



Supervisors Training Centre South Central Railway



ISM-Common Supervisory Skills (MRT-09)

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1. LEADER SHIP

1.0 Introduction: Foreman/supervisor is said to be backbone of the industry .His position is a key position, it is the most essential and effective post between the management and the workers. He must lead and inspire his men and should be familiar with the human psychology and the art of handling man which is LEADERSHIP.

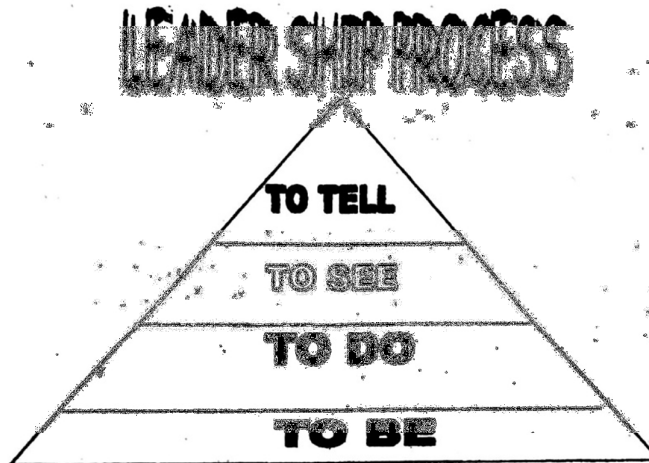
- Dealing appropriately with the people is leadership.
- Leadership is the ability to get desirable action, voluntarily and with out force from the followers.
- Leadership can also be defined as “The quality of the behavior of the individual in the guidance of the people and the desired activities”.
- It is that quality to awaken in others the desire to follow a common objective.
- Leaders are both born and self-made.

SWAMI VIVEKANANDA said “A sardar (leader) must be sirdar(ready to take responsibilities on his head)

1.1 Qualities of Leadership:

- Following are some of the qualities which good administrative leader must possess
 - Intelligence and technical knowledge
 - Initiative
 - Decisiveness
 - Responsibility
 - Social consciousness
 - Positive attitude
 - Imagination
 - Integrity
 - Ability to “stick to it”
 - Understanding of others
 - Ability to adopt changes
 - We and not you/I concept
 - Self control

1.2 Leadership process:



- TO BE IS THE SOURCE OF LEADERSHIP.
- TO DO IS THE STYLE OF LEADERSHIP.
- TO SEE AND TO TELL ARE THE FUNCTIONAL TOOLS AND TECHNIQUES OF LEADERSHIP.

There is a very practical advice contained with the single word "WATCH YOUR SELF" it contains

W - WORD

A - ACTION

T - THOUGHT

C - CONDUCT

H - HEART.

1.3 Types of Leaders:

Different types of leaders in an industry can be classified as

- Authoritarian or Autocratic leaders they
Drive their gang through command and by developing fear in their followers and assign duties without consulting employees
- Democratic or consultative leaders

They work according to the wishes of their followers. They frame policies and procedures in consultation with them

➤ Persuasive leaders (convincing):

These leaders influences his followers due to his personal contacts, to join with him in getting done

➤ Functional leaders:

Such leaders lead because of their expert knowledge and with the confidence of their followers by their superior knowledge

➤ Labour leaders:

These leaders come to prominence due to their qualities of speech, behavior and action.they then organize themselves into trade unions

➤ Administrative leaders:

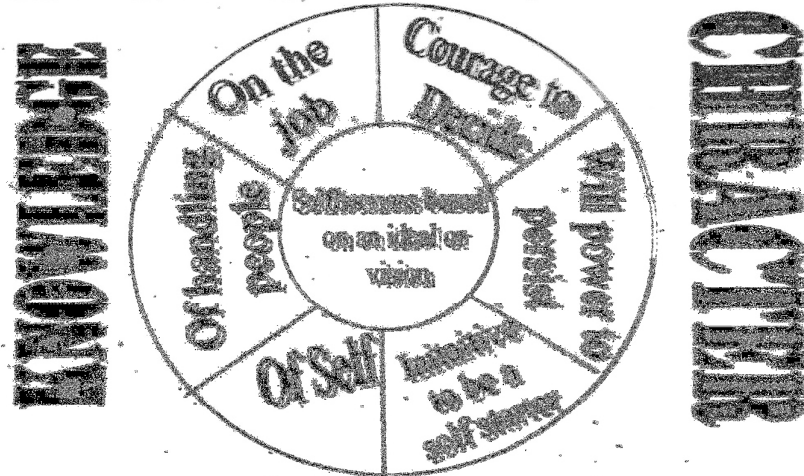
By administrative leadership we mean leaders or bosses in the administration. These leaders obtain this position by virtue of these ability, experience and associates with the organization.

These leaders responsible for formation of policies responsible to their execution. Administrative leadership must work in close co-operation with the workers leadership for smooth working.

