

An Analytical Study on the Medical Facilities provided by Tea-Estates Management to the Workers

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Abstract:

[The present study is an analytical study depending upon reflecting views, experience and ideas of the selected groups of the tea estates; those are recorded under 'Labour Commissioner Office' Dibrugarh, Assam and following 'The Plantation Labour Act, 1951' as well as from the targeted permanent workers, who have been working under the tea estates in Dibrugarh District of Assam. To interview the targeted groups a set of questionnaire-cum-schedule is prepared with a view to draw inferences on the hypotheses framed. The researcher has adopted 'Sampling with Probability Proportional to Size' method to select the sample tea estates. Based on the size of population, total 383 permanent workers are randomly drawn as sample out of 10,983 permanent workers working from 14 sample Tea Estates for the study keeping in view that these are becoming representatives and a cross section of all 95,543 permanent workers working in all 137 tea estates in the selected area of study. Chi-square test is done to test the hypotheses framed for measuring the level of satisfaction of the respondents regarding the medical facilities provided by the employer/management of the selected tea-estates under the provisions of PLA. The present study shows the effectiveness and level of satisfaction of the employees towards 'Medical Facilities' provided by tea-estates under the provisions of PLA. It is hoped that the findings of this study will be useful for the Government of India to formulate appropriate strategies for the purpose of doing the suitable amendment of PLA and the State Governments for its implementations for providing better medical facilities to Tea-workers under the provisions of PLA throughout the country.]

Keywords: *Tea Industry of Assam, Tea Garden Workers in Assam, the Plantation Labour Act, 1951, Effectiveness of Medical facilities under the provision of PLA, Employee Satisfaction on Medical facilities under the provision of PLA.*

Introduction:

The tea industry of India is one of the oldest and perhaps the most efficiently organized agricultural enterprises in the country. The tea industry of Assam is more than 180 years old by now. The cultivation of tea on small holding is comparatively a recent development. This Small tea cultivation is an integral component of large scale tea industry of the entire state by producing nearly 25 per cent of total tea production of the state. It provides ample avenues for self employment of educated unemployed youth besides engaging family members. The high profitability coupled with the prospect of getting steady income with minimum effort have attracted a large number of educational youth both rural urban. In many empirical researches, it has been observed that small scale tea cultivation was widely recognized as an integral part of economic development of many countries and region of the world.

Tea Industry of Assam:

The Tea industry in Assam is about 180 years old. It occupies an important place and plays a very special role in the State economy in particular and in the national economy in general. Robert Bruce discovered the wild tea plants in upper Brahmaputra valley in 1823 and the first Indian tea was sent to United Kingdom for public sale in the year 1838. Thereafter tea cultivation was extended to other parts of the country between 50's and 60's of the last century. As of today, Assam Tea has maintained its international reputation and commands significant share in the world Tea Market. The tea industry in Assam also provides average daily employment to more than six lakh persons in the State, which is around 50 percent of the total average daily number of labour employed in the country

The Tea Garden Workers in Assam:

Assam's tea industry is dependent on about two million labourers almost all of whom are the descendents of those who were brought to Assam as slaves first by the East India Company and later by the British rulers and entrepreneurs from 1830's through 1920's, mostly from the Santhal Parganas district of Bihar (now in Jharkhand state). The tea workers form the backbone of tea industry in Assam. Tea workers are found mainly in the districts of Darrang, Sonitpur, Nagaon, Jorhat, Golaghat, Dibrugarh, Cachar, Hailakandi, Karimganj, Tinsukia and almost all the districts of Assam (Wikipedia). The workers have to live with the basic facilities provided by the tea-planters. The tea-planters, usually exploit the tea workers in every possible way. Violence and agitation of labours against the management is common, where the state machinery normally protects the tea-planters. Non-education, poverty, poor standard of living and health facilities is the

problems in their life. The welfare officer' appointed in every tea-estate due to compulsion from Govt. of India under the provision of the Plantation Labour Act, 1951 for its implementation in the Tea-Estates.

The Plantation Labour Act, 1951:

The working conditions of workers employed in plantations are governed by the Plantation Labour Act, 1951 and the rules promulgated by the State Governments. The Plantation Labour Act inter-alia requires the employer to provide to the workers and their family members medical, housing, sickness and education facility and various other social security benefits. A legislation known as the Plantations Labour Act, 1951 was passed in October, 1951 which came into force with effect from 01.04.1954.

Section 10 of the Plantation Labour Act requires that every employer shall provide medical facilities for workers and their families. The Plantations Labour Act makes obligatory on the part of employers to provide and maintain such free and easily available medical facilities for the workers and their families as may be prescribed by the State Government. The Plantation Labour Act, 1951 prescribes that for every adult worker, one day earned leave for every twenty days of work performed by him should be allowed and for a young person, one day for every fifteen days of work.

Objectives of PLA:

The object of the Act is to provide for the welfare of the labour and to regulate the condition of work in Plantations.

Provisions of PLA: The main provision of the Act deal with –

- a. A canteen, if employing 150 or more workers;
- b. Crèche, if employing 50 or more women workers.
- c. Recreational facilities for workers and their children.
- d. Educational arrangements on the estates for the children of workers, if there are 25 workers children between the ages of 6 to 12.
- e. Housing facilities for every workers and his family residing on the plantation, in accordance with the prescribed standard lay down by state government.
- f. Medical aid to workers and their families; sickness and maternity allowance to the women workers.
- g. Making available to workers such number and type of umbrellas, blankets, raincoats or other like amenities for their protection against rain or cold, as prescribed by the state government.
- h. Welfare officer, if 300 or more workers are employed.

Statement of Problems:

Many Social Security Legislations passed in favour of workers during pre-independence and post-independence period in India. Particularly, ‘The Plantation Labour Act, 1951’ was passed by the Central Government of India to provide basic facilities to the plantation workers inside the area of plantations. The State Governments are responsible to enforce it by appointing ‘Labour Commissioner’ with adequate number of Inspectors in every district. Though, the implementations of this Act, is mandatory for all plantations measuring 25 acres or more and wherein 30 or more persons are employed. But the living conditions of tea workers are beyond the expectation even after 70 years of enactment of this Act. In this context, a research endeavor is needed to know the implementation and effectiveness of PLA. No such study so far been attempted by any researcher till now. Hence, the present study made a sincere attempt to fill this vacuum by keeping the following points in mind:

- a. Facilities provided under ‘The Plantation Labour Act, 1951’.
- b. Medical facilities provided by the employers of tea estates to their workers.
- c. Observation of previous studies regarding inadequacy in implementation of social security measures for the improvement of the living conditions of the workers.

Review of Literature:

Some researchers have conducted studies on these social security measures in India as well as abroad. All the studies reveal that about the provisions of the various social security legislations and measures taken for industrial workers to improve their working and living conditions at different places. The researcher has done the review of the following related literature to find out a gap for conducting the study on the present topic:

Monga (1980) conducted a study on implementation and awareness of labour laws in Haryana. He focused mainly on the machinery for implementation of labour laws and the impediments confronting the implementation.

Singh (1987) states that the country must find ways of meeting people’s basic needs by giving them access to sources of income, food, education, housing, health and hygiene.

Robert J Lemke, Robert Witt and Ann Dryden Witte (2007) considered how the market for child care services, child care vouchers, and welfare reforms affect the transition of welfare recipients from welfare to work.

Sarma (2007) in his paper, “A study on the Socio economic conditions of labourers in the tea gardens of Jorhat District., Assam mentioned the proposed investigation regarding the socio economic conditions in this context encompass the status of the community as a collectivity vis-à-vis other communities with regard to different aspects of life such as education, health, employment, income, gender equality, access to and realization of opportunities of participation in various activities of general significance, command over means of well being, feeling of security and integrity to the social environment.

Rama Satyanarayana and Jayaprakash Reddy (2012) carried out a research to know the satisfaction levels of employees about labour welfare measures in KCP Limited (Cement Division). The results of the research reveal that majority of the employees are satisfied with all the welfare measures provided by the organization.

