of the tea plantation Worker Vs Gender Wise classification

Gender Wise * Age of the tea plantation worker Cross tabulation						
Count						
Cross Tabulation		Age of the tea plantation worker				Total
		Less than 18 years	18-30 years	31-50 years	More than 51 years	
Gender	Male	2	34	25	34	95
Wise	Female	0	79	51	0	130
Total		2	113	76	34	225

Source: Primary Data

Interpretation

From the above table it depicts majority of the tea plantations worker are female and they belong to the age group of 18-30 years and most of them are in the age group of 31-50 years and from the study it is identified that only two workers are male and they belong to the Age group of less than 18 .out of the respondent 34 workers belong to the age group of more than 51 years.The Study also reveals the main work is always done bt female workers.

Table No 4 Literacy rate of the tea plantation workers Literacy of the tea plantation Worker

Literacy	Frequency	Percent	Cumulative Percent
Literate	45	20.0	20.0
Illiterate	180	80.0	100.0
Total	225	100.0	

Source: Primary Data

Interpretation

From the above table it can indicate that majority of tea plantation workers are illiterate 80 and only 20 are literate.

Table No 5 Educational Qualifications Educational Qualification

Educational Status	Frequency	Percentage	Cumulative Percent
Lower Primary	131	58.2	58.2
Upper Primary	74	32.9	91.1
SSLC	13	5.8	96.9
Pre-degree	7	3.1	100.0
Total	225	100.0	

Source: Primary Data

Interpretation

From the above table it can indicate that 131 have complete lower primary,74 have complete upper primary ,13 have complete and only 7 have complete pre-degree.

Table No 6 Cross Tabulation between Income status and daily wages of the tea plantation per day

Income Status * Daily wages of the tea plantations Cross tabulation

Income Status	Daily wages of the tea plantations			Total
	less than 275	275-300	More than 301	
Less than 10,000	9	58	0	67
10,000-15,000	8	72	42	122
More than 15,000	0	36	0	36
Total	17	166	42	225

Source: Primary Data

Interpretation

From the above table it depicts that majority of the tea plantation workers having a income of between 275-300 per day ie 166 of the workers,42 of the tea plantation workers having a more than 301 and only 17 tea plantation workers having the income less than 275.

Table No 7 Cross Tabulation between the types of family structure and Members of the family

Type of Family Structure * Members of the family Cross tabulation

Type of Family Structure	Members of the family			Total
	Less than three members	Four Members	More than Three Members	
Nuclear Family	22	113	8	143
Joint family	0	62	20	82
Total	22	175	28	225

Source: Primary Data

Interpretation

From the data analysis it shows that the structure of the family is majority of the tea plantation workers having nuclear family consisting of four members ie 143 workers and only 82 workers having a family Structure of joint family.

Table No 8 Cross Tabulation between the family members involved in tea industry and the members of the family

Family Members involved in tea industry * Members of the family Crossstabulation

Family Members involved in tea industry	Members of the family			Total
	Less than three members	Four Members	More than Four Members	
One Member	12	17	1	30
Two Members	10	145	27	182
More than Three Members	0	13	0	13
Total	22	175	28	225

Source: Primary Data

Interpretation

From the table it is observed that from the cross tabulation that majority of the tea plantation workers are involved in the field of Tea industry it means that sometimes husband and spouse or son are working together ie total of 82 workers ,30 workers are having one member from the family and only 13 workers family members are working with them,

III. WORKING CONDITIONS

Table No 9 Nature of work of the tea plantation workers

Nature of Work * Type of job Cross tabulation

Nature of Work	Type of job				Total
	Plucking	Spraying	Fertilizing	Pruning	
Permanent	88	13	19	24	144
Temporary	8	42	2	29	81
Total	96	55	21	53	225

Source: Primary Data

Interpretation

From the above table it shows that majority of the workers are doing the important job i.e. 96 of workers are involved in Plucking processing and it mostly done by the women workers. Sparying and pest attack work is done by 55 workers, 21 workers are involved in fertilizing process and only a minority of 53 workers are involved in the process of pruning .

