Chapter III

Methodology.
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Title:

An attempt has been made in this piece of research to study the problem of "Education and Employment of the tea garden labourers of Assam with special reference to the district of Sibsagar." By education, in this study is meant formal education and the term employment is used in its wider connotation to mean primarily any kind of tea garden occupation for personal income. The selection of the district of Sibsagar alone is intended to make it more intensive and also the district of Sibsagar is the biggest tea growing area of Assam.

Need and justification:

Education in the modern time is considered as an investment which besides making one literate generates skill and knowledge and inculcates right attitude towards work and production.¹

Education is essential for a society for its economic freedom. A society composed of illiterate masses is not

likely to have the necessary skills for creativity and the members remain ignorant of the know-hows of modern technologies of a rapidly progressing world of science and culture.² Educated manpower is not only important for economic development but also for efficient accumulation of capital. Trained workers can make better use of the available resources. The benefits of education are not only enjoyed by men engaged in machinery work, but it creates also a general atmosphere of mental and moral development. In workers, it inculcates a sense of responsibility and zeal for continuous improvement of their performance.³

The equalisation of educational opportunities to various sections of people of the society makes ways for equalisation of opportunities in all spheres of life in the society. In India, since independence, it has been the policy of the country to make educational opportunities available among all sections of the people of the society. Article 45 of the constitution of India directs that free and compulsory education

should be provided for all children up to the age of 14 years within 10 years of the commencement of the constitution. Though several measures have been taken by the government, the goal to spread education among the masses has yet to be realized.

The tea plantation labourers constitute a sizeable portion of the total population of Assam. In 1981 the total population of tea plantation labourers community has been conjectured as 17,26,742. Out of the total population only 4.2 lakhs people were in employment in 1971 which has increased to 4.5 lakhs in 1980. It shows that of the total population of labourers in the gardens only 20 per cent are employed and the rest 80 per cent are dependents. The ratio of employed and dependents is 1:4 which means that with the earning of one person four additional persons have to be fed.

On the other hand, high percentage of illiteracy determines their social structure. No systematic study has been conducted in the recent past to study the state of education among the labourers.

4. This aspect has been discussed in detail in Chapter VI.
The problem at present in majority of the plantations is not want of labourer but the surplus of it. Due to the fixity of land under tea cultivation and growing population there has been a rapid increase in the number of job seekers in the garden areas. This has created large scale unemployment among the labourers. These labourers who are uprooted from their original occupations are now leading a life in confusion. Too much of dependency on the planters due to social isolation has crippled their ability to do agriculture independently and made them ever dependent on the planters for employment.

The problem of unemployment in the plantation areas is different from the unemployment problem outside the garden. In the outside, the problem is educated unemployment. But in the tea plantation, the unemployeds are mostly illiterate and unskilled and as such the avenues of employment for them outside the garden is very limited.

Under the above circumstances a study on the problems of education and employment of these neglected multitudes is fully justifiable.
The main objective of this piece of research is to study the problems of education and employment, their interdependence, in relation to the tea garden labourers of Assam. The problems of education and employment of the tea garden labourers are manifold which springs from their ethnic background economic and intellectual backwardness. Intellectually the labourers have remained backward and they have been compelled to consider everything in terms of manual labour. They have been also in great demand in tea gardens and a psychology of hard earned subsistence has prevailed for a long time, which also infected their younger generation. Education was thought special for the privileged class and they never quarrelled on this subject. Such mental barrenness make them the easiest victims of exploitation by the planters, who are usually insensitive to the needs of education and mental upliftment of the labourers. They are totally isolated from the outside world where they are treated more or less a property of the plantation owners.

It would, therefore, be endeavoured to study specifically-
(1) The present state of literacy, education and employment of tea plantation labourers living inside the garden.

(2) Academic proficiency of the children of tea garden labourers.

(3) The problem of the medium of instruction in tea garden schools.

(4) Suitability of courses of studies for children of primary standard.

(5) The existing facilities of education for girls and women.

(6) Wastage and stagnation at the primary stage.

(7) The impediments to education of children of tea plantation labourers and ways and means for improvement.

(8) The state of employment of the labourers in the tea plantation.

(9) The scope of employment for the children of tea plantation labourers in the tea industry and in fields other than the tea industry.

