Chapter VIII

Labour Welfare and Productivity
CHAPTER VIII
LABOUR WELFARE AND PRODUCTIVITY

Introduction

Welfare refers to the adoption of measures to promote the physical, social, psychological and general well-being of the working people. Welfare measures adopted by any organisation aim at improving the working and living conditions of the people working there.

The committee of experts on welfare facilities for industrial workers constituted by ILO in 1965, has classified welfare services into two groups, viz.,

(1) Facilities within the establishment such as sanitary facilities, creches, rest shelters, canteen, drinking water etc.

(2) Welfare measures outside the establishment, which include medical facilities, housing
facilities, conveyance facilities, educational facilities, shopping facilities and cultural facilities.

The word 'labour' refers to any activity which is productive. Thus in a broader sense, the phrase Labour Welfare refers to the adoption of measures to promote physical, social and psychological and general well-being of the working force so that it can contribute to greater productivity.

The concept of labour welfare originated in the desire for a humanitarian approach to the working and living conditions of the workforce. Later, it came to be regarded more as a utilitarian philosophy which works as a motivating force for the better productivity of labour.

Objectives of Labour Welfare

Initially humanitarianism or Social Awareness motivated labour welfare activities. Driven by the desire for greater efficiency and output from workers and with a view to attracting a better workforce, employers started offering extra incentives in the form of labour welfare measures. Such schemes also
make it possible for employers to persuade workers to accept mechanisation. Labour welfare measures are often undertaken for building up better relations with employees.

Welfare measures generally provided by industries in India are of the statutory and the non-statutory types. Though the aim of the statutory welfare measures is to give a bare minimum of facilities and reasonably good working conditions, employers are free to provide non-statutory welfare measures or not. However, in practice organisations in India provide non-statutory measures in varying types and degrees.

Statutory welfare measures

The government of India has passed several Acts, viz., Factories Act, The Employees' State Insurance Act, the Minimum wages Act, the Payment of Wages Act etc., to ensure a fair deal to employees in the various aspects of their jobs, and to provide for welfare and social security to the working people. The benefits given to workers under the existing enactments are briefly discussed below.
The Factories Act, 1948 is a social piece of legislation meant to achieve social reforms in the workers working in the factories. The object of the Act was to regulate the employment of labour and provisions of the Act clearly show that said regulations were intended for the benefit and welfare of workers. The main purpose of the Act was to ameliorate the conditions of workers in factories and to take proper steps for the safety, health and welfare of the workers as well as to regulate working hours and to provide effective machinery for the administration of the Act.

The Act mainly deals with

1) Health, welfare and safety of workmen,
2) Working hours of adults and annual leave with wages,
3) Employment of women and young persons.

It would not be incorrect to say that the Act contains various provisions regarding labour welfare and it is one of the important social security measures taken in our country for the health, safety and welfare of the industrial labour. In fact, welfare includes
all matters affecting the health, safety, comfort and other things necessary for happy life. The Factories Act, 1948 is an important step in this direction.

2. Workmen's Compensation Act 1923

The Workmen's Compensation Act, 1923 is intended to provide for the compensation to those workmen who sustain personal injuries by accidents arising out of and in the course of their employment. The employers are responsible for paying compensation on prescribed scales. The Act provides compensation for death, permanent total disablement, permanent partial disablement and temporary disablement caused either by accidents or occupational diseases.

The general principle underlined in the Act is that the workman who sustain or suffer personal injury during the course of employment should be given adequate compensation to meet out the expenses of his treatment and livelihood.

3. Industrial Disputes Act, 1947

The Industrial Disputes Act which came into force on the first day of April 1947 is a legislation towards achieving economic and social justice. The
purpose and aim of this Act is to minimise the conflict between labour and management, and to ensure as far as possible, economic and social justice.

The main objects of the Act are:

1) to secure industrial peace -
   a) by preventing and settling industrial disputes between the employers and workmen,
   b) by securing and preserving amity and good relations between the employers and workmen through an internal works committee, and
   c) by promoting good relations through an external machinery of conciliation, courts of Inquiry, Labour courts, Industrial Tribunals and National Tribunals.

ii) to ameliorate the condition of workmen in industry -
   a) by redressal of grievances of workmen through a statutory machinery, and
   b) by providing job security.

Therefore, an attempt has been made in the Act to lay down the laws relating to

i) prevention of disputes in certain industries and
ii) to provide machinery for resolving the disputes which have arisen between the employer and workmen relating to wages, bonus, working hours and other matters relating to working conditions.

4. The Minimum Wages Act, 1948

The Minimum Wages Act, 1948, aims at the statutory fixation of minimum wages with a view to obviate the chances of exploitation of labour (by employers by paying lesser wages than what the employee actually deserves).

The Act provides that the appropriate government may fix -

i) a minimum rate of wages for time work,

ii) a minimum rate of wages for piece work,

iii) a minimum rate of remuneration to apply in the case of employees employed on piece work for the purpose of securing to such employees a minimum rate of wages on a time work basis,

iv) a minimum rate to apply in substitution for the minimum rate which would otherwise be applicable in respect of overtime work done by the employees.
The Act contemplates that the minimum wage rates must ensure not merely physical needs of the worker which would keep him just above starvation, but must ensure for him not only his subsistence and that of his family, but also preserve his efficiency as a workman. It should, therefore, provide not merely the base for subsistence of his life but for the preservation of the worker and must provide for some measure of education, medical requirements and amenities.

5. Employees' State Insurance Act, 1948

The principal object of the Employees' State Insurance Act 1948 is to secure sickness, maternity, disablement and medical benefits to employees of factories and establishments and to their dependents. This Act covers all employees whose monthly wage doesn't exceed a prescribed limit. This insurance scheme is administered by the ESI corporation with a nominal contribution from the employer and the employee.

The Act grants to all insured workers the following types of benefits:

a) Sickness benefit: Consisting of cash payment for a period of sickness not exceeding prescribed number of days at prescribed rate,
b) Maternity benefit: Every insured woman is entitled to receive maternity benefit for a maximum period of 12 weeks.

c) Disablement benefit: This consists of periodical payment to the insured person suffering from disablement arising out of an employment injury, total or partial.

d) Dependent's benefit: If a person dies due to any employment injury, the dependent gets periodical payments.

e) Medical benefits: An insured person and his family members get medical treatment for sickness.

f) Funeral benefits: This is payable in case of death of the insured employee to the eldest surviving member of the family or to such person who actually incurs funeral expenses. The amount payable shall not exceed Rs.100.

BHEL is exempted from the application of the ESI Act since it has its own fullfledged hospitals and the facilities provided to the employees in these hospitals are superior to the one provided elsewhere.
6. The Payment of Bonus Act, 1965

The Payment of Bonus Act, 1965 provides for the payment of bonus to employees in certain establishments and for matters connected therewith.

This Act applies to every Factory and every other establishment in which twenty or more persons are employed on any day during an accounting year. Once the Act becomes applicable, thereafter, even if the number of persons employed therein falls below twenty, the Act will continue to apply.

Welfare facilities provided by BHEL

BHEL has got a centralised welfare department which takes care of the employees in various ways.

The study showed that the following are the various statutory and non-statutory welfare facilities provided by BHEL.

I. Statutory Welfare facilities

Safety facilities

BHEL has a separate department for safety known as Safety Engineering Department and is one of the departments functioning effectively. The rate of accident is very low and the department has received
many State Awards. All India Awards for Low accident rate and also British Safety Council Award continuously for 3 years.

The following are the sections where safety regulations are strictly applied.

