

Labour

Introduction

Labour is the most important and typical factor of production. It is the human contribution and efforts to the production. Labour represents the physical and mental efforts of human beings employed in the production in expectation of some rewards and used for total conversion of materials into finished products and for other functions. Of the different factors and resources' engaged in the production of different goods and services, labour is the most sensitive, delicate and complex.

Although labour charge is paid for the time spent or works performed by the employees into the concern, but their willingness or heartiest contribution in the performance of duties is a criterion for the success of .a concern. That is why labour is the most sensitive factor of production. Modern management does not believe on the principle that "labour cost is the purchase of time of workers like slavery system." A good management is required to engage in the scientific planning, organising, directing, motivating, co-ordinating and controlling of labour forces of the concern by which works can be rightly matched with workers, internal powers can be fully generated in tile concern, employees can be fairly remunerated, a good employer-employee relationship can he established and objectives of the concern can he rationally fulfilled:

Another feature of labour is that it is perishable in nature labour is the most perishable than any other elements of production. It cannot be stored for future. If a worker remains idle even for a moment, his/her labour can never be recovered and so labour cost payable for such idle time is totally a loss to the concern. Moreover, labour cost is highly controllable in nature. As a result, proper utilisation and control of labour is the main problem of modern management. The role of labour is gradually changing in the context of not only economic factors but also in social, political and global atmosphere.

Meaning and Concept of Labour Cost

Labour cost is the amount paid or payable by a concern for its employees engaged directly and indirectly in different activities. According to the *CIMA, London*, labour cost is "the cost of remuneration, i.e., wages, salaries, commissions, bonuses etc. of employees of an undertaking." So the cost of any sacrifice or compensation provided by a concern to its employees for getting services from them is the labour cost.

1. Recording of Time of Workers :

- (A) Keeping Time = Time of Exit from Factory – Time of Entry into Factory.
- (B) Booking Time = Time at Completion of Work – Time of Starting the Work.
- (C) Idle Time = Keeping Time – Booking Time
Keeping Time = Booking Time + Idle Time
Booking Time = Keeping Time – Idle Time.

2. Calculation of Wages / Labour :

- (A) Gross Wages = Basic Pay / Wages + Dearness & Other Allowances + Bonus / Overtime / Incentives + Other Cash Payments.
- (B) Net Wages = Gross Wages – Deductions from Wages.
- (C) Labour Cost (from the side of Employer) = Gross Wages + Employer's Contribution to Different Funds (benefitting the workers) = Value of Perquisites.

3. Methods of Remuneration :

(A) Time Rate System :

$$\begin{aligned} \text{Total Earning / Wages / Remuneration} &= \text{Time taken / worked} \times \text{Time Wage Rate} \\ &= \text{Hours taken} \times \text{Wage per Hour} \\ &= \text{No. of Days worked} \times \text{Wage per Day} \\ &= \text{No. of Weeks worked} \times \text{Wage per Week.} \\ &= \text{No. of Months worked} \times \text{Wage per Month.} \end{aligned}$$

(B) Piece Rate System :

(i) **Straight / Normal Piece Rate System** : Total Earning / Wages / Remuneration
= No. of Pieces / Units produced \times Wage per unit.

(ii) **Taylor's Differential Piece Rate System (Double Piece Rate principle is used)** :
Earnings / Wages of a Worker (on the basis of Efficiency Level)
= 80% of Normal Piece Rate (For below standard efficiency)
= 120% of Normal Piece Rate (For at or above standard).

(iii) **Merrick's Differential Piece Rate System (Multiple Piece Rate principle is used)** : Earnings / Wages of a Worker on the basis of Efficiency Level :

<i>Efficiency Level</i>	<i>Piece Wage Rate</i>
Upto 83%	Normal Piece Wage Rate
83% — 100%	110% of Normal Piece Wage Rate
Above 100%	130% of Normal Piece Wage Rate.

N. B. : (i) Efficiency of a Worker on the basis of Output (if time is fixed) = $\frac{\text{Actual Output}}{\text{Standard Output}} \times 100$

(ii) Efficiency of a Worker on the basis of Time (if output is fixed) = $\frac{\text{Standard Time}}{\text{Actual Time (Workers)}} \times 100$.

(C) **Combined Time Rate and Piece Rate Systems :**

(i) **Emersion Efficiency System** : Earnings / Wages of a Worker on the basis of Efficiency Level.

<i>Efficiency Level</i>	<i>Basis of Wage Payment</i>
Below 67%	Guaranteed Time Wage, i.e., No Bonus
67% — 100%	Guaranteed Time Wage + Efficiency Bonus upto 20% (stage by stage varies)
Above 100%	120% of Time Rate + Additional Bonus of 1% for each 1% extra efficiency over 100%.

(ii) **Gantt Task and Bonus System** : Earnings / Wages of a Worker on the basis of Efficiency Level :

<i>Efficiency / Output</i>	<i>Basis of Wage Payment</i>
Below Standard / Below 100%	Guaranteed Time Wage
At Standard / 100% Efficiency	Guaranteed Time Wage + 20% Bonus on Wages
Above Standard / Above 100%	120% of Normal Piece Wage.

(iii) **Bedaux (Point) System** : Wages are paid on the basis of Bedaux points scored :

No. of B's scored by a Worker per hour = $\frac{\text{Standard B's required for the work}}{\text{Actual Hours Worked}}$

Wage Rate per B's = $\frac{\text{Wage Rate per hour}}{60}$

Earning / Wages = Time Taken (B's Scored) × Time Wage per B + 75% × $\frac{\text{Time Wage per B}}{60}$ × B's Saved.