Research Gap:

All the reviewed studies focused on the issues relating to workers satisfaction, various legislations and its scope, provisions, benefits and other aspects and very few studies were dealt with an in-depth analysis about the effectiveness of workers satisfaction measures of the workers of the tea industry in Assam. The detailed analysis of various workers satisfaction schemes related with Medical facilities in different public sector organizations (specific to tea industry), were not explored in several studies. There is a research gap found in the field of private sector organizations for the implementation and effectiveness of workers satisfaction on Medical facilities provided by Tea-Estates Management mainly in tea industry in Dibrugarh District of Assam.

Objectives of the Study:

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

- a) To examine the satisfaction of beneficiaries on Medical facilities provided by the employer under the provision of ‘The Plantation Labour Act, 1951’ in Dibrugarh district.
- b) To examine the effectiveness of Medical facilities provided to tea workers under the provision of ‘The Plantation Labour Act, 1951’ in Dibrugarh district.

Hypotheses of the Study:

On the basis of the above objectives the following null and alternative hypotheses are drawn for the study:-

- a. **To examine the level of satisfaction of beneficiaries on ‘Medical Facilities’ the following null and alternative hypotheses are drawn for the study:-**

Ho 1: There is no significant difference between the level of satisfaction expected and level of satisfaction experienced on the medical facilities arrangement made by the management of tea estates as per the provision of PLA for the tea workers.

H₁1: There is a significant difference between the level of satisfaction expected and level of satisfaction experienced on the medical facilities arrangement made by the management of tea estates as per the provision of PLA for the tea workers.

- b. **To examine the effectiveness of Medical facilities the following null and alternative hypotheses are drawn for the study:-**

Ho 1: There is no significant difference between the level of satisfaction expected and level of satisfaction experienced across the permanent tea-workers on the medical facilities arrangement made by the tea estates as per the provision of PLA for the tea workers.

H₁1: There is a significant difference between the level of satisfaction expected and level of satisfaction experienced across the permanent tea-workers on the medical facilities arrangement made by the tea estates as per the provision of PLA for the tea workers.

Research Methodology:

The present study is an analytical study depending upon reflecting views, experience and ideas of the selected groups of the tea estates; those are recorded under ‘Labour Commissioner Office’ Dibrugarh, Assam and following ‘The Plantation Labour Act, 1951’ as well as from the targeted permanent workers, who have been working under the tea estates in Dibrugarh District of Assam. As the methodology is analytical, in-depth interviews are also being conducted with the targeted groups for a clear understanding of the research problems. To interview the targeted groups a set of questionnaire-cum-schedule is prepared with a view to draw inferences on the hypotheses framed. The information regarding level of satisfaction of the sample tea-workers from the facilities provided by the employers/management of selected Tea-Estates are collected in ‘Five-Point-Rating Scale’. Chi-square test is done to test the hypotheses framed for measuring the level of satisfaction of the respondents regarding the medical facilities provided by the employer/management of the selected tea-estates under the provisions of PLA. Moreover, ‘Yates’ correction process’ is adopted in the Chi-square Test where it becomes necessary. On the other hand One-Way

ANOVA has been done through SPSS (2019 version) to measure the effectiveness of the facilities provided to the permanent workers by the employer/management of the selected tea-estates under the provisions of PLA.

Sampling Design:

The researcher has adopted ‘Sampling with Probability Proportional to Size’ method to select the sample tea estates and ‘Krejcie & Morgan Method’ for the determination of sample permanent workers for the proposed study. Based on the size of population, total 383 permanent workers are randomly drawn as sample out of 10,983 permanent workers from 14 sample TEs for the study keeping in view that these are becoming representatives and a cross section of all 95,543 permanent workers working in all 137 tea estates in the selected area of study depending upon the table based on the formula used by Krejcie & Morgan in their 1970 article “Determining sample size for Research Activities” (Educational and Psychological Measurement, # 30, pp- 607-610).

Variables considered for measuring the effectiveness of ‘Medical Facility’ provided by sample T/Es under the provisions of PLA:

For analyzing the collected data from the sample tea-workers as well as from the management of selected Tea-Estates One-way ANOVA has been used as statistical tools. The calculated tables of these tests through SPSS (Statistical Package for the Social Sciences) software have been summarized for better understanding and for this purpose the calculated values have been shown in the cross tables. The following variables used at the time using One Way ANOVA Test:

1. **Association:** In which the sample Tea-Estates have been registered.
2. **Medical Investment:** The cost of medicine supplied to the workers and their families. The sample tea-estates where garden hospitals aren’t available, the cost of maintenance of ambulances through which the patients are carried to other hospitals is taken into consideration.

One-Way ANOVA Test:

Table – 1

Name of Association-wise Total costs of Medicines supplied by Tea-Estates to the workers and their families as per the provision of PLA

Name of Association	Mean	Standard Deviation	F. Value	Sig.
ABITA	394011.1	73095.59	88.376	.000
BCP	284558.8	102790.37		
TAI	289000.0	0.00		
ATPA	234195.0	70964.96		

(Compiled from the tables calculated through SPSS)

Effectiveness gap based on the views expressed by the management of Tea-Estates:-

The table – 1 indicates about the effectiveness of medical facilities provided by the management of Tea-Estates to the permanent workers as per the provision of PLA depending upon the name of association in which the tea-estates have been registered. For this purpose a null hypothesis is set that there is no significant difference in living condition across the permanent tea-workers based on the medical facility provided by the management of tea estates as per the provision of PLA depending upon its name of association. And an alternative hypothesis is set that there is a significant difference in living condition across the permanent tea-workers’ based on the medical facility provided by the management of tea estates as per the provision of PLA depending upon its name of association. One-way ANOVA as a parametric test has been used to find out the differences in the cost of medicines supplied by the management of selected Tea-estates depending upon its name of association operating in Dibrugarh District of Assam. The table shows that the calculated sig. value of One-way ANOVA test is less than 5% level of significance i.e., 0.05. So null hypothesis is rejected and alternative hypothesis is accepted that there is a significant difference between total cost of medicines supplied to the workers and their families depending upon the name of its association. It is also observed from the table that the highest mean value of ABITA association of tea-estates is 394011.1, which is comparatively higher than the mean values of other associations of tea-estates. On the other hand the highest standard deviation value of BCP association of tea-estates is 102790.37, which is comparatively higher than the standard deviation values of other associations of tea-estates. Hence, it is found that there is a significant difference in living condition across the permanent tea-workers from medical facilities provided by the management of tea-estates as per the provision of PLA depending upon the total costs of medicines supplied as per the name of associations of tea-estates.

Employee Satisfaction:

Employee satisfaction is the terminology used to describe whether employees are happy and contented and fulfilling their desires and needs at work. Many measures purport that employee satisfaction is a factor in employee motivation, employee goal achievement, and positive employee morale in the workplace. In human resource terms,

employee satisfaction means employees are contented, they likely enjoy much of their work, they feel management is fair and cares about them, and they are comfortable in their work environment.

Workers Satisfaction under the provision of ‘Medical Facilities’ of PLA:

For the purpose of analyzing the collected data from the sample tea-workers from selected Tea-Estates Chi-square tests, arithmetic percentage and graphs have been used as statistical tools. First of all the collected data have been put in the SPSS Excel sheet with the variables like sex, age-group, family members, number of children, availability of (doctors, nurses medicines, ambulance, operation theatre, number of beds in the garden hospitals), critical cases of the patients handled by the garden hospital, critical cases referred to other hospitals, hospital prefer to go for treatment. For testing the hypothesis framed on the basis of the objectives of the study the opinions of the respondents collected in five point Likert scale regarding their level of satisfaction with respect to medical facilities provided by tea-estates as per the provisions of PLA by using Chi-Square test to draw the inferences of the study. The calculated tables of Chi-square Test through SPSS (Statistical Package for the Social Sciences) software have been summarized for better presentation and for this purpose the calculated values have been shown in different cross tables. The number of respondents regarding their level of satisfaction from medical facilities provided by tea-estates as per the provision of PLA is shown in the table given below:

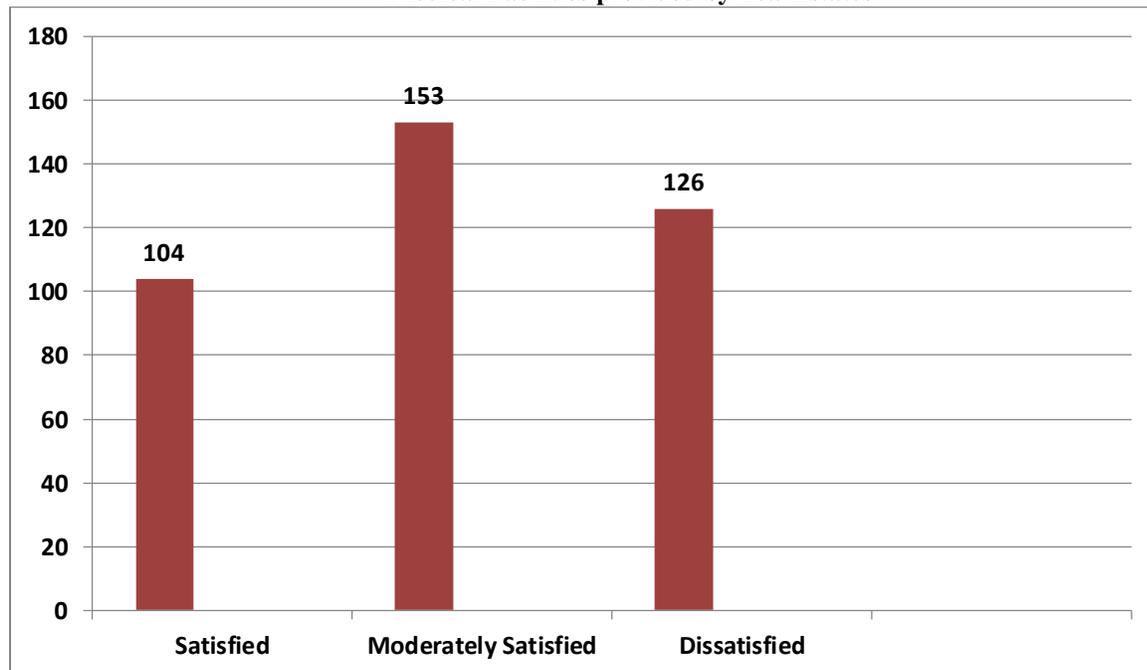
Table – 2

Opinions of the Respondents regarding their Level of satisfaction from Medical Facility provided by Tea-Estates as per the provision of PLA

Opinions	No. of Respondents	Percentage
Satisfied	104	27.2%
Moderately Satisfied	153	39.9%
Dissatisfied	126	32.9%

Source: Data compiled from the field survey.

Figure - 1: Bar Diagram representing opinions of the Respondents regarding their level of satisfaction from Medical Facilities provided by Tea-Estates



Source: Based on the data collected from the field survey.

Table – 2 and the Bar-diagram show the number of the respondents regarding their level of satisfaction from medical facilities provided by Tea-Estates management/employer under the provision of PLA. From the table it is clear that 104 respondents are satisfied, 153 respondents are moderately satisfied and 126 respondents are dissatisfied from the medical facilities provided by tea-estates. The percentage of the respondents moderately satisfied from the medical facility is 39.9%, which is comparatively higher than the percentage of the other level of satisfaction of the respondents. Sex-wise level of satisfaction of the respondents regarding medical facilities is shown in table given below:

Table – 3
Sex-wise Level of Satisfaction of the respondents regarding Medical Facility provided by Tea-Estates under the provision of PLA

Characteristics	Satisfied	Moderately Satisfied	Dissatisfied	Chi-square Value	df	P. Value
Sex: Male	67 (26.3%)	106 (41.6%)	82 (32.2%)	.847	2	.655
Female	37 (28.9%)	47 (36.7%)	44 (34.4%)			

Note: (Yeat's correction process is adopted)

Satisfaction gap based on the views expressed by respondents:-

Table - 3 reveals the level of satisfaction of the respondents regarding medical facilities provided by tea-estates as per the provision of PLA depending on their sex. So a sub hypothesis is set that sex of the workers and satisfaction from the medical facilities are not differentiated, chi-square test is applied to test the hypothesis. Chi-Square as a non-parametric test has been used to find out the differences in level of satisfaction of male and female permanent workers of selected Tea-Estates in Dibrugarh District of Assam. The calculated p value of Chi-Square test is .655, which is greater than 5% level of significance i.e., 0.05 (at 2 degrees of freedom). So the null hypothesis may be accepted that there is no difference between the level of satisfaction regarding medical facility provided as per the provision of PLA with respect to their sex. From the table it is also observed that 26.3%, 41.6% and 32.2% of the permanent male workers are 'Satisfied', 'Moderately Satisfied' and 'Dissatisfied' respectively, while 28.9%, 36.7% and 34.4% of the permanent female workers are 'Satisfied', 'Moderately Satisfied' and 'Dissatisfied' respectively with the 'Medical Facilities' provided by the management of Tea-Estates as per the provisions of PLA. Therefore, it is found that there is no difference between the level of satisfaction expected and level of satisfaction experienced depending upon their sex regarding medical facility provided to the permanent workers by the tea estates as per the provision of PLA. Age-group wise level of satisfaction of the respondents regarding medical facilities provided by tea-estates is shown in table given below:

Table – 4
Age-wise Level of Satisfaction of the respondents regarding Medical Facility provided by Tea-Estates under the provision of PLA

Characteristics	Satisfied	Moderately Satisfied	Dissatisfied	Chi-square Value	df	P. Value
Age: 18-25 Yrs.	26 (32.9%)	27 (34.2%)	26 (32.9%)	4.456	4	.348
26-40 Years	53 (23.5%)	98 (43.4%)	75 (33.2%)			
41-60 Years	25 (32.1%)	28 (35.9%)	25 (32.1%)			

Note: (Yeat's correction process is adopted)

Satisfaction gap based on the views expressed by respondents:-

Table- 4 shows the level of satisfaction of the respondents regarding medical facilities provided by tea-estates as per the provision of PLA depending upon their age groups. So a sub hypothesis is set that age group of the workers and their level of satisfaction with respect to medical facilities are not differentiated, chi-square test is applied to test the hypothesis. Chi-Square as a non-parametric test has been used to find out the differences in opinions expressed by the different age-group of the permanent tea-workers of Tea-Estates in Dibrugarh District of Assam. The calculated p value of Chi-Square test is .348, which is greater than 5% level of significance i.e., 0.05 (at 4 degrees of freedom). So the null hypothesis is accepted that there is no significant difference between age groups of the workers in their level of satisfaction with respect to housing facilities provided by tea estates as per the provision of PLA. From the table it is also observed that 32.9%, 34.2% and 32.9% of the permanent workers with age group of 18-25 years are 'Satisfied', 'Moderately Satisfied' and 'Dissatisfied' respectively, while 23.5%, 43.4% and 33.2% of the permanent workers with age group of 26-40 years are 'Satisfied', 'Moderately Satisfied' and 'Dissatisfied' respectively whereas, 32.1%, 35.9% and 32.1% of the permanent workers with age group of 41-60 years are 'Satisfied', 'Moderately Satisfied' and 'Dissatisfied' respectively with the 'Medical Facilities' provided by the management of Tea-Estates as per the provisions of PLA. So, it is found that there is no difference between the level of satisfaction expected and level of satisfaction experienced depending upon their age-group on the medical facility provided to the permanent workers by the tea estates as per the provision of PLA. Family member-wise level of satisfaction of the respondents regarding medical facilities provided by tea-estates as per the provision of PLA is shown in the table given below:

Table – 5
Family member-wise Level of Satisfaction of the respondents regarding Medical Facility provided by Tea-Estates under the provision of PLA

Characteristics (Family Members)	Satisfied	Moderately Satisfied	Dissatisfied	Chi-square Value	df	P. Value
5	27 (25%)	45 (41.7%)	36 (33.3%)	2.060	4	.725
6	42 (26.3%)	68 (42.5%)	50 (31.3%)			
7	35 (30.4%)	40 (34.8%)	40 (34.8%)			

Note: (Yeat’s correction process is adopted)