- safety in the electrical side
- safety in pressure vessels
- safety in Cranes, lifting tackle etc.
- safety in Gas plant
- safety in NDTL (Non Destructive Testing Laboratory) etc.

More than 50 different safety equipments are being issued to employees, free of cost. BHEL provides safety shoes, safety goggles, safety hood and asbestos gloves to its employees. There are Safety Officers appointed in each unit of BHEL; workers are also given training on safety aspects.

An 'Industrial Safety Course' for supervisors is conducted periodically for a duration of two months. Safety Stewards, properly trained, are posted in the shop floors to arouse the consciousness of safety among workers. There is also a Central Safety Committee with
representatives of workmen from the works committee. Safety celebrations are conducted every year and prizes distributed in various competitions held. It is noteworthy that the safety department in BHEL has won the national and international Awards for the lowest percentage of accidents in the industrial sector.

Moreover, substantial expenditure is involved in the provision of safety and the following table shows expenditure incurred on the safety items during the year 1984-85 to 1988-89.

Table 8.1 Safety expenditure

<table>
<thead>
<tr>
<th>Years</th>
<th>Safety expenditure in BHEL (HPBP) (Rs. in lakhs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984-85</td>
<td>18.79</td>
</tr>
<tr>
<td>1985-86</td>
<td>19.11</td>
</tr>
<tr>
<td>1986-87</td>
<td>20.50</td>
</tr>
<tr>
<td>1987-88</td>
<td>26.90</td>
</tr>
<tr>
<td>1988-89</td>
<td>30.00</td>
</tr>
</tbody>
</table>

Source: Total loss control department, Trichy BHEL.
From the Table 8.1, it can be seen that the safety expenditure in BHEL, Trichy shows an increasing trend, because it spends substantially on safety gadgets such as tools, equipments, safety shoes, gloves and goggles etc., to safeguard the employees against accidents.

Only the expenditure on safety which is of a recurring nature, spent towards provision of safety gadgets supplied to the employees free of cost is shown in the Table 8.1 and figure 19. Other expenditures on establishment and maintenance of Safety Engineering Department are not included.

The trend of safety expenditure during 1984-85 to 1988-89 is shown in figure 19. It reflects the fact that the safety expenditure has been showing an increasing trend in BHEL, Trichy.

Medical facilities

BHEL has got a fully equipped Hospital and three dispensaries to serve the employees. All regular employees of BHEL and their family members are entitled to get free medical treatment at the hospital. A Medical Identity Card is issued by the personnel department
Safety expenditure

Year

Figure 19
to the employees and an outpatient book is to be main­
tained from the Medical Department by showing the iden­
tity card. The hospital is adequately staffed; the
main hospital of BHEL is at present having 50 doctors
and 400 para medical staff. Approximately 250 beds
are available in the hospital; the casualty department
is functioning round the clock. Medical officers in
various specialised fields are available. A very good
laboratory is attached to the hospital and modern faci­
lities for X-rays, ECG etc., are provided.

Normally all the general treatment to self,
family and dependents is being given in the company's
hospital itself. But in some rare cases, where specia­
lised treatment is warranted such as the cases related
to psychiatry, cardiology, Neurology, Thoracic, treat­
ment for Cancer and T.B. are referred to outside special­
lised hospitals. Facilities towards the treatment of
heart ailments such as open heart surgery, (By-pass
surgery), kidney transplantation etc., which involve
huge expenditures are provided to the needy employees,
irrespective of their designation or cadre, and to
their, dependents. This is the greatest boon to every
employee of BHEL and this facility is not available
to employees in any other concern/government departments. Free medical treatment is provided to the employees' dependent parents also, whose monthly income does not exceed Rs.675/- p.m. and who are normally staying with the employees.

Ambulance facilities

Ambulance service is provided free of charge to cases eligible for free treatment requiring admissions as inpatients. The use of Ambulance will normally be limited to places within a radius of 30 kms from the company hospital. The Ambulance service is available all the 24 hours. There are two ambulances in the main hospital.

Spot re-imbursement

At times, when the medicines prescribed by the attending doctor is not available in the company's main hospital/Dispensary, the doctor authorises the employee to purchase the same from outside. The Medical Department arranges for spot re-imbursement of such expenses.

Provision of accommodation near hospital

Accommodation is provided at the rate of Re.1/- per day per room near the hospital for the employees.
and their family members who are taking treatment for serious ailment and whose residences are outside the township.

The expenditure spent towards the provision of free medical aid, maintenance of hospital, provision of accommodation is shown below.

Table 8.2 Medical expenditure

<table>
<thead>
<tr>
<th>Years</th>
<th>Amount spent (Rs. in lakhs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984-85</td>
<td>84.42</td>
</tr>
<tr>
<td>1985-86</td>
<td>93.34</td>
</tr>
<tr>
<td>1986-87</td>
<td>112.64</td>
</tr>
<tr>
<td>1987-88</td>
<td>125.79</td>
</tr>
<tr>
<td>1988-89</td>
<td>159.37</td>
</tr>
</tbody>
</table>

Source: Personnel department, BHEL, Trichy.

It can be seen that the medical expenditure shows an increasing trend every year. This is also depicted in figure 20.
Medical expenditure

Medical expenditure (Rs. in lakhs)

Year

1984-85  85-86  86-87  87-88  88-89

84.42  93.34  112.64  125.79  159.37

Figure 20
Occupational Health Services (OHS)

There is a separate department called Occupational Health Services Department in BHEL, started in 1976. This occupational health services department conducts continuous study of the probability of occupational health hazards.

The occupational health service aims at the promotion and maintenance of higher levels of physical, mental and social wellbeing of workers in all occupations which in turn will have a positive impact on productivity. The promotion of 'positive health' among the employees with special reference to work and the psycho physical environment inside the factory is an absolute necessity for better output and happiness in industry.

OHS offers quite a complete health-care programme, a comprehensive approach to the total health needs of the employed population, starting right from the time of recruitment to extend throughout an employee's working life.

This is a service which goes to the work spot and studies man in action before he gets into 'action'.
Positive promotion of health, specific protection against industrial health hazards and communicable diseases, medical aid, supervision of work places at intervals, health education, psychological guidance and counselling and the maintenance of health statistics are all included in this service.

In addition, Research and development for identifying the unrecognised hazards is given utmost importance in the activities of OHS.

OHS is a means to the desired state of health and happiness. BHEL today is one of the pioneers in the field of occupational health services too.

Recognising the work done so far at the OHS, BHEL, ILO with the help of the government of India is helping financially and technically to start a 'Model Centre for Occupational Health Service' at plant level at BHEL, Trichy, which would render consultancy services to other industries too.

Canteen

There are six canteens in BHEL complex located at suitable places with the provision of canteen buildings, utensils, equipment and furniture at the cost
of the management as laid down in Tamil Nadu Factories Rules 1950. Canteens are located centrally, accessible to each department. BHEL provides food in the canteen to the employees at subsidised rates.

The canteens are being manned by supervisors specialised in catering technology. A Manager is fully in charge of a canteen to take care of day to day problem. Finalisation of menu and other matters such as prices are decided through canteen Managing Committees which consist of elected workmen representatives and Management nominees.