(10) The income and expenditure pattern of the tea plantation labour families.
(11) The state and the causes of unemployment among the tea labourers and ways and means for its improvement.

**Hypotheses:**

Keeping in view the above objectives we set up the following hypotheses to be verified in this piece of research.

1. Tea plantation labourers are generally illiterate and much backward educationally in the district of Sibsagar.

2. Schools in tea plantations were practically nonexistent before independence; facilities being gradually improved though not to an expected level.

3. The academic proficiency of children of tea plantation labourers is low.

4. Several impediments to educational growth may be conjectured.
   
   (a) Poor economic condition and psychology of the deprived class.

   (b) Social estracisation of the manual labour class; low aspirations.

   (c) Inadequate facilities for the schooling of the children of the tea plantation labourers.
(d) The practice of alcoholism is more among the labourers and is an impediment for the education of children.

(e) Early induction of the children to manual work for improving household economy.

(5) Heavy wastage is anticipated at the lowest and lower levels. Stagnation may not be as high as wastage.

(6) Education through mother tongue or the spoken language of the garden is a difficult proposition. Education through the regional language may also be difficult but may prove helpful in the longrun.

(7) Courses are not wholly suitable as they are dominated by verbal learning. No scope for vocational education.

(8) Other things being equal the educational attainments in the families of upper socio-economic status group are likely to be higher than the families of middle and lower socio-economic status group.

(9) Educationally the girls of the tea plantation labourers are backward compared to that of their boys.

(10) The scope of employment in the garden is good and should be better still. That can be improved if schools offer courses in vocational fields. The scope outside the garden is less bright.
(11) Lack of mobility hinders in securing employment outside the garden.

(12) Mechanisation and automatization of the tea factory has little impact on the employment of labourers as most of the operations in the tea cultivation are similar to agriculture. No mechanisation has taken place in the field processes.

Selection of area:

The area selected for study is the district of Sibsagar which is the largest tea producing district of Assam. Out of the total 722 gardens in the state, the district of Sibsagar has 229 gardens, which constitute 31.72 per cent of the total. The table below shows the districtwise number of gardens in Assam.

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5. The district of Sibsagar has been reorganised by the Government of Assam, according to which the former Sibsagar Sub-division has become a district and the Jorhat and Golaghat sub-divisions together a separate district with effect from 15th August 1983. The former is known as Sibsagar and the latter as Jorhat district. But in this study by Sibsagar district is meant the undivided district of Sibsagar.
Table 3.1

Districtwise number of gardens in Assam.

<table>
<thead>
<tr>
<th>Districts</th>
<th>No. of gardens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Darrang</td>
<td>94</td>
</tr>
<tr>
<td>Goalpara</td>
<td>10</td>
</tr>
<tr>
<td>Kamrup</td>
<td>15</td>
</tr>
<tr>
<td>Lakhimpur</td>
<td>11</td>
</tr>
<tr>
<td>Dibrugarh</td>
<td>217</td>
</tr>
<tr>
<td>Nowgong</td>
<td>23</td>
</tr>
<tr>
<td>Sibsagar</td>
<td>229</td>
</tr>
<tr>
<td>Karbi Anglong and North Cachar Hills</td>
<td>12</td>
</tr>
<tr>
<td>Cachar</td>
<td>111</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>722</strong></td>
</tr>
</tbody>
</table>

Source: The Assam Directory and Tea areas handbook 1980-81

Sibsagar district has got three administrative sub-divisions, viz., Sibsagar, Jorhat and Golaghat of which Jorhat is the headquarters. 10 per cent of the gardens from each sub-division were selected on random basis for sample study. All the gardens of the district were codified beginning with 'Garden 1' and the table VIII of Random Numbers published
by a group of authors in Statistics simplified, had been used for selecting the gardens at random. While selecting the gardens the following criteria were taken into consideration.

1. The gardens selected should cover a wide range.

2. The gardens so selected should cover the gardens located away from the highways and also the ones nearer to it.

3. The gardens so selected should include both bigger and smaller in size and economically sound as well as gardens considered to be economically weak.

4. Only the main division of the gardens are to be included in the list of gardens, leaving aside the out gardens which are considered to be parts of the main divisions.