Satisfaction gap based on the views expressed by respondents:-

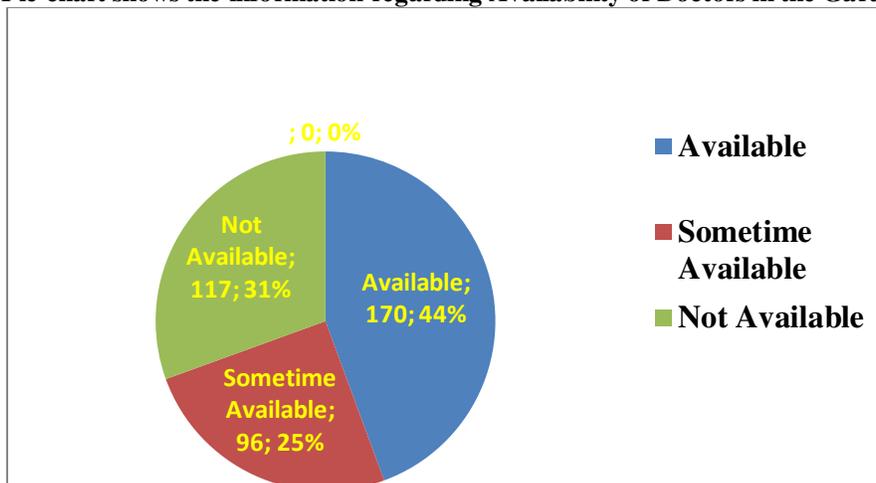
Table - 5 represents the level of satisfaction of the respondents regarding medical facilities provided by tea-estates as per the provision of PLA depending upon their number of family members. So a sub hypothesis is set that family members’ of the workers and satisfaction from the medical facilities are not differentiated, chi-square test is applied to test the hypothesis. Chi-Square as a non-parametric test has been used to find out the differences in opinions expressed by the permanent workers having different number of family members’ of selected Tea-Estates in Dibrugarh District of Assam. The calculated p value of Chi-Square test is .725 is greater than 5% level of significance i.e., 0.05 (at 4 degrees of freedom). So the null hypothesis may be accepted that there is no significant difference between number of family members of the permanent workers in their level of satisfaction expected and level of satisfaction experienced on the medical facilities provided by tea estates as per the provision of PLA. From the table it is also observed that 25%, 41.7% and 33.3% of the permanent workers having 5 members are ‘Satisfied’, ‘Moderately Satisfied’ and ‘Dissatisfied’ respectively, while 26.3%, 42.5% and 31.3% of the permanent workers having 6 members are ‘Satisfied’, ‘Moderately Satisfied’ and ‘Dissatisfied’ respectively whereas, 30.4%, 34.8% and 34.8% of the permanent workers having 7 members are ‘Satisfied’, ‘Moderately Satisfied’ and ‘Dissatisfied’ respectively with the ‘Medical Facilities’ provided by the management of Tea-Estates as per the provisions of PLA. It is also found that there is no significant difference between the level of satisfaction expected and level of satisfaction experienced depending upon their number of family members on the medical facility provided to the permanent workers by the tea estates as per the provision of PLA. Information regarding availability of doctors in the garden hospitals of tea-estates is shown in the table given below:

Table – 6
Information provided by the Respondents regarding Availability of Doctors in the Garden Hospitals of Tea-Estates

Availability of Doctors	Number of Respondents	%
Available	170	44.4%
Sometime Available	96	25.1%
Not Available	117	30.5%

Source: Data compiled from the field survey.

Figure - 2: Pie-chart shows the information regarding Availability of Doctors in the Garden Hospitals



Source: Based on the data collected from the field survey.

Table – 6 and the Pie-chart are indicating about the opinions of the respondents regarding availability of doctors in garden hospitals. From the table and pie-chart it is clear that 170(44.4%) respondents are opinioned that doctors are available in garden hospitals, whereas, 96(25.1%) respondents are opinioned that doctors are sometime available and 117(30.5%) respondents are opinioned that doctors are not available at all in garden hospitals. Hence, it is found that majority of the respondents are opinioned that doctors are available in the garden hospitals. Information regarding availability of nurses in the garden hospitals of tea-estates is shown in the table given below:

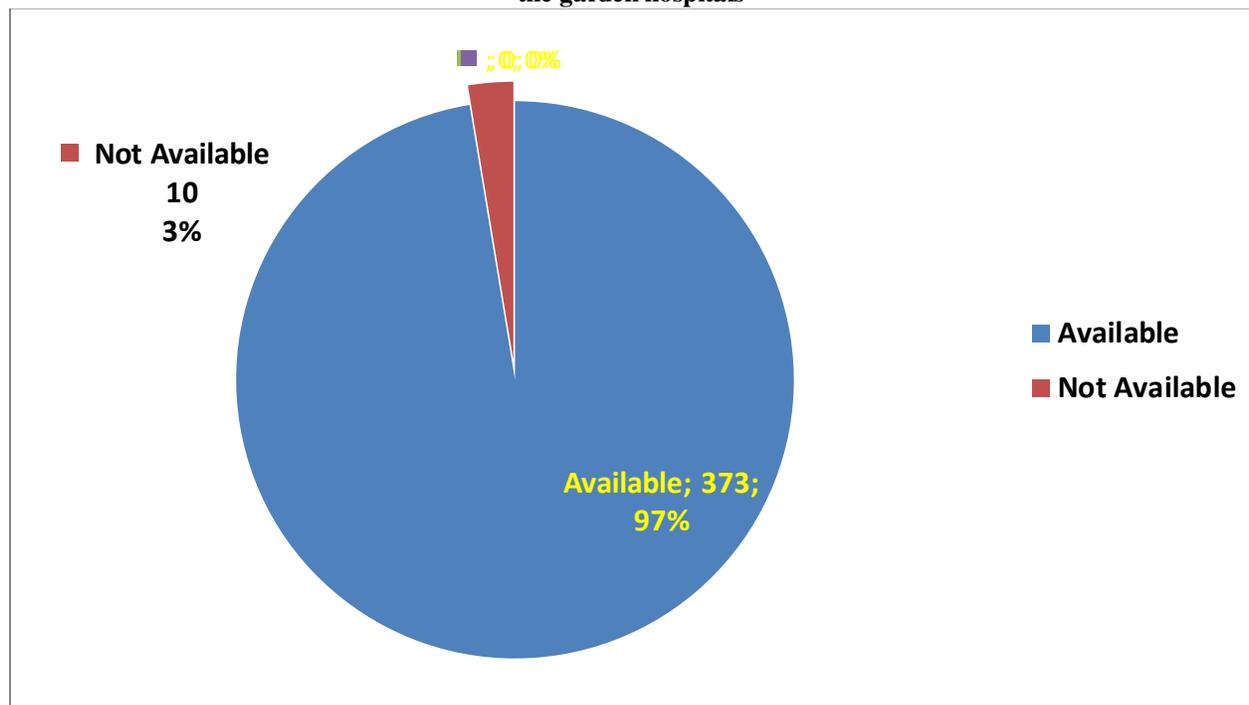
Table – 7

Information provided by the respondents regarding Availability of Nurses in the Hospitals of Tea-Estates

Availability of Nurses	Number of Respondents	%
Available	373	97%
Not Available	10	3%

Source: Data compiled from the field survey.

Figure - 3: Pie-chart representing information provided by the respondents regarding availability of nurses in the garden hospitals



Source: Based on the data compiled from the field survey.