The canteen expenditure comprising of the purchase of groceries, rice, milk and salaries paid to the canteen staff and maintenance charges, during the past five year period 1984 - 1989 and the extent of subsidy and income earned during the five years are shown below.
Table 8.3 The canteen expenditure, Income and Subsidy
(Rs. in lakhs)

<table>
<thead>
<tr>
<th>Years</th>
<th>Expenditure</th>
<th>Income</th>
<th>Extent of Subsidy</th>
<th>Subsidy as a % of total expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984-85</td>
<td>124.31</td>
<td>26.31</td>
<td>98.00</td>
<td>78.84</td>
</tr>
<tr>
<td>1985-86</td>
<td>119.18</td>
<td>23.35</td>
<td>95.83</td>
<td>80.41</td>
</tr>
<tr>
<td>1986-87</td>
<td>141.30</td>
<td>22.12</td>
<td>119.18</td>
<td>84.35</td>
</tr>
<tr>
<td>1987-88</td>
<td>178.96</td>
<td>31.02</td>
<td>147.94</td>
<td>82.67</td>
</tr>
<tr>
<td>1988-89</td>
<td>173.05</td>
<td>14.79</td>
<td>158.26</td>
<td>91.45</td>
</tr>
</tbody>
</table>

Source: Personnel department, BHEL, Trichy.

It is observed that the canteen expenditure and the extent of subsidy given show an increasing trend, whereas the income arising out of canteen is very meagre; the income arises out of the sale of coupons, and sale of waste food and empty gunny bags. The following figures 21, 22 and 23 show the expenditure and extent of subsidy and income earned respectively by the company through the canteen.
Canteen expenditure

Canteen expenditure (Rs. in lakhs)

Year

Figure 21
Income from Canteen

Income from Canteen (Rs. in lakhs)

Year

1984-85 85-86 86-87 87-88 88-89

Figure 22
Canteen Subsidy

Amount of Subsidy (Rs. in lakhs)

Year


98      95.83    119.10  147.94  158.28

Figure 23
Leave

As per section 74 of Factories Act 1948, every worker who has worked for a period of 240 days or more in a factory during a calendar year shall be allowed during the subsequent calendar year, leave with wages for a number of days calculated at the rate of 1 day for every 20 days of work performed by him during the previous calendar year. But in BHEL, Trichy, the leave benefits are more favourable than provided in the Act. The following are the various leave benefits available to the employees in BHEL, Trichy.

(a) Earned Leave

This is allowed to the employees depending on the length of service as given below.
Table 8.4 Entitlement of Earned Leave  
(credited once in six months)

<table>
<thead>
<tr>
<th>No. of completed years of service</th>
<th>No. of days allowed per annum</th>
<th>Break up details of No. of days credited</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>E.E.L.</td>
</tr>
<tr>
<td>Upto 5 years</td>
<td>22</td>
<td>16</td>
</tr>
<tr>
<td>Upto 10 years</td>
<td>24</td>
<td>18</td>
</tr>
<tr>
<td>Above 10 upto 15 years</td>
<td>26</td>
<td>20</td>
</tr>
<tr>
<td>Above 15 upto 20 years</td>
<td>28</td>
<td>22</td>
</tr>
<tr>
<td>Above 20 years</td>
<td>30</td>
<td>22</td>
</tr>
</tbody>
</table>

Source: Personnel department, BHEL, Trichy.

Note:

(i) NEEL - Non Encashable Earned Leave  
(ii) EEL - Encashable Earned Leave  
(iii) The accumulation limit for Earned Leave is 180 days.

(b) Half Pay Leave

All employees are entitled to 20 days of Half Pay Leave (HPL) in a year, 10 days being credited to leave account every six months on 25th December and 25th June every year. Commutation of HPL into full pay Leave is allowed on Medical grounds, debiting twice
the amount of HPL. Such commutation is limited to 240 days in the service.

(c) Casual Leave

The employees are allowed 10 days of casual leave in a calendar year, which commences from 25th December to 24th December of next year, during the first 10 years of service and thereafter increased to 12 days.

(d) Extra-ordinary Leave without pay and allowances

The employees are allowed Extra-ordinary Leave without pay and allowances upto 3 months on any occasion otherwise than on medical grounds and upto 6 months on any occasion on medical grounds which can be extended upto 18 months in case of treatment for T.B. and Leprosy. This facility is available to employees, if no other kind of leave is due or when it is specially applied for.

(e) Disability Leave

In the case of employees governed by Workmen's Compensation Act, all absence due to accident arising out of and in the course of employment will be governed by the provisions of this Act. No leave salary will
be paid for such leave, but payments will be made as due under the Act. However, the employees will also be allowed to avail their own leave at credit, if they choose.

Leave encashment

Encashment of Earned Leave is allowed to employees once in a calendar year to the extent of 75% of EL standing to their credit subject to a maximum of 90 days. Amount of encashment is determined with reference to the basic pay including special pay, personal pay and non-practising allowance, wherever applicable and D.A. as on the date of application.

Half pay Leave is encashable subject to a maximum of 240 days on superannuation/voluntary retirement/death, also in the case of cessation of service after attaining the age of 50 years, if the employee has put in a minimum of 20 years continuous service as regular employee. In the case of Superannuation and death, the encashment of E.L is not taxable, while the encashment of HPL is taxable.

The following are the five years' expenditure incurred on Leave encashment.
Table 8.5 Leave encashment

<table>
<thead>
<tr>
<th>Years</th>
<th>Amount (Rs. in lakhs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984-85</td>
<td>64.64</td>
</tr>
<tr>
<td>1985-86</td>
<td>60.06</td>
</tr>
<tr>
<td>1986-87</td>
<td>74.88</td>
</tr>
<tr>
<td>1987-88</td>
<td>73.50</td>
</tr>
<tr>
<td>1988-89</td>
<td>141.09</td>
</tr>
</tbody>
</table>

Source: Personnel Department, BHEL, Trichy

It is found that Leave encashment payment by the company shows a slight decrease in 1985-86 compared to 1984-85 and then showed an increasing trend during 1986-89. This is shown in figure 24.

Leave Travel Concession (LTC)

LTC is a facility extended to every employee of BHEL. Under this scheme, every employee can make a tour along with his family members to places of interest (home town/other places) in India once in two years (known as a block) for a total distance not exceeding 3000 KM (onward and return journey). Splitting one block into two and combining two blocks to suit the
Leave encashment

Amount of expenditure (Rs. in lakhs)

Year

Figure 24
convenience of the employee is also permitted. Journeys can be performed by Car or Bus or Train or even by Flight subject to certain conditions and the expenses incurred towards the journey are borne by the company.

If an employee is not in a position to avail the facility, encashment of this facility is permitted subject to certain rules.

The expenditure incurred on LTC encashment during the five years from 1984 to 1989 are shown year-wise in Table 8.6.

Table 8.6 LTC - encashment

<table>
<thead>
<tr>
<th>Years</th>
<th>Amount (Rs. in lakhs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984-85</td>
<td>-</td>
</tr>
<tr>
<td>1985-86</td>
<td>105.81</td>
</tr>
<tr>
<td>1986-87</td>
<td>60.42</td>
</tr>
<tr>
<td>1987-88</td>
<td>77.05</td>
</tr>
<tr>
<td>1988-89</td>
<td>74.74</td>
</tr>
</tbody>
</table>

Source: Personnel department, BHEL, Trichy.
LTC encashment

Figure 25
It can be seen from the Table 8.6 and figure 25 that the expenditures on encashment of LTC show a decreasing trend from 1985-86 to 1986-87 and from 1987-88 to 1988-89.

**Employee's Provident Fund**

Employee's Provident Fund and Miscellaneous Provisions Act, 1952 applies to every establishment which is a factory engaged in any industry (specified in schedule I of the Act) and in which 20 or more persons are employed.