Table No 10 Length of services

Length of Services

Length of Services	Frequency	Percentage	Cumulative Percent
Less than three years	12	5.3	5.3
Three to five Years	76	33.8	39.1
Five to seven years	74	32.9	72.0
Seven to Ten Years	48	21.3	93.3
More than Five years	15	6.7	100.0
Total	225	100.0	

Source: Primary Data

Interpretation

From the above it can identify that majority of the workers are working in this field for more than three to five years ie,76 workers,74 workers are working in this field for five to seven years,48 are working for seven to ten years ie 48 workers ,15 workers are working for more than five years and only 12 workers are working for less than three years.

Table No 11 Working hours per week

Working hours per week

Working Hours per week	Frequency	Percentage	Cumulative Percent
Below 20 hrs	20	8.9	8.9
21-40 hrs	74	32.9	41.8
41-50 hrs	94	41.8	83.6
More than 51 hrs	37	16.4	100.0
Total	225	100.0	

Source: Primary Data

Interpretation

From the above data analysis it shows that the working hours of the worker per week majority of the worker

are working between 41-50 hours,74 Workers are working for 21-40 hours 37 workers are working for more than 51 hours and only 20 workers are working less than 20 hours.

Table No 12 Level of Job Satisfaction of the tea plantation workers

Job satisfaction of the tea plantation workers

Responses	Frequency	Percentage	Cumulative Percent
Highly Dissatisfied	30	13.3	13.3
Dissatisfied	48	21.3	34.7
Neither dissatisfied nor satisfied	47	20.9	55.6
Satisfied	66	29.3	84.9
Highly Satisfied	34	15.1	100.0
Total	225	100.0	

Source: Primary Data

Interpretation

From the above it can find out that that 60 of the workers are satisfied with the job,34 workers are highly satisfied with their work,47 did not express their opinion 48 workers are dissatisfied with their work and only 30 workers are highly dissatisfied.

IV. OCCUPATIONAL HEALTH HAZARDS AND SAFETY MEASURES

Table No 13 Personal habits of the tea plantation workers

Personal Habits of the tea plantation workers

Habits	Frequency	Percentage	Cumulative Percent
Smoking	97	43.1	43.1
Alcohol	94	41.8	84.9
Tobacco	34	15.1	100.0
Total	225	100.0	

Source: Primary Data

Interpretation

From the above data analysis it can be seen that majority of the worker having a habit of smoking ie 43.11% o the workers,41.8% of the workers having a habit of alcohol and minority has a habit of having tobacco.

Table No 14 Accident that occurred in the tea plantation regularly

Accidents that Occurred Regularly in the tea plantation estate

Responses	Frequency	Percentage	Cumulative Percent
Never	6	2.7	2.7
Almost never	11	4.9	7.6
Occasionally	57	25.3	32.9
Almost every time	60	26.7	59.6
Everytime	91	40.4	100.0
Total	225	100.0	

Source: Primary Data

Interpretation

The above table shows the opinion of the workers stating about the accident that occurred in the workplace 91 of the workers has a opinion that the accident occurred every time,60 workers said that almost every time,57 workers has said that occasionally it happens, 11 workers never happens and only 6 state that the accident are not happened in the workplace during the working hours.

Table No 15 Physical Hazards faced by the tea plantation workers

Physical Hazard affected by the tea plantation workers			
Factors	Frequency	Percentage	Cumulative Percent
Heat	18	8.0	8.0
Cold	94	41.8	49.8
Rain	113	50.2	100.0
Total	225	100.0	

Source: Primary Data

Interpretation

From the above table it shows that majority of the workers have affected by the rain ie,50.2% ,41.8% of the workers are affected by the cold and only 8% have affected from the heat

Table No 16 .Mechanized Disease faced by the tea plantation workers

Mechanized Hazards affected by the tea plantation workers			
Factors	Frequency	Percentage	Cumulative Percent
Cuts	71	31.6	31.6
Injuries	120	53.3	84.9
Sprain	34	15.1	100.0
Total	225	100.0	

Source: Primary Data

Interpretation

It is observed from the table that most of the workers are affected by mechanized hazards such as 53.33% are affected by injuries,31.56% have affected by cuts and minority of 15.11% have affected by sprains.

Table No 21. Biological Hazards

Biological Hazards affected by the tea plantation workers

Factors	Frequency	Percentage	Cumulative Percent
Insects bites	93	41.3	41.3
Snake bites	80	35.6	76.9
Animal attack	32	14.2	91.1
Plant fungal infectious	20	8.9	100.0
Total	225	100.0	

Source: Primary Data

Interpretation

It is observed that the above table shows the biological hazards affected by the workers majority of the workers are affected by the 41.33% are affected by the insects bites,35.56% are affected by snake bites,14.22% are affected by the animal attack and only 8.89% are affected by the plant fungal infectious .