Table – 7 and Pie-chart are indicating about the opinions of the respondent regarding availability of nurses in the garden hospitals. From the table and the pie-chart it is also clear that 373(97%) respondents are opinioned that nurses are available in garden hospitals, whereas, 10(3%) respondents are opinioned that nurses are not available in garden hospitals. Hence, it is found that majority of the respondents are opinioned that nurses are available in the garden hospitals. Information regarding availability of medicines in the garden hospitals of tea-estates is shown in the table given below:

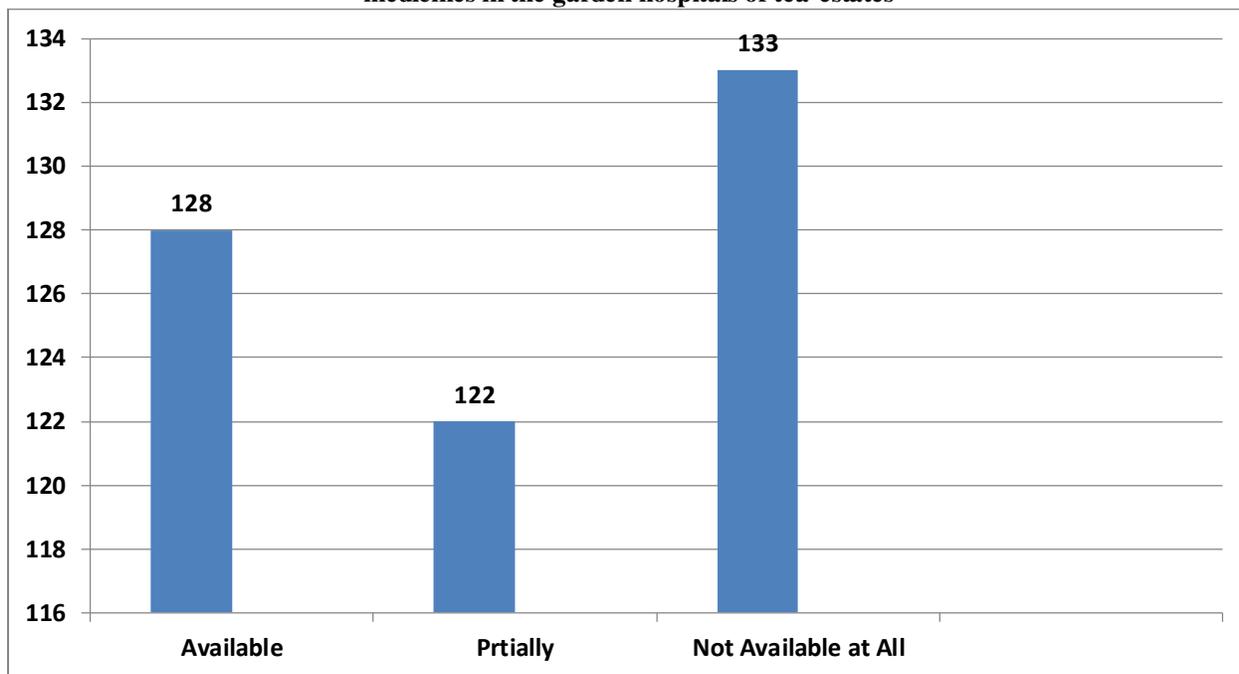
Table – 8

Information provided by the respondents regarding Availability of Medicines in the Hospitals

Availability of Medicines	Number of Respondents	%
Available	128	33.4%
Partially Available	122	31.9%
Not Available at All	133	34.7%

Source: Data compiled from the field survey.

Figure - 4: Bar-Diagram representing information provided by the respondents regarding availability of medicines in the garden hospitals of tea-estates



Source: Based on the data compiled from the field survey.

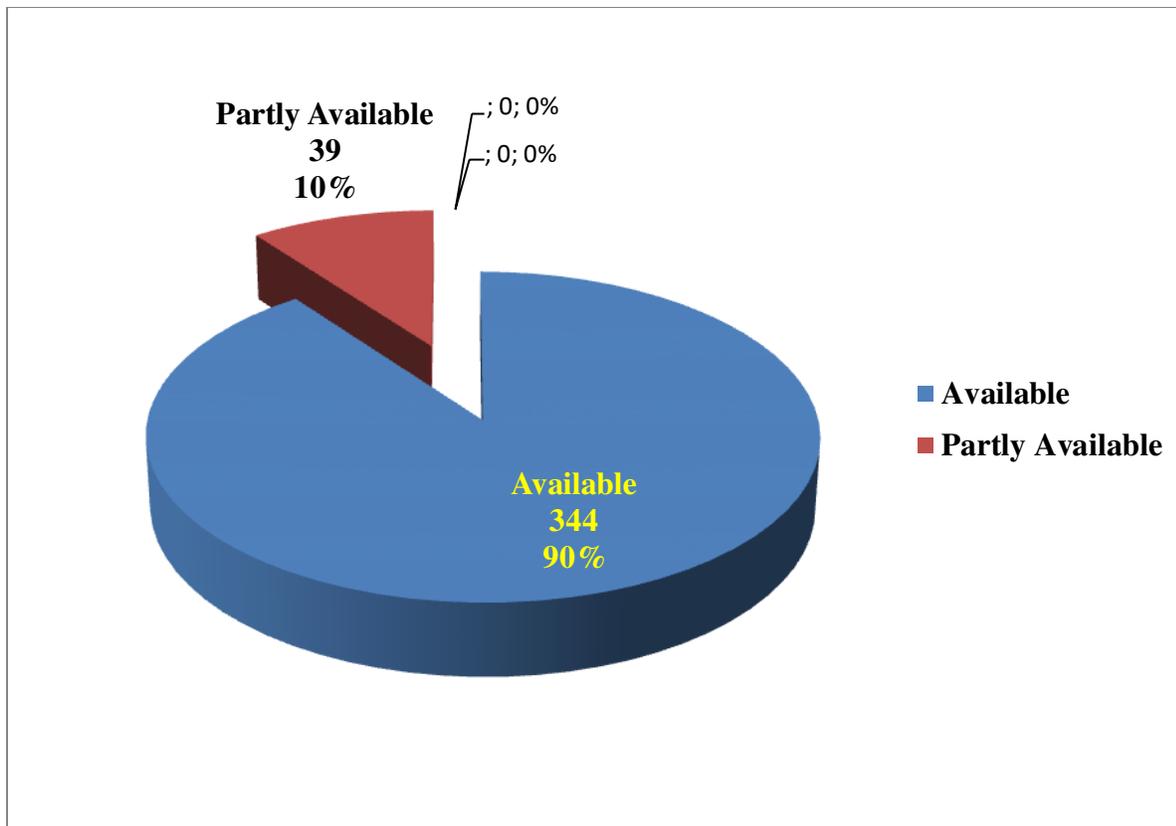
Table – 8 and Bar-diagram are indicating about the opinion of respondents regarding availability of medicines in garden hospitals. From the table and Bar-diagram it is clear that 128(33.4%) respondents are opinioned that medicines are available in garden hospitals, whereas, 122(31.9%) respondents are opinioned that medicines are partially available in garden hospitals whereas, 133(34.7%) respondents are opinioned that medicines are not available at all in the garden hospitals. Hence, it is found that the number of respondents opinioned that medicines are not available at all in the garden hospitals is comparatively higher than the number of respondents’ opinioned regarding medicine available and partially available in the garden hospitals. Information regarding availability of ambulances in the garden hospitals of tea-estates is shown in the table given below:

**Table – 9
Information provided by the respondents regarding Availability of Ambulance in the Garden Hospitals of Tea-Estates**

Availability of Ambulance	Number of Respondents	%
Available	344	90%
Partly Available	39	10%

Source: Data compiled from the field survey.

Figure - 5: Pie-chart representing information provided by the respondents regarding availability of medicines in the garden hospitals



Source: Based on data compiled from the field survey.