All employees including Non-Mustor Roll employees (NMRS) who have completed a continuous service of 60 days are members of Contributory Provident Fund (CPF). A sum equivalent to 10% of basic pay plus D.A. is contributed to Provident Fund account along with an equal amount of company's contribution. The Regional Provident Fund commission has given permission to the management of BHEL to operate the Provident Fund of the employees of BHEL, Trichy and for this purpose a Provident Fund Trust is formed in this unit. Election is conducted once in 3 years to elect the Board of Trustees which include nominated members from BHEL Management and
the Deputy Manager/Finance looking after the funds section of the Finance department will be ex-officio Secretary of the trust.

withdrawal from the fund is allowed to the employees on (a) Temporary basis (refundable) and (b) Permanent basis (non-refundable) subject to certain conditions.

Voluntary Provident Fund

Employees can also contribute to Voluntary Provident Fund in addition to the Contributory Provident Fund (CPF). The rate of interest is the same as applicable to Contributory Provident Fund.

The following shows the amount of temporary and permanent withdrawals made by the employees during the past five years 1984 to 1989.
Table 8.7 P.F. withdrawals

<table>
<thead>
<tr>
<th>Years</th>
<th>Amount withdrawn (Rs. in lakhs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984-85</td>
<td>198.65</td>
</tr>
<tr>
<td>1985-86</td>
<td>207.72</td>
</tr>
<tr>
<td>1986-87</td>
<td>248.63</td>
</tr>
<tr>
<td>1987-88</td>
<td>276.37</td>
</tr>
<tr>
<td>1988-89</td>
<td>328.33</td>
</tr>
</tbody>
</table>

Source: Personnel department, BHEL, Trichy.

From the above, it can be seen that the P.F. withdrawals amount had increased each year from 1984 to 1989. This is also represented through the following figure 26.

Group Savings-linked Insurance Scheme

This scheme has been introduced by BHEL with effect from April 1987 to provide an additional insurance cover for all employees on the one hand and to promote savings that will provide assistance to the employees at the time of retirement on the other. The employee will be assured for the sums against each category, as shown in Table 8.8.
Withdrawal from Provident Fund

Amount of withdrawal (Rs. in lakhs)

Year


198.65 207.72 248.63 276.37 328.33

Figure 26
Table 8.8 Sums assured in G.S.I. Scheme

<table>
<thead>
<tr>
<th>Grades</th>
<th>Amount</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>USW to Artisan I and equivalent grade</td>
<td>Rs. 10,000</td>
<td>A</td>
</tr>
<tr>
<td>Sr. Artisan III to I, Chargeman to Foreman</td>
<td>Rs. 20,000</td>
<td>B</td>
</tr>
<tr>
<td>Jr. Executive of other Supervisors of equivalent grades</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Foreman &amp; above E_1 to E_4 grades</td>
<td>Rs. 40,000</td>
<td>C</td>
</tr>
<tr>
<td>E_5 and above</td>
<td>Rs. 80,000</td>
<td>D</td>
</tr>
</tbody>
</table>

USW - Unskilled Worker.

It contemplates payment of fixed amount of monthly premium for each category of employees. The monthly premium consists of two portions, viz., risk portion which will be borne by the company and savings portion, which will be borne by the employees. The amount spent by BHEL on this scheme for the years 1984-89 is shown in Table 8.9 and figure 27.
Table 8.9 Amount spent on G.S.I. Scheme

Note: G.S.I. came into force only during the year 1987-88

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount (Rs. in lakhs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984-85</td>
<td>Nil</td>
</tr>
<tr>
<td>1985-86</td>
<td>Nil</td>
</tr>
<tr>
<td>1986-87</td>
<td>Nil</td>
</tr>
<tr>
<td>1987-88</td>
<td>10.18</td>
</tr>
<tr>
<td>1988-89</td>
<td>10.25</td>
</tr>
</tbody>
</table>

Source: Personnel department, Trichy, BHEL.

Maternity benefit

All the benefits specified in the Maternity Benefit Act are extended to women employees in BHEL. They are allowed 6 weeks leave with wages before and after delivery. An additional leave with wages upto one month is also allowed, if she shows proof of illness due to delivery, miscarriage or premature birth. If the employee is not provided free medical care in such a case, she is offered a medical bonus of Rs.25/- per month. In case of miscarriage also she is offered 6 weeks leave with wages.
Group Savings Linked Insurance Scheme

![Bar chart](chart.png)

- Amount spent (Rs. in lakhs)
  - 10.18 (1984-85 to 87-88)
  - 10.25 (85-86 to 88-89)

Year

Figure 27
Workmen's compensation

The 'workmen' as defined in the Act includes Apprentices except those in the clerical category. All provisions of this Act are strictly adhered to in case of accidents arising out of and in the course of employment for grant of half monthly payment and compensation as per the Act, the maximum rate at which calculation is being made is @ Rs.1000/- p.m.

In BHEL, Trichy, the company treats the date of accident as on duty and salary is paid for that day. The employees are allowed to choose either Accident leave with the benefit of half monthly payment or regularise their absence by any leave standing at their credit in order to enjoy maximum financial benefit by way of salary.

In case of death of workmen, not only the compensation amount under the Act is paid, but also he is entitled to the payment of Group insurance.

The following are the expenditure for five years incurred by BHEL on workmen's compensation.
Table 8.10 Expenditure on workmen's compensation

<table>
<thead>
<tr>
<th>Years</th>
<th>Amount (Rs. in lakhs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984-85</td>
<td>0.014</td>
</tr>
<tr>
<td>1985-86</td>
<td>0.21</td>
</tr>
<tr>
<td>1986-87</td>
<td>0.83</td>
</tr>
<tr>
<td>1987-88</td>
<td>2.38*</td>
</tr>
<tr>
<td>1988-89</td>
<td>0.58</td>
</tr>
</tbody>
</table>

Source: Personnel department, BHEL, Trichy.

*Note: During the year 1987-88, there were a few fatal accidents in BHEL and accordingly the compensation paid during this year was high, compared to other years.

From the above it can be seen that the Amount on workmen's compensation each year differs, because of the unexpected Accidents occurring each year. This is also made clear by figure 28.
Workmen's Compensation

Amount of Compensation (Rs. in lakhs)

Year

1984-85  85-86  86-87  87-88  88-89

0.014  0.21  0.83  2.38  0.58

Figure 28
Gratuity Act

The provision of payment of Gratuity Act 1972 is applicable to all employees (other than apprentice) whose wages do not exceed Rs.1000/- p.m. in any establishment. Any person who is employed in a managerial and administrative capacity is not covered under this Act.

As per this Act, gratuity shall be payable to an employee in BHEL on the termination of his employment at the rate of 15 days wages last drawn for each completed year of service or part thereof in excess of 6 months. But BHEL has established a fund called 'BHEL Employee's Gratuity Fund' and as per this, gratuity shall be payable to all employees of BHEL irrespective of pay limit and status. The maximum gratuity as per this fund is Rs.50,000/- the factor of calculation being

\[
\frac{15}{26} \times \text{Last Salary/Wages drawn} \times \text{No. of years of continuous service}
\]

Under this Act, a trust in BHEL corporate office is functioning to administer the provisions of the Gratuity Act.
Gratuity shall be payable to an employee on the termination of the employment after he has rendered continuous service for not less than five years.

(a) on his superannuation or
(b) on his voluntary retirement or resignation or
(c) on his death or disablement due to accident or disease.