5. Gardens where schools do not exist were eliminated from the sample study.

6. The field survey was confined to the garden areas only.


7. In the district of Sibsagar there were 229 tea gardens in which there were 184 (Government managed 164 and Private manage 20) tea garden schools. There were 35 tea gardens without school. The number of gardens without school in the sample were 3.
While finalizing the size of the sample some contradicting information were found from different sources which had to be settled after a careful consideration. As regards the number of gardens the latest available 'Tea Statistics 1979-80' published by the Tea Board shows that in the year 1979 (Provisional figures) there were 769 tea gardens in the state of Assam, of which 268 were located in Sibsagar and Karbi Anglong district alone. The 'Tea Statistics 1979-80' has not shown the separate data for Sibsagar and Karbi Anglong which are two neighbouring districts. The 'Tea Statistics 1979-80' has not shown the sub-divisionwise number of gardens of Sibsagar district for stratified sampling. Due to these limitations of 'Tea Statistics 1979-80' of Tea Board could not be made use of in the present sampling. Had there been an acceptable way to overcome these limitations, the Tea Board data would have become greatly useful for this study.

Again, according to the official records available at the Office of the Commissioner of Labour, Government of Assam, there were 666 tea gardens in the state of which 198 were in the district of Sibsagar. The sub-division wise distribution
of figures were 59, 66 and 73 in Golaghat, Jorhat and Sibsagar sub-divisions respectively. These data could not be made use of in the present study because the difference on the number of gardens with Tea Board data was too large and besides that these data were not officially published.

The information available in 'The Assam Directory and Tea Areas hand book, 1980-81' published by The Assam Review Publishing Company, Calcutta have been considered to be most useful for the present study. As mentioned above 'The Assam Directory 1980-81' showed that there were 722 tea gardens all over the state of which 229 were in Sibsagar district. The sub-divisionwise distribution of figures were 62, 86 and 81 respectively for Golaghat, Jorhat and Sibsagar sub-divisions. These figures on the number of gardens were found after carefully counting the gardens, district and sub-divisionwise from the directory in which every detail of each garden was available. The figures on the number of gardens in total and district-wise though differed with the Tea Board yet, they had more similarity than with the labour commissioner's data. The tea directory is a published source of information, detailed and systematic in all respects. Hence, for the purpose of this
study the acceptance of the Assam Directory as the most acceptable source of information has been strongly justified for the above reasons.

As mentioned above 10% of the gardens from each subdivision of the district of Sibsagar were taken for the present study. The total number of gardens in each subdivision were 62, 86 and 81 in Golaghat, Jorhat and Sibsagar subdivisions respectively. From among these gardens altogether 23 gardens were taken, 6 from Golaghat, 9 from Jorhat and 8 from Sibsagar subdivisions on a random basis with the following stratification (Fig. III).

1. Gardens have been divided on the basis of administrative subdivisions so as to have a better representative sample.

2. The gardens of each subdivision have again been sub-divided on the basis of ownership of gardens e.g. Agency and Non-agency concerns. And 10 per cent from each were taken at random to cover a wider range and also to examine its bearing on education and employment of labourers. But the percentage of this stratification of agency and non-agency gardens could not be maintained at a latter stage because in the recent

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8. Agency gardens are those gardens which are managed by the managing agency houses.
time many gardens have been sold out by the foreign organisations to the native planters, which has resulted in less number of agency gardens.

From each garden 25 labour households were taken at random for interview. The persons interviewed were head of families and working members in the gardens irrespective of sex. The garden authorities were interviewed and necessary information were collected from each garden of the sample. The headmaster of school of each garden of the sample were interviewed and other relevant information were collected. School going children beyond primary stage and unemployed persons irrespective of their educational status and sex were interviewed on a random basis. No fixed percentage could be maintained for these two categories of individuals as these persons used to be away from home during the daytime in most cases. The evening hours are not at all convenient for the purpose of interviewing since by the time they are available at home they are highly drunk after the days hard work and many go to sleep at an early hour. Due to these limitations only 130 unemployed persons and 77 students were interviewed in 23 number of gardens.
The method employed for the purpose of this study is the normative survey method. Both primary and secondary sources were used to study several aspects pertaining to education and employment of the tea plantation labourers.

