#### **HUMAN RESOURCE MANAGEMENT II**

#### CHAPTER 9: WORK ENVIRONMENT, INDUSTRIAL ACCIDENTS, SAFETY AND HEALTH



#### INTRODUCTION

- Employees are endowed with skills, knowledge, abilities, values, aptitude, attitude etc.
- They come to the organization with all these varieties of human resources
- It is inevitable to the management to bear and respect the total employee
- Then only the employee commits himself to the organization
- Committed employee is loyal to the company
- In the process of maintaining human relations, the company provides congenial work environment to its employees

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### CHAPTER 9 MEANING

- The organization has to create conducive environment at the work place to make employees committed to the company
- The work environment which suits the requirements of job and conveniences of the employee maximizes workers' efficiency and productivity
  - Work environment consists of:
    - Physical Environment
    - Social Environment
    - Psychological Environment



#### FATIGUE

Fatigue is defined as a decrease in the capacity of a person to carry out the work because of previous work.

Implication is generally psychological in nature and it has psychological, emotional and behavioural aspects.

Fatigue reduces the capacity of a person to carry out the work leading to fall in efficiency and production

#### SYMPTOMS OF FATIGUE

- It is simple tiredness
- Changes in the brain

Nerve and muscle cells functions are changed

CAUSES 0F FATIGUE Poor quality of raw materials

Absence of strong physique of the employee

Poor lighting, ventilation and heavy noise
Bureaucratic organizational structure
Allotment of the work to the employee in which he is not interested

#### **TYPES OF FATIGUE**

Physiological fatigue

Psychological fatigueNervous fatigue

#### MONOTONY

- "Monotony is a state of mind caused by performing repetitive tasks.
- It implies no emotional dislike
- Job enlargement mostly causes monopoly
  - Monotony is a state of mind or an attitude of a worker towards his job.
    - Monotony is caused even if the worker is not tired mentally and/or physically.

#### BOREDOM

- Boredom is caused due to lack of interest or aptitude in the job.
- It is characterised by depression and a desire for change of activities.
- "Boredom is tinged with emotional distaste and is accompanied by a corresponding attitudinal outlook"
  - Boredom is heavily affected by factors like personality, attitude, aptitude or interest pattern rather than doing repetitive tasks

#### FATIGUE AND BOREDOM

Fatigue is reduced capacity for doing work/carrying out the activities, Boredom is lack of interest or decreased interest in a particular work/activity

All workers experiences fatigue, some workers only experience boredom

Fatigue can be reduced but can't be prevented/avoided. Boredom can be prevented/avoided, if work is assigned based on the interest

#### **CHAPTER 9** MEASUREMENT OF FATIGUE

Angelo Masso developed an instrument called "ergograph" which helps to investigate the relation between fatigue and work in a relatively isolated part of the body

■ The principle of ergograph is that all fingers except middle are similarly immobilised. A string is then fastened to the free finger which is to be put to work. The free finger can be made to pull against the load by placing the load on the other side of the string.

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- A recording device is fastened to the moving string in order to obtain the graph of the output.
- Though there are differences among fatigue, boredom and monotony, they affect employee and the organization more or less similarly
- Effects of fatigue
  - Decline in the level of satisfaction
    - Increase in absenteeism and labour turnover
  - Increase in accidents



#### MEASURES TO REDUCE FATIGUE, BOREDOM AND MONOTONY

Reduction in working hours

Rest pauses and flexi-working schedule

The worker may be trained to eliminate unnecessary motions

#### INDUSTRIAL ACCIDENTS, EMPLOYEE SAFETY AND INDUSTRIAL HEALTH

- Engineers and safety officers usually render necessary practical advice on certain aspects of safety in the industry
- Accident prevention and safety are inter-related and therefore require a multi-dimensional approach

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• An industrial accident may be defined as "an occurrence which interrupts or interferes with the orderly progress of work in an industrial establishment"

According to the Factories Act of 1948, it is "an occurrence in an industrial establishment causing bodily injury to a person which makes him unfit to resume his duties in the next 48 hours"

There are three basic causes/factors that contribute to accidents in organizations:

- Unsafe Conditions (work-related causes)
- Unsafe Acts
- Other Causes



#### EMPLOYEE SAFETY

- Every organization should formulate and implement a safety policy
- Companies should take concrete efforts to provide safety measures
- The safety organization plans and implements the safety procedure
- Safety Committee
  - In some organizations, safety work is primarily carried out by Safety Committee
  - Its function is to ensure the establishment of safe working conditions in an organization and create conductive work environment by following



Appraisal of Employee Attitude to Safety Programmes

Safety Engineering

Safety Education and Training

#### INDUSTRIAL HEALTH

- According to the joint I.L.O./W.H.O. Committee on Organisational Health, industrial health is:
  - The prevention and maintenance of physical, mental and social well-being of workers in all occupations
    - Prevention among workers of ill-health caused by the working conditions
    - Protection of workers in their employment from risks resulting from factors adverse to health and Contd.



- Placing and maintenance of the worker in an occupational environment adapted to his physical and psychological equipment
- "On the one hand, efficiency in work is possible only when an employee is healthy; on the other, the industry (in which he is employed) exposes him to certain hazards which he would not meet elsewhere and which may affect his health. It is with the intention of reducing these hazards and improving the worker's health that the discipline of industrial health came into being as a branch of public health in its own right".

OCCUPATIONAL HAZARDS AND RISKS Roland Blake has classified occupational health hazard as follows:

- Chemical
- Biological
- Environmental
  - Psychological

Occupational diseases are the results of physical conditions and the presence of industrial poisonous and non-poisonous dust in the environment.

#### PROTECTION AGAINST HEALTH HAZARDS

- By ensuring that firms using radiation in their manufacturing process or by providing protective clothing, handling and warning devices and by providing safety education
- By controlling noise
- By substituting a less toxic substance

By devoting adequate attention to lighting, temperature and atmospheric conditions, by controlling dust, fumes and gases and by providing other protective devices