It is also provided that the completion of continuous service of five years shall not be necessary, where the termination of the employment of any employee is due to death or disablement. In case of death, gratuity is paid to the nominee. If there is no nomination, the same is paid to the legal heirs. In case of death, the amount of gratuity will be calculated either under the provisions of the Act as stated above or in the manner shown below, whichever is more beneficial to the employees' legal heirs.
Table 8.11 The amount of gratuity calculation

| (i)  | During the first year of service | 2 Months emoluments | Reduced by the amount of the contribution of the company together with interest thereon standing to the credit in the contributory Provident Fund account of the employees. |
| (ii) | After one year but before five years of service | 6 Months emoluments |
| (iii) | After completion of five years of service | 12 Months emoluments |

The following is the additional cost incurred by BHEL every year for crediting the gratuity fund for its employees since 1984-85.
Gratuity Fund

Amount spent (Rs. in lakhs)

Year

1984-85  85-86  86-87  87-88  88-89

113.4  95.5  82.61  80.51  295.22

Figure 29
Table 8.12 Amount showing the additional cost for creating gratuity fund

<table>
<thead>
<tr>
<th>Years</th>
<th>Amount (Rs. in lakhs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984-85</td>
<td>113.40</td>
</tr>
<tr>
<td>1985-86</td>
<td>95.50</td>
</tr>
<tr>
<td>1986-87</td>
<td>82.61</td>
</tr>
<tr>
<td>1987-88</td>
<td>80.51</td>
</tr>
<tr>
<td>1988-89</td>
<td>295.22</td>
</tr>
</tbody>
</table>

Source: Personnel department, BHEL, Trichy.

From the above, it is found that the amount of gratuity shows neither increasing or decreasing. It is also represented through the figure 29.

*During the year 1988-89, the number of employees retired on superannuation and resigned was high.

II. Non-statutory Welfare Measures

Staff Benefit Fund

Staff Benefit Fund (SBF) was started in BHEL, Trichy in the year 1969. All employees other than executives are eligible to become members of this fund. Membership to this fund is voluntary. The fund extends various assistance to its members. At present nearly 11,900 employees are members of this fund. Two members
(elected) from the works committee are in SBF committee along with other nominated members from the Management side. Financial assistance is provided to the members on the following grounds.

(i) Extra Ordinary Leave (EOL) on medical ground

Members, who happen to be on EOL due to sickness for a continuous period of not less than 30 days are given assistance @ Rs.3/- per day subject to a maximum of Rs.300 or @ Rs.5/- per day in case of treatment for TB/Cancer subject to a maximum of Rs.600/-.  

(ii) Accident leave

Members of the fund who have been sanctioned Accident leave for a continuous period of not less than 30 days are eligible to receive financial assistance @ Rs.3/- per day subject to a maximum of Rs.300.

(iii) Hospitalisation

Members of the fund or their spouse or children, when referred by the CMO to outstation specialists at Tanjore, Madras, Madurai, Vellore etc., for admission and treatment, are given assistance @ Rs.3/- per day of hospitalisation subject to a maximum of Rs.180/- (ie., for 60 days) in a financial year.
(iv) Assistance for funeral expenses

An amount of Rs.50/- is paid in case of death of member or any adult member of his family i.e., parents, spouse and children. In the case of children below the age of 10, the assistance given is Rs.25/-.  

(v) Reimbursement of cost of spectacles

When BHEL's ophthalmologist advises members to purchase spectacles, the fund reimburses the cost of spectacles to the extent of 50% of the actual cost or Rs.40/- whichever is less. This assistance is given to members alone and only once in their service.

(vii) Refund of examination fees

Members pursuing higher studies, are helped with the money being reimbursed by the fund to the extent of 50% of the examination fee, the names of examination being fixed by the SBF committee.

(vii) Cost of books in respect of school/college going children

All members of the fund who have more than two school/college going children are eligible for financial assistance of Rs.5/- to Rs.25 per child per annum towards the partial cost of the books purchased.
(viii) Reimbursement of cost of artificial limb

With the approval of the Medical Officer, the cost of the artificial limb and travel expenses for two visits to the place of treatment to the extent of Rs.30 for each trip, are reimbursed to the employee.

(ix) Grant to Arivalayam

A recurring grant of Rs.500/- p.m. is also extended from the staff benefit fund to Arivalayam, a school for the mentally retarded children situated in the campus.

Death Relief fund

BHEL employee's death relief fund scheme is also administered by the staff benefit fund committee. This scheme is designed to give monetary assistance to the family members of a member of the scheme, who dies in the service of the company. This scheme came into existence in BHEL, Trichy from July, 1968. This covers all employees irrespective of pay scale or rank, who have enrolled themselves as members of the scheme. Membership to this scheme is voluntary.

In case of death of a member, each other will contribute Re.1/- and the total amount collected will
be given to the members of the bereaved family as assistance from the fund.

On information of death of a member in most cases, the company's welfare supervisor visits the place where the death has occurred and pays a sum of Rs.200/- to the wife, mother, father or brother (in the order of preference) to defray the funeral expenses.

Uniforms

All employees are provided with 3 sets of TC Ash Grey uniforms on the first issue. From the subsequent year onwards, one set of uniform will be provided every year; stitching charges are paid @ Rs.100/- per set and a washing allowance of Rs.15/- p.m. is also paid to the employees.

Children's education Assistance

Assistance for meeting the tuition expenses of children is given to employees @ Rs.10/- per child upto a maximum of 3 children studying in schools other than the schools located in BHEL campus. The assistance is given to the child studying in standard I to plus two level.
The above payment is made every month along with the salary after getting a declaration from the employee and a certificate from the Headmasters of the institution.

Transport allowance

Transport allowance is paid to employees who are not Township residents. This allowance is paid from the date a declaration is given by the employee that he resides at a place within 8 kms/beyond 8 kms.

radius from factory main gate. The transport allowance is admissible at the rates given below.

* Rs. 60.00 P.M. - within 8 kms
* Rs. 96.50 P.M. - beyond 8 kms
* This will be revised whenever there is a hike in the fare of public transport.

Cycle allowance @ Rs.15/- p.m. is paid in respect of township residents on declaration of using the cycle.

Conveyance allowance to physically handicapped/Blind

Employees who are blind and who are orthopaedically handicapped with disability of lower extremities are eligible for grant of conveyance allowance at the
rate of 10% of basic pay subject to a maximum of Rs.75/-
per annum.

In case of an orthopaedically handicapped employee, he must have a minimum of 40% permanent partial disability of both the upper and lower extremity deformities. The Allowance is admissible on the recommendation of the head of the orthopaedic Department of a government civic hospital.

Advances

Cycle Advance

An Advance for purchase of a bicycle is admissible once in every 5 years only to all employees (other than casual employees) who have completed atleast one year of service in the company. The Amount of advance would be Rs.800/- or the anticipated cost of the cycle, whichever is less.

Motor car advance

The advance for the purchase of a motor car is admissible only to the Executives in salary grade of Rs.3700-5900, and above, and who are members of BHEL Provident Fund for atleast one year.
Festival advance

An interest free festival advance of Rs.1000/- for Executives and Rs.750/- for others is admissible. The employees may apply for advance for any of the 12 festivals notified but the same shall be granted only once in a calendar year.

Advance of building/purchasing of Houses

House Building Advance (HBA) is granted to company employees on regular employment with not less than 5 years of continuous service, subject to certain conditions; where both husband and wife are employed in BHEL, the HBA is admissible to one of them.

Awards and incentives in BHEL

For higher qualification

A cash award scheme for acquiring higher qualification is applicable to all regular employees of BHEL who have completed a minimum of two years service on the date of enrolment of the course. The qualification must be significantly relevant to the duties performed by the employee in his particular functional channel and should be such that it helps improving his skill or knowledge for better and more efficient performance of work.
The qualification approved for the purpose of the scheme and the categories of employees eligible and the amount of cash award are given in the personnel manual.

For passing Hindi examination

Employees who pass the Hindi examination conducted by the Central Hindi Directorate, New Delhi, through correspondence coaching are given incentives as shown below besides reimbursing the examination fee.