Primary data were collected with the help of questionnaires by the interview method. The questionnaires were of restricted type and the subject had to answer from among several answer choices. The main purpose of this kind of codified survey is comprehensive in nature and does not allow any subjective estimation of data. To avoid certain limitations of the questionnaires an "any other" alternative has been provided in most of the questions for unanticipated responses. The following are the sets of questionnaires prepared for the purpose.

Schedule I School Information form - an interview schedule for the headmaster of the tea garden schools (vide Appendix No. B)

Schedule II Interview schedule for the heads of tea garden labour families (vide Appendix No. C)

Schedule III Interview schedule for the tea garden authorities (vide Appendix No. D)
Schedule IV  Interview schedule for the school going children of the tea labourers beyond primary stage (vide Appendix No. E)

Schedule V  Interview schedule for the unemployed persons of labourers' community (vide Appendix No. F)

Besides the field survey, data relating to education and employment in general were collected from Census handbooks, records of the Labour and Employment Department, Education Department, Tea Board, Assam Chah Mazdoor Sangha.

Treatment of data:

For the analysis of data both qualitative and quantitative methods have been adopted.

(i) Qualitative analysis: By qualitative analysis is meant a sequence of observations in which each observation belongs to one of several mutually exclusive classes which are non-numerical. The characteristic that is observed in this case is called attribute.

A good number of analysis in this piece of research are qualitative. There are many aspects which can not be analysed in numerical terms. For example, to study the mobility of the labourers it has been assumed that the tea plantation
labourers are generally immobile. To confirm this assumption questions were asked to the labourers on their preference of holding a job inside or outside the garden. The replies of such questions can not be numerically expressed. Moreover, there are records of studies conducted by others on the same line. The findings of those studies also make use of and supported the assumption.

Another example is on the attitude of the garden management on the education of the tea labourers children. This is a study of the attitude of the planters which can not be explained in numerical terms.

For such kinds of analysis qualitative method is imperative.

(ii) quantitative analysis: By quantitative analysis is meant a set of numerical observations obtained by counting or measuring some characteristics. The characteristic that is counted or measured in this case is called variable or variables.

Quantitative analysis too occupies a significant position in the analysis of data. Among the quantitative methods the following have been made use of in the analysis and interpretation of data.
(i) **Frequencies**: To explain the different number of objects in a category it has been analysed in the form of frequencies.

(ii) **Percentages**: Frequencies do not serve the purpose when there is the need of comparing between frequencies on an equitable basis. In such cases percentages are used which compare sets of frequencies on an equitable basis.

(iii) **Ratios**: A ratio is a fraction. It is used to show the relation of one quantity to another.

(iv) **Average**: It is used to show an estimate obtained by dividing the sum of a number of quantities (\(\Sigma x\)) by the number of quantities (\(N\)).

(v) **The Chi-Square**: At some specific stages the Chi-Square test has been used in contingency table to study the extent of association between two variables. It is an useful method of comparing experimentally obtained results with those to be expected theoretically on some hypothesis. The equation for Chi-square (\(\chi^2\)) is stated as follows:

\[
\chi^2 = \sum \left[ \frac{(fo-fe)^2}{fe} \right]
\]

In which

\(fo\) = frequency of occurrence of observed or experimentally determined facts,
fe = expected frequency of occurrence on some hypothesis.

The differences between observed and expected frequencies are squared and divided by the expected number in each case and the sum of these quotient is $\chi^2$. The more closely the observed results approximate to the expected, the smaller the Chi-square and closer the agreement between observed data and the hypothesis being tested.

(vi) **Graphical representation**: Graphs add nothing to the information already obtained but they bring out clearly the relative importance of different figures and often clearly indicate a trend or tendency which the tabulated figures may reveal only under close scrutiny. Further, graphs have a more lasting effect on the mind and it is possible to have an immediate grasp of significance through them.

But it must be noted that data can not be shown as accurately by a graph as by a table, moreover a graph can give only a rough idea about the magnitude of variation whereas a table gives the exact values.

(vii) **Table**: Tables are an organized and curtained picture of what is in the original data. It includes percentages, frequencies etc. with the data grouped in one or more meaningful ways.