(D) **Incentive Methods or Premium Bonus Systems :**

(i) **Halsey System / Plan / Scheme** : Wages are paid on the basis of premium bonus on time saved by worker :

Wage / Earnings = Time Wages + Premium Bonus
= Time Taken × Time Wage Rate + 50% × Time Saved × Time Wage Rate.

N. B. : (a) Time Saved = Standard Time / Time Allowed – Time Taken; (b) Time is normally considered in "hours".

(ii) **Rowan System / Plan / Scheme** : Wages are paid on the basis of premium bonus on time saved by worker :

Wages / Earnings = Time Wages + Premium Bonus.
= Time Taken × Time Wage Rate + $\frac{\text{Time Taken}}{\text{Time Allowed}} \times \text{Time Saved} \times \text{Time Wage Rate}$.

(iii) **Halsey-Weir System / Plan / Scheme** : Wages are paid on the basis of premium bonus on time saved by worker :

Wages / Earnings = Time Wages + Premium Bonus.

$$= \text{Time Taken} \times \text{Time Wage Rate} + 40\% \text{ or } 33\frac{1}{3}\% \times \text{Time Saved} \times \text{Time Wage Rate.}$$

(iv) **Barth Variable Sharing System** : Geometric Mean of Standard and Actual Time is allowed :

$$\text{Wages / Earnings} = \text{Time Wage Rate} \times \sqrt{\text{Standard Time} \times \text{Actual Time}}$$

(v) **Accelerating Premium System or Sliding Scale Bonus System** : Bonus rate varies for output or efficiency attained by the worker :

Wages / Earnings = Time Wages + Production / Efficiency Bonus

$$= \text{Time Taken} \times \text{Time Wage Rate} + \text{Bonus Time earned} \times \text{Time Wage Rate.}$$

N. B. : Bonus Time of a Worker = Extra Time earned by the worker for his Efficiency / Performance or % of Time Saved from a table of varying Rate / Percentage.

(vi) **Group Bonus System** : Wages / Earnings of a Worker = Normal Wages + A Part of Bonus Allowed for the Group of Workers.

(E) **Indirect Monetary Incentive System** :

(i) **Profit Sharing Scheme** : Wages / Earnings of a Worker = Normal Wages + Production / Efficiency / Premium Bonus + A Part or Share of Profit.

(ii) **Co-Partnership Scheme** : Wages / Earnings of a Worker = Normal Wages + Production / Efficiency / Premium Bonus + A Part or Share of Profit + Participation in Management.

3. Measurement of Labour Turnover :

(i) **Separation Method** : Labour Turnover = $\frac{\text{No. of Employees Left}}{\text{Average No. Employees on the Roll}}$

(ii) **Replacement Method** : Labour Turnover = $\frac{\text{No. of Employees Replaced}}{\text{Average No. of Employees on the Roll}}$

(iii) **Flux Method** : Labour Turnover = $\frac{\text{No. of Employees Left} + \text{No. of Employees Replaced}}{\text{Average No. of Employees on the Roll}}$

Illustration L4 (Large Size) : From the following particulars, compute the net earnings of the two workers M and N employed in a factory for the month of December, 2001 :

	M	N
(i) Basic Wages for 200 working hours (Rs.)	600	600
(ii) Dearness Allowance (on Basic Wage)	50%	50%
(iii) Overtime at 200% of Basic & DA (hours)	10	—
(iv) Leave Wage as Basic & DA (hours)	—	15
(v) Bonus Plan at Basic Wage	Halsey	Rowan
(vi) Contribution to P.F. (on Basic Wage)	10%	10%
(vii) Contribution to ESI Fund (on Basic Wage)	2%	2%
(viii) No. of Units produced	26	50
(ix) Standard time per unit (hours)	10	5

Solution : Statement showing computation of Net Earnings of the Workers in factory for the month of December, 2001 :

Particulars	Worker M	Worker N
	Rs.	Rs.
(i) Basic Wages or Time Wages (Hours taken × Wage per Hour) = 200 × Rs. 3	600.00	600.00
(ii) Dearness Allowance @ 50% of Basic Wages = 200 × Re. 1.50	300.00	300.00
(iii) Overtime (Overtime hours × 200% × Basic & DA per hour) M = 10 × 200/100 × Rs. (3 + 1.50)	90.00	—
(iv) Leave Wages (Leave hours × Basic & DA per hour) N = 15 × Rs. (3 + 1.50)	—	67.50
(v) Premium Bonus : M = Halsey Plan (50% × Time Saved × Wages per hour) = 50/100 × 60 × Rs. 3	90.00	—
N = Rowan Plan $\left(\frac{\text{Time taken}}{\text{Standard time}} \times \text{Time Saved} \times \text{Wage per hour} \right) = \frac{200}{250} \times 50 \times \text{Rs. 3}$	—	120.50
Gross Wages	1,080.00	1,087.50
Less : Deductions from Wages :		
(i) Employee's Contribution to P.F. (10% on Basic Wage = $\frac{10}{100} \times 600$)	(-) 60.00	(-) 60.00
(ii) Employee's Contribution to ESI Fund (2% on Basic Wage = $\frac{2}{100} \times 600$)	(-) 12.00	(-) 12.00
Net Wages / Earnings	1,008.00	1,015.50

Working Notes : (i) In case of Worker M, Standard time for the output produced = 26 × 10 hours = 260 hours. So Time Saved = Standard Time – Actual Time taken = 260 hours – 200 hours = 60 hours. (ii) In case of Worker N, Standard time for the output produced = 50 × 5 hours = 250 hours. So Time Saved = 250 hours – 200 hours = 50 hours.