Table 8.13 The Award scheme for Hindi examination

<table>
<thead>
<tr>
<th>Name of examination</th>
<th>Cash award for securing marks in exam</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>70% or more 60% or more 55% or more</td>
</tr>
<tr>
<td>Prabodh</td>
<td>Rs. 200 Rs. 100 Rs. 50</td>
</tr>
<tr>
<td>Praveen &amp; Pragya</td>
<td>Rs. 300 Rs. 200 Rs. 100</td>
</tr>
</tbody>
</table>

Besides these, BHEL has got memorial funds and it distributes prizes to various educational institutions on understanding the merits of the students. The following is the expenditure spent on Awards and incentives.
Table 8.14 The expenditure spent on Awards and incentives

<table>
<thead>
<tr>
<th>Years</th>
<th>Amount spent (in Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984-85</td>
<td>2,150</td>
</tr>
<tr>
<td>1985-86</td>
<td>3,175</td>
</tr>
<tr>
<td>1986-87</td>
<td>-</td>
</tr>
<tr>
<td>1987-88</td>
<td>11,813</td>
</tr>
<tr>
<td>1988-89</td>
<td>20,375</td>
</tr>
</tbody>
</table>

Source: Personnel department, BHEL, Trichy.

From the table, it is found that expenditure spent on awards and incentives shows an increasing trend during the year 1984-85 to 1988-89. This is also represented through the figure 30.
Awards and Incentives

Amount spent (Rs. in Thousands)

<table>
<thead>
<tr>
<th>Year</th>
<th>1984-85</th>
<th>85-86</th>
<th>86-87</th>
<th>87-88</th>
<th>88-89</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount</td>
<td>2.15</td>
<td>3.175</td>
<td>11.813</td>
<td>20.375</td>
<td></td>
</tr>
</tbody>
</table>

Figure 30
The aims and objectives of the worker's education scheme are

(i) To equip labour to take its place in a democratic society and to fulfil effectively its social and economic functions and responsibilities.

(ii) To promote among workers a greater understanding of the problems of their economic environment and their privileges and obligations to union members and officials and as citizens.

(iii) To develop stronger and more effective Trade unions through better trained official and more enlightened members.

(iv) To develop leadership from the rank and file and promote the growth of the democratic process.

The attitude developed through this education will help increase productivity, reduce absenteeism, buildup knowledgeable workers regarding their duty and rights of harmonious industrial relations.

Transport subsidy

1) A bus pass is issued at concessional rate of Rs.2/- and Rs.3/- per month for the employee's
children studying upto V std in the educational institutions at Township.

2) Open jeeps are offered for marriage purposes, after working hours at concessional rates.

3) BHEL will reimburse the actual taxi fare at the rate of fixed from time to time to carry the dead body of an employee to his native place, subject to a limit of 400 km. from BHEL Township and 400 km. down empty trip.

Transport subsidy given to the employees for the past 5 years are as follows:

**Table 8.15 Transport subsidy**

<table>
<thead>
<tr>
<th>Years</th>
<th>Amount (Rs. in lakhs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984-85</td>
<td>45.45</td>
</tr>
<tr>
<td>1985-86</td>
<td>54.65</td>
</tr>
<tr>
<td>1986-87</td>
<td>53.38</td>
</tr>
<tr>
<td>1987-88</td>
<td>63.71</td>
</tr>
<tr>
<td>1988-89</td>
<td>81.25</td>
</tr>
</tbody>
</table>

Source: Personnel department, BHEL, Trichy.
It can be seen from the above that the transport subsidy offered to the employees shows an increasing trend each year except during the year 1986-87 which shows a slight decrease. This is also represented by the figure 31.

Other facilities

Working women's hostel

In the heart of the township of BHEL, there is a working women's Hostel in which there are 48 rooms with self contained kitchen and toilet facilities. The hostel facilities are extended to BHEL Lady employees and other women working in the campus school.

Swimming pool

The swimming pool in Kailasapuram club is made available for the use of employees. A membership fee of Rs.5/- is received at the time of enrolment and a charge of 0.50 paise is collected for each time the swimming pool is used by the member.

Quarters

There are two townships in the BHEL complex, Kailasapuram Township and Kamarajapuram Township.
Transport Subsidy

Amount of Subsidy (Rs. in lakhs)

Year

Figure 31
In all, there are 5,050 quarters consisting of Type II to Type VI. The allotment is made on receipt of application, based on a well defined policy, by the Manager/Administration, who is also the ex-officio Estate Officer. Monthly rent at subsidised rate is recovered from the salary of the employee.

The maximum monthly rent recovered from employees are as follows:

<table>
<thead>
<tr>
<th>Type</th>
<th>Rent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type II</td>
<td>Rs. 40/-</td>
</tr>
<tr>
<td>Type III</td>
<td>Rs. 58/-</td>
</tr>
<tr>
<td>Type IV</td>
<td>Rs. 100/-</td>
</tr>
<tr>
<td>Type V</td>
<td>Rs. 174/-</td>
</tr>
<tr>
<td>Type VI</td>
<td>Rs. 252/-</td>
</tr>
</tbody>
</table>

Amenities in Townships

The roads and parks are well maintained. For recreational facilities there are community centres and clubs besides camera club, Tennis club etc. there are two co-operative stores for general merchandise; these stores also take care of the supply on rationed items to the family card holders and also the cooking gas to the consumers.
There are two post offices, one in the administrative building and the other in Kailasapuram township. Besides these, there are two branches of State Bank of India, one in each Township, two Kalyanamandapam, one in each Township and one Employees Co-operative Bank in the Township.

Community Centre

It is a recreation centre for all employees and their family members. The membership fee is Re.1/- per month per employee. It is situated inside the Township and is administered by a committee consisting of elected Vice-president, elected members and nominated members; President and Secretary are nominated by the management. This community centre takes care of all the sports activities for the employees, inter-unit Tournaments and cultural activities. It has an in-door Auditorium for conducting all cultural activities.

The expenditures spent by BHEL for cultural activities for the five years from 1984 to 1989 are shown in the Table 8.16 and figure 32.
Table 8.16 The expenditure on cultural activities

<table>
<thead>
<tr>
<th>Years</th>
<th>Amount (Rs. in lakhs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984-85</td>
<td>4.29</td>
</tr>
<tr>
<td>1985-86</td>
<td>9.48</td>
</tr>
<tr>
<td>1986-87</td>
<td>3.72</td>
</tr>
<tr>
<td>1987-88</td>
<td>4.64</td>
</tr>
<tr>
<td>1988-89</td>
<td>7.35</td>
</tr>
</tbody>
</table>

Source: Personnel department, BHEL, Trichy.

From the Table 8.16 and figure 32, it can be found the expenditure spent on cultural facilities neither shows an increasing trend nor decreasing trend.

Schools

In order to ensure good education to the children of the Township residents, private management of repute in the educational field have been given facilities to run schools in the Township. There are 8 schools out of which 6 are Tamil medium and the other two are English medium schools. Among these schools
Cultural Activities

Amount spent (Rs. in lakhs)

Year

Figure 32
one is a Higher Secondary School (English Medium) leading to Central Board of Secondary Education, two Higher secondary schools, one for boys and the other for girls, under Tamil Nadu Board of Secondary Education. Each sector of the Township has a middle school for the young children.

The total strength of school going children in the Township is 18,109 and the distribution is as follows.