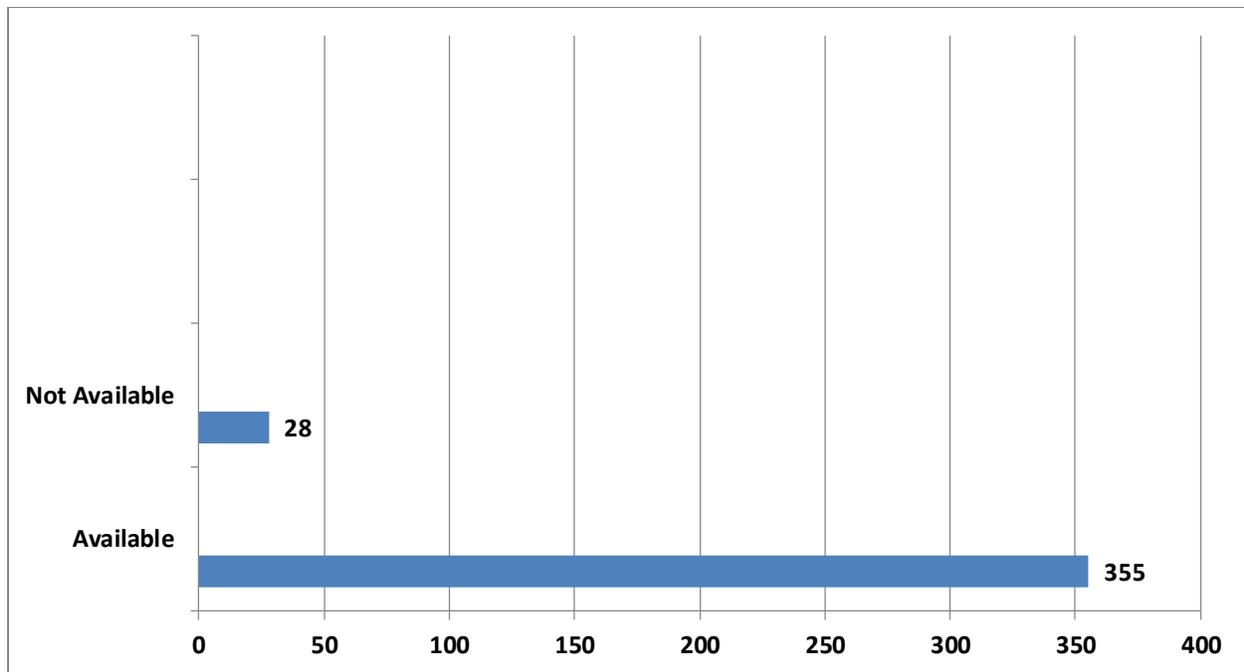
Table – 9 and Pie-chart are indicating about the opinion of the respondents regarding availability of ambulance in garden hospitals. From the table and pie-chart it is clear that 344(90%) respondents are opinioned that ambulance are available in garden hospitals, whereas, 39(10%) respondents are opinioned that ambulance are partly available in garden hospitals. Hence, it is found that majority of the respondents are opinioned that ambulance are available in the garden hospitals. Information regarding availability of operation theatre in the garden hospitals of tea-estates is shown in the table given below:

Table – 10
Information provided by the respondents regarding Availability of Operation Theatre in the Garden Hospitals of Tea-Estates

Availability of Operation Theatre	Number of Respondents	%
Available	355	92.7%
Not Available	28	7.3%

Source: Data compiled from the field survey.

Figure - 6: Bar-Diagram representing information provided by the respondents regarding availability of operation theatre in the garden hospitals



Source: Based on the data compiled from the field survey.

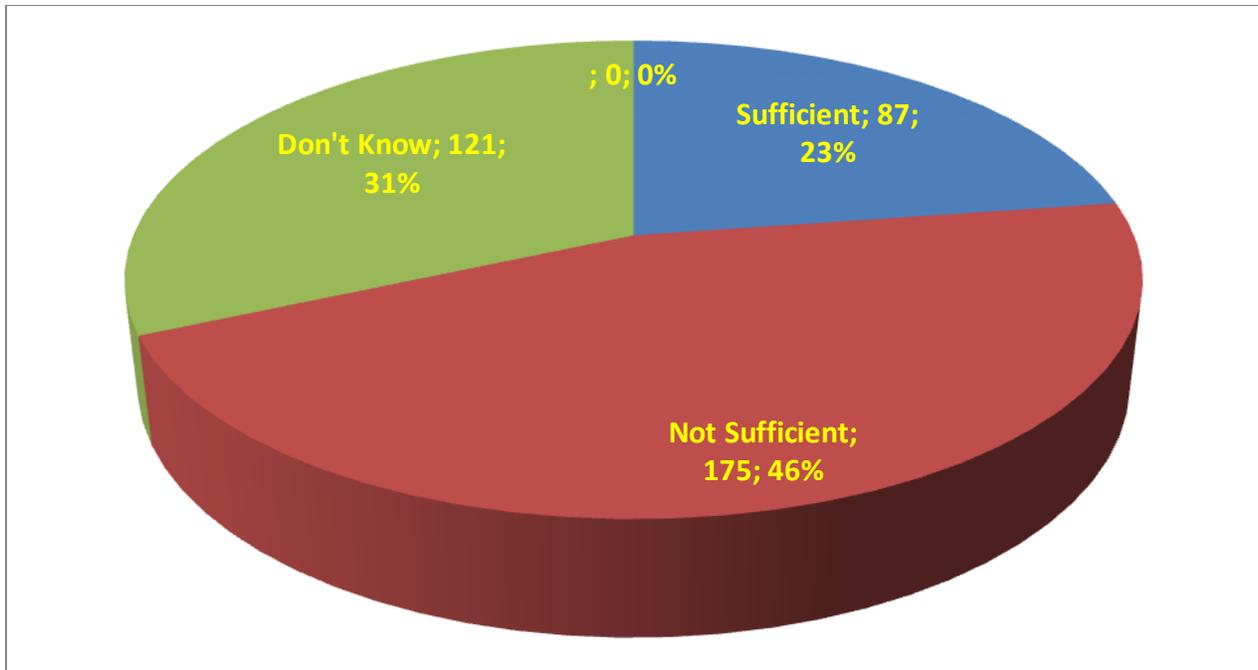
Table – 10 and Bar-diagram are indicating about the opinion of the respondents regarding availability of operation theatre in garden hospitals. From the table and bar diagram it is clear that 355(92.7%) respondents are opinioned that operation theatre is available in garden hospital, whereas, 28(7.3%) respondents are opinioned that there is no operation theatre in garden hospital. Hence, it is found that majority of the respondents are opinioned that operation theatres available in the garden hospitals. Information regarding availability of beds in the garden hospitals of tea-estates is shown in the table given below:

Table –11
Information provided by the respondents regarding Availability of Beds in the Garden Hospitals of Tea-Estates

Availability of Beds	Number of Respondents	%
Sufficient	87	23%
Not Sufficient	175	46%
Don't Know	121	31%

Source: Data compiled from the field survey.

Figure - 7: Pie-chart representing information provided by the respondents regarding availability of beds in the garden hospitals



Source: Based on the data compiled from the field survey.

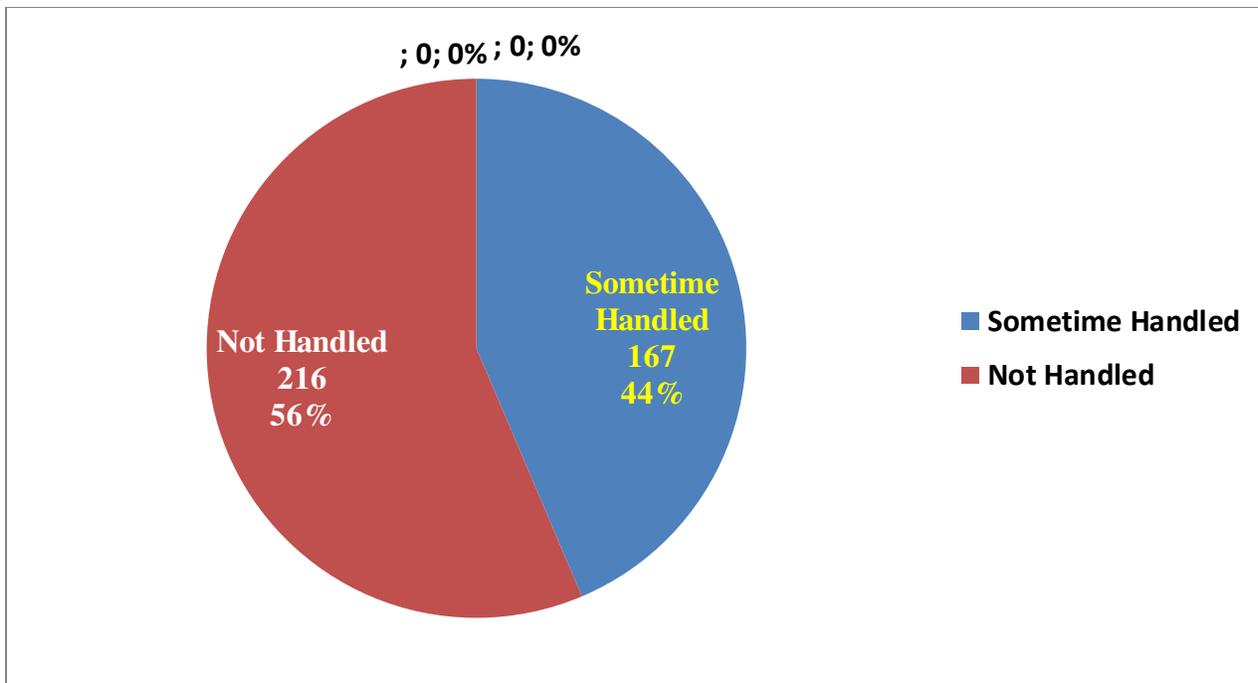
Table – 11 and Pie-chart are indicating about the opinion of the respondents regarding availability of number of beds in the garden hospitals. From the table and pie-chart it is clear that 87(23%) respondents are opinioned that number of beds is sufficient in garden hospitals, 175(46%) respondents are opinioned that number of beds is not sufficient in garden hospitals whereas, 121(31%) respondents are opinioned don't know regarding availability of the number of beds in the garden hospital. Hence, it is found that 46% respondents are opinioned that number of beds in the garden hospital is not sufficient which is comparatively higher than the respondents of opinioned sufficient and don't know. Information regarding critical cases of the patients handled by the garden hospital of tea-estates is shown in the table given below:

Table – 12
Information provided by the respondents regarding Critical cases of the patients handled by the Garden Hospitals of Tea-Estates

Critical cases Handled	Number of Respondents	%
Sometime Handled	167	44%
Not Handled	216	56%

Source: Data compiled from the field survey.

Figure - 8: Pie-chart representing information provided by the respondents regarding critical cases handled by the garden hospitals



Source: Based on the data compiled from the field survey.

Table – 12 and Pie-chart are indicating about the opinion of the respondents regarding critical cases of the patients handled by the garden hospital or not. From the table and pie-chart it is clear that 167(44%) respondents are opinioned that critical cases of the patients sometime handled by the garden hospitals, whereas, 216(56%) respondents are opinioned that critical cases are not handled by the garden hospitals. Hence, it is found that the number of the respondents’ opinioned critical cases are not handled is higher than the number of respondents who are opinioned that critical cases are sometime handled by the garden hospitals. Information regarding critical cases of the patients referred to other hospitals by the garden hospitals of tea-estates is shown in the table given below:

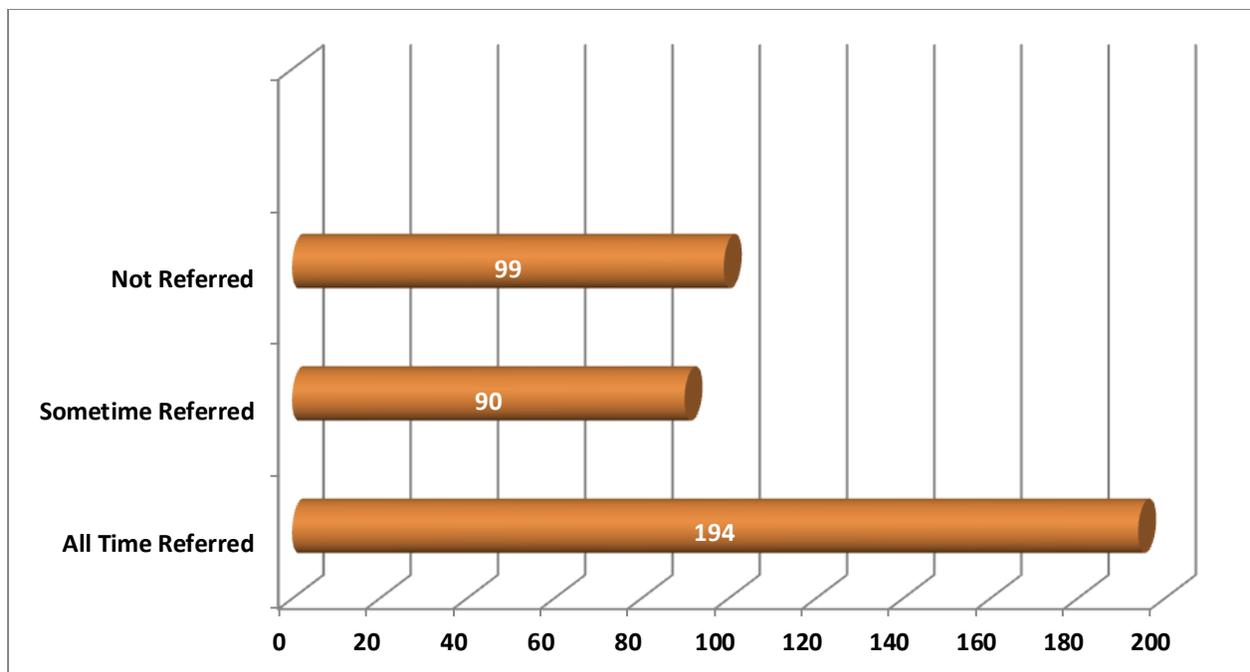
Table – 13

Information provided by the respondents regarding ‘Critical cases of the patients referred to other Hospitals’ by the Garden Hospitals of Tea-Estates

Critical cases Referred	Number of Respondents	%
All time Referred	194	50.7%
Sometime Referred	90	23.5%
Not Referred	99	25.8%

Source: Data compiled from the field survey.

Figure - 9: Pie-chart showing information provided by the respondents regarding critical cases of the patients referred to other hospitals by the garden hospitals



Source: Based on the data compiled from the field survey.

Table – 13 and Bar-diagram are indicating about the opinion of the respondents regarding critical cases of the patients referred to other hospital by the garden hospitals. From the table and bar-diagram it is clear that 194(50.7%) respondents are opinioned that critical cases of the patients all time referred by the garden hospitals, 90(23.5%) respondents are opinioned that critical cases of the patients sometime referred to other hospitals whereas, 99(25.8%) respondents are opinioned that critical cases of the patients not referred to other hospitals by the garden hospitals. Hence, it is found that majority of the respondents are opinioned that critical cases of the patients are all time referred to other hospitals by the garden hospitals. Information regarding Preference of Hospital-wise Level of Satisfaction of the respondents about Medical Facility provided by Tea-Estates is shown in the table given below:

Table – 14
Preference of Hospital-wise Level of Satisfaction of the respondents about Medical Facility provided by Tea-Estates

Characteristics (Hospital prefer to go)	Satisfied	Moderately Satisfied	Dissatisfied	Chi-square Value	df	P. Value
Garden Hospital	41 (32.8%)	49 (39.2%)	35 (28%)	8.725	4	0.068
Nearby PHC	40 (27.4%)	50 (34.2%)	56 (38.4%)			
Medical College	23 (20.5%)	54 (48.2%)	35 (31.3%)			

Note: (Yeat’s correction process is adopted)

Satisfaction gap based on the views expressed by respondents:-

Table - 14 is indicating about the level of satisfaction of the respondents with respect to medical facilities provided by tea-estates as per the prove not differentiated, chi-square test is applied to test the hypothesis. Chi-Square as a non-parametric test has been used to find out the differences in opinions expressed by the respondents of selected Tea-Estates in Dibrugarh District of Assam in this regard. The calculated p value of Chi-Square test is 0.068 is greater than 5% level of significance i.e., 0.05 (at 4 degrees of freedom). So the null hypothesis is accepted that there is a significant difference between hospitals prefers to go and the level of satisfaction on the medical facilities provided to the permanent workers by the tea estates under the provision of PLA. From the table it is also observed that 32.8%, 39.2% and 28% of the respondents are ‘Satisfied’, ‘Moderately Satisfied’ and ‘Dissatisfied’ respectively and prefer to go in garden hospital, while 27.4%, 34.2% and 38.4% of the respondents are ‘Satisfied’, ‘Moderately Satisfied’ and ‘Dissatisfied’ respectively and prefer to go in nearby PHC, whereas 20.5%, 48.2% and 31.3% of the sample tea-workers are ‘Satisfied’, ‘Moderately Satisfied’ and ‘Dissatisfied’ respectively and prefer to go in Medical College for the treatment. Hence, it is found that there is no significant difference between the level of satisfaction expected and level of satisfaction experienced in the medical facilities provided to the permanent workers and their families as per the provision of PLA depending upon their preference to go for treatment in different categories of

the hospitals. Level of satisfaction of the respondents regarding children education facilities provided by tea-estates as per the provision of PLA is analyzed below from the data collected from the respondents through questionnaire for drawing the inferences depending upon the hypothesis framed for the study:

Major Findings of the study:

- i. There is a significant difference in living condition across the permanent tea-workers from medical facilities provided by the management of tea-estates as per the provision of PLA depending upon the total costs of medicines supplied as per the name of associations of tea-estates.
- ii. There is no significant difference between the level of satisfaction expected and level of satisfaction experienced depending upon their sex factor on the medical facility provided to the permanent workers by the tea estates as per the provision of PLA.
- iii. There is no significant difference between the level of satisfaction expected and level of satisfaction experienced depending upon their age-group on the medical facility provided to the permanent workers by the tea estates as per the provision of PLA.
- iv. There is no significant difference between the level of satisfaction expected and level of satisfaction experienced depending upon their number of family members on the medical facility provided to the permanent workers by the tea estates as per the provision of PLA.
- v. 170(44.4%) respondents are opinioned that doctors are available in garden hospitals, whereas, 96(25.1%) respondents are opinioned that doctors are sometime available and 117(30.5%) respondents are opinioned that doctors are not available at all in garden hospitals. Hence, it is found that majority of the respondents are opinioned that doctors are available in the garden hospitals.
- vi. 373(97%) respondents are opinioned that nurses are available in garden hospitals, whereas, 10(3%) respondents are opinioned that nurses are not in garden hospitals. Hence, it is found that majority of the respondents are opinioned that nurses are available in the garden hospitals.
- vii. 128(33.4%) respondents are opinioned that medicines are available in garden hospitals, whereas, 122(31.9%) respondents are opinioned that medicines are partially available in garden hospitals whereas, 133(34.7%) respondents are opinioned that medicines are not available at all in the garden hospitals. Hence, it is found that the number of respondents those who are opinioned that medicines are available and not available in the garden hospitals are almost same.
- viii. 344(90%) respondents are opinioned that ambulances are available in garden hospitals, whereas, 39(10%) respondents are opinioned that ambulances are partly available in garden hospitals. Hence, it is found that majority of the respondents are opinioned that ambulances are available in the garden hospitals.
- ix. 355(92.7%) respondents are opinioned that operation theatres are available in garden hospitals, whereas, 28(7.3%) respondents are opinioned that there are no operation theatres in garden hospitals. Hence, it is found that majority of the respondents are opinioned that operation theatres are available in the garden hospitals.
- x. 87(23%) respondents are opinioned that number of beds sufficient in garden hospitals, 175(46%) respondents are opinioned that there number of beds not sufficient in garden hospitals whereas, 121(31%) respondents are opinioned that don't know number of beds sufficient or not. Hence, it is found that 46% respondents are opinioned that number of beds in the garden hospital aren't sufficient, which is comparatively higher than the respondents of opinioned 'sufficient' and 'don't know'.
- xi. 167(44%) respondents are opinioned that critical cases of the patients sometime handled by the garden hospitals, whereas, 216(56%) respondents are opinioned that critical cases are not handled by the garden hospitals. Hence, it is found that the number of the respondents opinioned critical cases are not handled is higher than the number of respondents who are opinioned that critical cases are sometime handled by the garden hospitals.
- xii. 194(50.7%) respondents are opinioned that critical cases of the patients all time referred by the garden hospitals, 90(23.5%) respondents are opinioned that critical cases of the patients sometime referred to other hospitals whereas, 99(25.8%) respondents are opinioned that critical cases of the patients not referred to other hospitals by the garden hospitals. Hence, it is found that majority of the respondents are opinioned that critical cases of the patients are all time referred to other hospitals by the garden hospitals.
- xiii. There is no significant difference between the level of satisfaction expected and level of satisfaction experienced in the medical facilities provided to the permanent workers and their families as per the provision of PLA depending upon their preference to go for treatment in different categories of the hospitals.

Suggestions forwarded to the Different Stakeholders:**A. To The Medical Superintendent of Garden Hospital:**

1. Medical officers of Garden Hospitals are also suggested to take appropriate steps to make availability of doctors and nurses in the hospitals 24X7 days by appointing good number of doctors and nurses for providing better medical facilities to the workers and their families.
2. Medical officers of Garden Hospitals are suggested to take appropriate steps to make availability of Ambulance in the hospital 24X7 with drivers.
3. Medical officers of Garden Hospitals are suggested to take appropriate steps to make availability of medicines in the dispensaries of the hospitals for providing proper treatment of the workers in emergency.
4. Medical officers of garden hospitals are suggested to take care of the patients when they are referred from the hospital to other hospital for better treatment purposes. It is noticed that they are very much reluctant for getting feedback for the referred patients. After referring the patients to other hospitals they feel free from their responsibilities.

B. To The Officials of State Government:

1. Penalty should be imposed upon the management if any discrepancy is found in case of medical facilities provided by tea-estates.
2. Chief Inspector should do the inspection in the garden hospitals for monitoring the medical facilities available or not in the hospital under the provision of PLA.
3. The chief Inspector should take strict action against the tea-estates if the medical facilities are not provided by the management under the provision of PLA.

C. To The Labour Unions:

1. The officials of Labour Union body are suggested to bring awareness among the tea-workers regarding the provisions of PLA by conducting the meetings in Labour-lines particularly on Sunday or holidays.
2. They should lodge a complaint to the Labour Commissioner/Assistant Labour Commissioners, if they are not getting the medical facilities as per the provisions of PLA.
3. Time by time they should visit the garden hospitals also and talk with the Medical Officer regarding availability of medicines, ambulance, nurses and other medical staffs.

D. To the Tea-Workers:

1. They should collect the information regarding the facilities under the provisions of PLA from different sources. If the facilities are not provided by the management of tea-estates as per the provisions than do the demand for them.
2. They should try to avail the medical facilities from the garden hospital irrespective of going to other hospitals.

Outcome of the study:

The findings may also be considered as important additions to enrich the existing knowledge and literature in the area of social security measures. It is hoped that the findings of this study will be useful for the Government of India to formulate appropriate strategies for the purpose of doing the suitable amendment of PLA and the State Governments for its implementations for providing medical facilities to Tea-Workers under the provisions of PLA throughout the country. Future researchers also in these areas would definitely get some clue for future research.

Limitation of the Study:

The study is concentrated on the social security facility provided to tea workers under the provisions of PLA with special reference to the Dibrugarh District of Assam having the following limitations:-

- i. Only the provisions under PLA are covered by the present study.
- ii. Only the permanent workers are covered by the present study.
- iii. The study has been covered only 5 financial years starting from 2012-2013 to 2016-2017, but the analysis is done by taking the information of the last financial year i.e., 2016-17 only.

Conclusion:

The present study shows the level of satisfaction of the employees towards medical facilities provided by tea-estates under the provisions of PLA. Further it shows the effectiveness towards the medical facilities provided by tea-estates to the workers. It is helpful in knowing the area of dissatisfaction of the workers and about their grievances. Depending upon the findings of the study some suggestions are forwarded to the management of tea-estates of Assam to redress them. The management of Tea-Estates of Assam can make an attempt to implement the suggestions to improve the level of satisfaction of the workers with respect to the medical facilities provided under

the provisions of PLA. Inspection of State Government officials for regulating the activities of tea-states management in case of providing medical facilities to the workers under the provisions of PLA is also weak and non-transparent. Further, no internal procedure existed in Labour Commissioner's office and Labour Officer's office regarding conduct of such inspections which led to failure to ensure fair practices. Assistant Labour Commissioner's office is also not able to ensure submission of business information by tea-estates on prescribed time period, so as to exercise effective control on their activities as well as timely collection of Tea statistics. Thus, Labour Commissioner along with his Assistant Labour Commissioners and Chief Inspectors has been ineffective in exercising its role as agents of State Government. Hence, the workers unrest can be minimized up to great extent and good industrial relationship can be maintained in the organizations which help to increase the level of productivity and profitability.

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