Table No 22 Chemical Hazards affected by the tea plantation workers

Chemical Hazards affected by the tea plantation workers			
Factors	Frequency	Percentage	Cumulative Percent
Skin diseases	111	49.3	49.3
Gastro intestine	37	16.4	65.8
Allergy diseases	77	34.2	100.0
Total	225	100.0	

Source: Primary Data

Interpretation

The above table depicts that the chemical hazards affected by the workers majority of the workers are affected by the 49.33% are affected by the skin diseases ,34.22% are affected by allergy problems and only 16.44% are affected by the gastro intestine problems.

Table No 23 Psycho-Social Hazards affected by the tea plantation workers

Psycho-social Hazards affected by the tea plantation workers			
Factors	Frequency	Percentage	Cumulative Percent
Working Stability	62	27.6	27.6
Job stress	88	39.1	66.7
Working Condition	45	20.0	86.7
Quality of work life	30	13.3	100.0
Total	225	100.0	

Source: Primary Data

Interpretation

It can indicates from the above table that the Psycho-social hazards affected by the workers majority of the workers are affected by the job stress ie 39.11% ,27.56% are affected by the working stability ,20% are affected by the working condition,13.33% are affected by the quality of work life.

Table No 24 Health problem faced by the tea plantation workers

Health problems faced by the tea plantation workers

Various diseases	Frequency	Percentage	Cumulative Percent
Body pain	77	34.2	34.2
Anemia	57	25.3	59.6
Blood Pressure	33	14.7	74.2
Respiratory Diseases	24	10.7	84.9
Malaria	10	4.4	89.3
Abdominal Problems	24	10.7	100.0
Total	225	100.0	

Source: Primary Data

Interpretation

It can be seen from the above table that the workers are affected by various diseases. Majority of the workers are affected by body pain i.e. 77 workers, 57 are affected by anemia, 33 are affected by the blood pressure, 24 of the workers are affected by the respiratory problems, 10 workers are affected by Malaria and 24 workers are affected by the abdominal diseases.

V. FINDINGS**Profile of the tea plantation workers**

- Majority of the respondents are female i.e. 57.28% and only 42.22% are male.
- Majority of the tea plantation workers are married i.e. 142 of the workers, 17 are widows and the rest 6 are widowers.
- Majority of the tea plantation workers are female and they belong to the age group of 18-30 years and most of them are in the age group of 31-50 years and from the study it is identified that only two workers are male and they belong to the age group of less than 18. Out of the respondents 34 workers belong to the age group of more than 51 years. The study also reveals that the main work is always done by the female workers.
- Majority of tea plantation workers are illiterate 80 and only 20 are literate.
- 131 have complete lower primary, 74 have complete upper primary, 13 have complete and only 7 have complete pre-degree.
- Majority of the tea plantation workers having an income of between 275-300 per day i.e. 166 of the workers, 42 of the tea plantation workers having a more than 301 and only 17 tea plantation workers having the income less than 275.
- The structure of the family is majority of the tea plantation workers having nuclear families consisting

of four members i.e. 143 workers and only 82 workers having a family structure of joint family.

- The cross tabulation that majority of the tea plantation workers are involved in the field of tea industry it means that sometimes husband and spouse or son are working together i.e. total of 82 workers, 30 workers are having one member from the family and only 13 workers family members are working with them,

Profile of the Working conditions of the tea plantation workers

- Majority of the workers are doing the important job i.e. 96 of workers are involved in plucking processing and it is mostly done by the women workers. Spraying and pest attack work is done by 55 workers, 21 workers are involved in fertilizing process and only a minority of 53 workers are involved in the process of pruning.
- Most of the workers are working in this field for more than three to five years i.e. 76 workers, 74 workers are working in this field for five to seven years, 48 are working for seven to ten years i.e. 48 workers, 15 workers are working for more than five years and only 12 workers are working for less than three years.
- The working hours of the worker per week majority of the workers are working between 41-50 hours, 74 workers are working for 21-40 hours, 37 workers are working for more than 51 hours and only 20 workers are working less than 20 hours.
- 60 of the workers are satisfied with the job, 34 workers are highly satisfied with their work, 47 did not express their opinion, 48 workers are dissatisfied with their work and only 30 workers are highly dissatisfied.