(a) Primary 10,016
(b) Mid Secondary 4,514
(c) Secondary 2,283
(d) Higher Secondary 1,296

The school buildings, furniture and laboratory equipment are provided by BHEL management and a nominal rent of Re.1/- per annum is realised from the school managements. The teachers of various schools and their family members are given free treatment in BHEL Hospital.

Besides the above schools there are Bala Vihar Schools for infants of "A", "B", "C", sectors of the Kailasapuram Township and Kamarajapuram Township run by the Ladies Welfare Association and a school by name
"ARIVALAYAM" for the mentally retarded and deaf children with hostel facilities, run by a board of Trustees.

College

Management of BHEL has given a donation of Rs. 3,00,000 for starting a Government Arts College in Thuvakudi near Kailasapuram Township for the benefit of the employees seeking admission for their wards. This college has been functioning since 1976.

BIM

Bharathidasan Institute of Management (BIM) a leading institute for Management studies under the Bharathidasan University was started with the active support of BHEL and is functioning within the campus of BHEL, Trichy. Besides providing the basic infrastructural facilities such as building, furniture, hostel for the students, etc., BHEL spares the services of some of its top Executives for handling classes on various Management topics. The students of this Institute have direct access to many of the facilities such as Library, Training Centre, Shop floor etc., of BHEL. Various short term courses in Management are being conducted at this Institute for the benefit of Executives of BHEL.
The following table 8.17 gives the breakup of expenditure incurred on statutory and non-statutory welfare measures provided by BHEL to its employees to ensure a quality of work life.

Table 8.17 Breakup of expenditure on Statutory welfare measures (Rs. in lakhs)

<table>
<thead>
<tr>
<th>Items</th>
<th>84-85</th>
<th>85-86</th>
<th>86-87</th>
<th>87-88</th>
<th>88-89</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety expenditure</td>
<td>18.79</td>
<td>19.11</td>
<td>20.50</td>
<td>26.90</td>
<td>30.00</td>
</tr>
<tr>
<td>Medical expenses</td>
<td>84.42</td>
<td>93.34</td>
<td>112.64</td>
<td>125.79</td>
<td>159.37</td>
</tr>
<tr>
<td>Canteen</td>
<td>124.31</td>
<td>119.18</td>
<td>141.30</td>
<td>178.96</td>
<td>173.05</td>
</tr>
<tr>
<td>LTC - encashment</td>
<td>-</td>
<td>105.81</td>
<td>60.42</td>
<td>77.05</td>
<td>74.74</td>
</tr>
<tr>
<td>Leave encashment</td>
<td>64.64</td>
<td>60.06</td>
<td>74.88</td>
<td>73.50</td>
<td>141.09</td>
</tr>
<tr>
<td>Group savings linked insurance scheme</td>
<td>-</td>
<td>-</td>
<td>10.18</td>
<td>10.25</td>
<td></td>
</tr>
<tr>
<td>Payment of Gratuity</td>
<td>113.40</td>
<td>95.50</td>
<td>82.61</td>
<td>80.51</td>
<td>294.22</td>
</tr>
<tr>
<td>Workmen's compensation</td>
<td>0.014</td>
<td>0.21</td>
<td>0.83</td>
<td>2.38</td>
<td>0.58</td>
</tr>
<tr>
<td>Total</td>
<td>405.574</td>
<td>493.21</td>
<td>493.18</td>
<td>575.27</td>
<td>883.3</td>
</tr>
</tbody>
</table>

Source: Personnel Department, BHEL, Trichy.
Table 8.18 Non-Statutory Welfare facilitiesd (Rs. in lakhs)

<table>
<thead>
<tr>
<th>Items</th>
<th>84-85</th>
<th>85-86</th>
<th>86-87</th>
<th>87-88</th>
<th>88-89</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount spent on awards and incentives</td>
<td>0.021</td>
<td>0.031</td>
<td>-</td>
<td>0.118</td>
<td>0.203</td>
</tr>
<tr>
<td>Transport Subsidy</td>
<td>45.45</td>
<td>54.65</td>
<td>53.38</td>
<td>63.71</td>
<td>81.25</td>
</tr>
<tr>
<td>Cultural Activities</td>
<td>4.29</td>
<td>9.48</td>
<td>3.72</td>
<td>4.64</td>
<td>7.35</td>
</tr>
<tr>
<td>Total</td>
<td>49.761</td>
<td>64.161</td>
<td>57.10</td>
<td>68.468</td>
<td>88.803</td>
</tr>
<tr>
<td>Grand Total</td>
<td>455.335</td>
<td>557.371</td>
<td>550.28</td>
<td>643.738</td>
<td>972.103</td>
</tr>
</tbody>
</table>

Source: Personnel Department, BHEL, Trichy.

Quality of Worklife and Productivity

The very essence of material welfare was expressed aptly by Emile Dupont when he stated, "all we have is what we produce". The more the society with a particular population and workforce produces, more each individual in the society can possess. It follows that if there is to be maximisation of social welfare, each individual in the society has to produce the most
and each individual must contribute his most effective efforts.

Welfare measures constitute an important factor in making human factor productive and determine the quality of worklife. A company which spends much money on employee's welfare scheme is assured of employee's commitment. An employee works hard for the accomplishment of organisation goals if he is given proper recognition and importance in the organisation.

To establish a relationship between the quality of worklife measured in terms of labour welfare cost and productivity, an attempt has been made to correlate the conditions of worklife in terms of the cost of the welfare measures - statutory and non-statutory and the value added during the period of study i.e., 1984-85 to 1988-89. The cost of welfare measures has been suitably deflated taking 1984-85 as the base year and using index numbers of industrial production for different years for conversion. The cost details of statutory welfare measures, non-statutory welfare measures and total welfare measures are shown in the follow-Tables 8.19, 8.20 and 8.21 respectively.
Table 8.19 Cost of Statutory welfare measures
(Rs. in lakhs)

<table>
<thead>
<tr>
<th>Year</th>
<th>Statutory Welfare cost</th>
<th>Index No.</th>
<th>Deflated to 1984-85 Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984-85</td>
<td>405.574</td>
<td>100</td>
<td>405.574</td>
</tr>
<tr>
<td>1985-86</td>
<td>493.21</td>
<td>104.16</td>
<td>473.512</td>
</tr>
<tr>
<td>1986-87</td>
<td>493.18</td>
<td>110.63</td>
<td>445.792</td>
</tr>
<tr>
<td>1987-88</td>
<td>575.27</td>
<td>114.80</td>
<td>501.106</td>
</tr>
<tr>
<td>1988-89</td>
<td>883.3</td>
<td>123.75</td>
<td>713.778</td>
</tr>
</tbody>
</table>

Table 8.20 Cost of Non-Statutory welfare measures
(Rs. in lakhs)

<table>
<thead>
<tr>
<th>Year</th>
<th>Non-statutory welfare cost</th>
<th>Index No.</th>
<th>Deflated to 1984-85 Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984-85</td>
<td>49.761</td>
<td>100</td>
<td>49.761</td>
</tr>
<tr>
<td>1985-86</td>
<td>64.161</td>
<td>104.16</td>
<td>61.599</td>
</tr>
<tr>
<td>1986-87</td>
<td>57.10</td>
<td>110.63</td>
<td>51.613</td>
</tr>
<tr>
<td>1987-88</td>
<td>68.468</td>
<td>114.80</td>
<td>59.641</td>
</tr>
<tr>
<td>1988-89</td>
<td>88.803</td>
<td>123.75</td>
<td>71.76</td>
</tr>
</tbody>
</table>
Thus the expenditure is deflated suitably for price level adjustment and the relationship between value added and the cost of welfare measures has been established using the Karl Pearson's coefficient of correlation. Correlation helps us to study the functional relationship existing between the two or more variables. Thus this correlation technique is used to find out the extent of relationship existing between the 'welfare cost' taken as variable X and 'value added' taken as variable Y.
Table 8.22. Relationship between statutory welfare cost and value added in BHEL, Trichy (Rs. in lakhs)

<table>
<thead>
<tr>
<th>Years</th>
<th>X</th>
<th>Y</th>
<th>x</th>
<th>y</th>
<th>x^2</th>
<th>y^2</th>
<th>xy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984-85</td>
<td>405.574</td>
<td>12529</td>
<td>-102.3784</td>
<td>-655.60</td>
<td>10481.3368</td>
<td>429811.36</td>
<td>67119.28</td>
</tr>
<tr>
<td>1985-86</td>
<td>473.512</td>
<td>12576</td>
<td>-34.4404</td>
<td>-608.60</td>
<td>1186.1411</td>
<td>370393.96</td>
<td>20960.43</td>
</tr>
<tr>
<td>1986-87</td>
<td>445.792</td>
<td>13287</td>
<td>-62.1604</td>
<td>102.4</td>
<td>3863.9153</td>
<td>104857.6</td>
<td>-6365.22</td>
</tr>
<tr>
<td>1987-88</td>
<td>501.106</td>
<td>14198</td>
<td>-6.8464</td>
<td>1013.4</td>
<td>-46.8732</td>
<td>1026979.56</td>
<td>-6938.14</td>
</tr>
<tr>
<td>1988-89</td>
<td>713.778</td>
<td>13333</td>
<td>205.8256</td>
<td>148.4</td>
<td>42364.1776</td>
<td>22022.56</td>
<td>30544.52</td>
</tr>
</tbody>
</table>

| Σ          | 2539.762 | 65923 | 0  | 0  | 57942.444 | 1859693.2 | 105320.87 |
Here  \( X \) - Statutory welfare cost

\( Y \) - Value added

\( x = X - \bar{X} \)

\( y = Y - \bar{Y} \)

Where \( \bar{X} = \frac{\sum X}{N} \); \( \bar{Y} = \frac{\sum Y}{N} \)

Applying the formula \( r = \frac{\sum xy}{\sqrt{\sum x^2 \times \sum y^2}} \)

\[ r = 0.3208 \]

The \( r \) value is 0.3208, which shows that the statutory welfare cost and value added are positively correlated. Thus, it has been proved that there exists a certain and definite relationship between the expenditure incurred on labour welfare cost and the value added got back by the study unit.

The correlation was applied to non-statutory welfare cost and value added also.
Table 8.23 Relationship between Non-Statutory welfare cost and value added in BHEL, Trichy (Rs. in lakhs)

<table>
<thead>
<tr>
<th>Years</th>
<th>X</th>
<th>Y</th>
<th>x</th>
<th>y</th>
<th>x^2</th>
<th>y^2</th>
<th>xy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984-85</td>
<td>49.761</td>
<td>12529</td>
<td>-9.1138</td>
<td>-655.6</td>
<td>83.06</td>
<td>429811.36</td>
<td>5975.007</td>
</tr>
<tr>
<td>1985-86</td>
<td>61.599</td>
<td>12576</td>
<td>2.7242</td>
<td>-608.6</td>
<td>7.4212</td>
<td>870393.96</td>
<td>-1657.948</td>
</tr>
<tr>
<td>1986-87</td>
<td>51.613</td>
<td>13287</td>
<td>-7.2618</td>
<td>102.4</td>
<td>52.7337</td>
<td>10485.76</td>
<td>-743.608</td>
</tr>
<tr>
<td>1987-88</td>
<td>59.641</td>
<td>14198</td>
<td>0.7662</td>
<td>1013.4</td>
<td>0.5870</td>
<td>1026979.56</td>
<td>-776.467</td>
</tr>
<tr>
<td>1988-89</td>
<td>71.76</td>
<td>13333</td>
<td>12.8852</td>
<td>148.4</td>
<td>166.0284</td>
<td>22022.56</td>
<td>1912.164</td>
</tr>
</tbody>
</table>

<p>| | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>294.374</td>
<td>65923</td>
<td>0</td>
<td>0</td>
<td>309.8304</td>
<td>1859693.2</td>
<td>6262.082</td>
</tr>
</tbody>
</table>
\( X \) - represents non-statutory welfare cost
\( Y \) - represents value added,
\[ x = X - \bar{X}, \quad y = Y - \bar{Y} \]

Where \( \bar{X} = \frac{\sum X}{N} \) and \( \bar{Y} = \frac{\sum Y}{N} \)

Applying the formula,
\[ r = \frac{\sum xy}{\sqrt{\sum x^2 \sum y^2}} \]
\[ r = 0.2609 \]

Thus, it is found that the non-statutory welfare cost and value added are also positively correlated.

The very same technique can be adopted to find out whether there exists a positive correlation or negative correlation between the total welfare cost and the amount of value added.
Table 8.24. Relationship between the total welfare cost and value added in BHEL, Trichy.  

(Rs. in lakhs)

<table>
<thead>
<tr>
<th>Years</th>
<th>X</th>
<th>Y</th>
<th>x</th>
<th>y</th>
<th>x^2</th>
<th>y^2</th>
<th>xy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984-85</td>
<td>455.335</td>
<td>12529</td>
<td>-111.4922</td>
<td>-655.60</td>
<td>12430.5106</td>
<td>429811.36</td>
<td>73094.2863</td>
</tr>
<tr>
<td>1985-86</td>
<td>535.110</td>
<td>12576</td>
<td>-31.7172</td>
<td>-608.60</td>
<td>1005.9807</td>
<td>370393.96</td>
<td>19303.0879</td>
</tr>
<tr>
<td>1986-87</td>
<td>497.406</td>
<td>13287</td>
<td>-69.4212</td>
<td>102.40</td>
<td>4819.3030</td>
<td>10485.76</td>
<td>-7108.7308</td>
</tr>
<tr>
<td>1987-88</td>
<td>560.747</td>
<td>14198</td>
<td>6.0802</td>
<td>1013.40</td>
<td>36.9688</td>
<td>1026979.56</td>
<td>-6161.6747</td>
</tr>
<tr>
<td>1988-89</td>
<td>785.538</td>
<td>13333</td>
<td>218.7108</td>
<td>148.40</td>
<td>47834.414</td>
<td>22022.56</td>
<td>32456.6827</td>
</tr>
</tbody>
</table>

2834.136 65923 0 0 66127.177 1859693.2 111583.6514
$x$ - represents total welfare cost

$y$ - represents value added

$x = X - \bar{x}$

$y = Y - \bar{y}$

Where $\bar{x} = \frac{\sum x}{N}$; $\bar{y} = \frac{\sum y}{N}$

Applying the formula $r = \frac{\sum xy}{\sqrt{\sum x^2 \cdot \sum y^2}}$

We get $r = 0.3181$

$r$ value is 0.3181. From the above it is found that there is a positive correlation between the total welfare cost and the value added, which implies that whenever the total welfare cost increases, the value added also increases.

The above analysis shows the fact that there exists a positive correlation between the cost of welfare measures which indicates the quality of worklife in BHEL and the value added. The basic objective of provision of welfare measures to employees is to improve the quality of worklife in an organisation which in turn reflects in the productivity.
It is interesting to note that the statutory welfare cost and value added, non-statutory welfare cost and value added, total welfare cost and value added are positively correlated. This makes obvious the fact that BHEL understands the need for identifying the welfare needs of the employees and takes care of all such welfare needs identified in an attempt to tone up the productivity further so that both the parties i.e., the organisation and the human force are benefitted.