Profile of the Occupational health Hazards and safety Measures

- Most of the workers having a habit of smoking i.e. 43.11% of the workers, 41.8% of the workers having a habit of alcohol and minority has a habit of having tobacco.
- The opinion of the workers stating about the accident that occurred in the workplace 91 of the workers has an opinion that the accident occurred every time, 60 workers said that almost every time, 57 workers said that occasionally it happens, 11 workers never happens and only 6 state that the accident did not happen in the workplace during the working hours.

- Majority of the workers have affected by the rain ie,50.2% ,41.8% of the workers are affected by the cold and only 8% have affected from the heat.
- Most of the workers are affected by mechanized hazards such as 53.33% are affected by injuries,31.56% have affected by cuts and minority of 15.11% have affected by sprains.
- The biological hazards affected by the workers majority of the workers are affected by the 41.33% are affected by the insects bites,35.56% are affected by snake bites,14.22% are affected by the animal attack and only 8.89% are affected by the plant fungal infectious .
- The chemical hazards affected by the workers majority of the workers are affected by the 49.33% are affected by the skin diseases ,34.22% are affected by allergy problems and only 16.44% are affected by the gastro intestine problems.
- The Psycho-social hazards affected by the workers majority of the workers are affected by the job stress ie 39.11% ,27.56% are affected by the working stability ,20% are affected by the working condition,13.33% are affected by the quality of work life.
- The tea plantation workers has to provides the safety measures .
- The estates should provide the basic medical assistances to their workers and the estate clinic should raise their facilities, also provide the better medical treatment appoint skilled and experienced medical experts.
- The tea plantations workers has to provides preventative measures for the workers are providing raincoat to get protect from the rain the workers has said that they want to using full body suit,also provide head umbrella to protect from raining as well as sunny seasons , the workers are have give face shield to get protect for their face while they are spraying the plant, the workers also provide hand gloves while they are working .

VI. CONCLUSION

From the present study it attempt to find out the occupational health hazards of the tea plantation workers in Kerala. The happier people are within their job, the more satisfied they are said to be.. The most common way of measurement is the use of rating scales where workers report their reactions to their jobs. Occupational health of workers is a crucial issue in labor intensive manufacturing units in India. In this regard, an attempt was made to study the occupational health hazards and to use safety to prevent these hazards of the tea plantation workers in. It is observed that the most important work are done by the women workforce. Majority of the workers are female. They are working hours between 40-50 hours per week. The basic amenities are provided by the Management for the workers. Most of the workers family member are working in tea and it is observed most of the family members have quit this field because of the wage rate. Majority of the workers are involved in Plucking processing and it mostly done by the women workers they have to provide hand gloves to protect their hand . Spraying and pest attack work , fertilizing process are done by male workforce and they have to provide the face shield or mask for the protection. Workers is involved in the process of pruning because pruning is mostly done by the experienced person. Majority of the workers working in the tea estate are permanent workers and only few workers are working on contract basis and they are not provided any amenities for the contract workers. There is no significant relationship between the length of the services and age of the workers. It also indicate that workers have less income ie less than 10,000per year and they have to work more. The workers are highly satisfied with the working hours.

Suggestions & Recommendations

- The male workers as well as the female's workers have to properly reward and also motivated them.
- Tea plantations workers should be given awareness programmes regarding the rights they are not much educated so they can be easily exploit.
- The workers has to provide a basic wages to meet their standard of living
- The workers should provide the basic facility for their daily life such as better working condition and the rate of wages.
- The tea plantation have to be motivated to continue their job and also to stick down in the particular job.
- The working hours of the female workers has to decrease they have to provide the rest time between the working hours.
- The Tea estate workers has to motivated as to satisfy their needs and wants of the daily workers.
- The tea plantation workers has to provide the awareness about the problems faced by using alcohol and other products.
- The tea plantation workers have to raincoat to protect from the rain .
- The tea plantation has provides hand gloves to protect their hands.

Although the workers perceive high risky jobs as severe jobs yet they prefer doing such well-paid jobs due to economic problems. Long working hours and inappropriate rest breaks further add to the risk of occupational health hazards. hence Job stress is found to be the most serious health hazard among others. Job stress is an acknowledged occupational health hazard that has been under-diagnosed and under-reported.

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