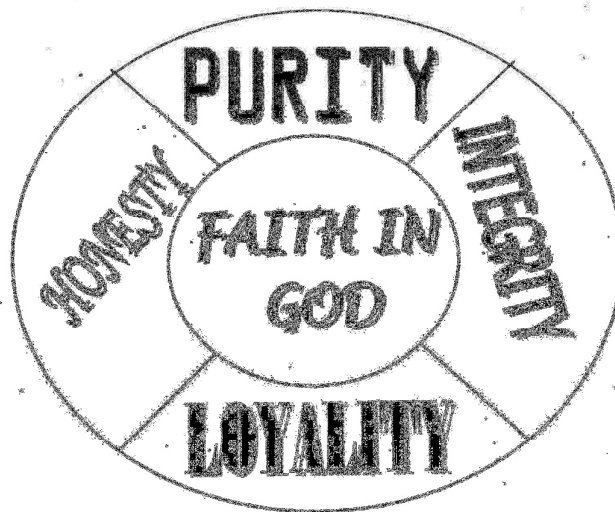
Acceptance of administrative leadership, factors accepts the administration levels such as

- Fear of losing jobs
- Thankfulness and faithfulness
- Bargaining
- Common object

UNIVERSAL INNER STRUCTURE OF GOOD LEADERS



SELFLESSNESS COMPONENTS



1.4 Handling the boss:

- Know your boss completely
- Be dependable
- Listen to him with undivided attention
- Brevity in your speech to convey your thoughts clearly
- Be diplomatic
- It is wise to let your boss look good
- Be a team player
- Solve your problems

1.5 Functions of Leadership:

Leader has to achieve the tasks (mission, objective or goal)



One has to work according to needs and should reach the objective.

1.6 Conclusion:

The management development institute, Gurgaon along with other two management Institutes undertook a survey of the need for leadership training. The major conclusion emerged from the survey.

- Productivity in India can be improved by 30%-40% without extra finance or new technology. If only we could improve the leadership abilities of our executives.
- Leadership theories and styles which are taught in management schools are not very useful to improve leadership. Practical approach to leadership should be the basis for any training, so that the executive can improve their effectiveness.
- It is necessary for leaders to keep on reading the lives of out standing men in their own fields. The lives Ashoka, Akbar, Shivaji, Vivekananda, Tilak, Nepolean, Einstein, Abraham Lincoln, Churchill etc – have inspired generations of leaders round the world.

2. Role of Supervisor in Mechanical Department

2.0 Introduction:

There are in general three levels of management in organization. These are top management middle management and lower level/ front line/ supervisory management. Top management makes policy, middle management broadly interprets policy while supervisory management's role is restricted to narrow interpretations, which ensure that the day to day running of sections conforms to norms and guidelines laid down by the top management .The supervisor stands at the point where the plans and policies of top management are turned into practical results through the efforts of men at work. Therefore, supervisory is the key front line manager, the person who can make or break top management plans. In other words in an organization compared to an arch the supervisor is key uniting stone the higher management with the operating employees or workers.

2.1 The role of supervisor

Supervisor is a person selected by the management to take charge of group of workers or ensures that work is carried out satisfactorily. Although he does not play any direct role in long term planning and doesn't actually work on the production process, he is required to have a firm grasp of both. If he doesn't enjoy the confidence of management, no effective actions take place. Similarly, if men at work don't rely on him as their link with managers, the shop floor will began to ignore the role of supervisor. Without him, the organization would be in a mess. Specially the supervisor:

- a) Establishes the climate of human relationships at department level of the organization.
- b) Communicates policy directives of top management to operative employees.
- c) Shapes the attitudes that motivate the employees towards better performance.
- d) Provides on-the-spot guidance and assistance to operating/subordinate staff in attending to certain difficult and ticklish problems and suggest various alternatives to solve the problems.
- e) Interprets and applies organization policies, work specifications, and job orders.
- f) Initiates or recommends personnel actions such as recruitment, promotions, transfers, etc.,
- g) Plans and maintains time and work schedules.
- h) Takes necessary steps to secure good quality of output.

- i) Coordinates the activities of his department in such away as to meet its goals economically, and.
- j) Ensures effective feedback pertaining problems/issues to top management, etc.

Even though a supervisor plays vital role in an organization, the recognition and acceptance of the supervisor by top management only help him to emerge finally as an essential and integrated member of the management group. Unfortunately many managers do not fully understand the supervisors role, consequently, a large number of problems and issues have crept into supervisory management and the present supervisors status is shaky and insane

2.2 Technical Duties of a Mechanical Supervisor in workshops:

- a) Incharge of one section with 20-30 staff.
- b) Planning, allocation and execution of work.
- c) Posting of staff to various load centres according to the requirement.
- d) Good load centre planning, process planning, M&P, tool and Jig planning.
- e) Control of documents and data for adhering to the schedules.
- f) Co-ordination between sections in the shop.
- g) Ensure availability of Raw, semi finished and finished materials.
- h) In Process quality control.
- i) Calibration of equipments and measuring instruments.
- j) Maintenance of equipments and instruments as per QMS and EMS standards.
- k) Ensuring good housekeeping to have accident free and health hazards free work spot.
- l) Analysis of rejections. Initiation of corrective and preventive action.

2.3 Non technical Duties of Mechanical Supervisors in workshops:

- I. GA card punching witness. Authorising form 440.
- II. Maintenance of various files and records for EMS,QMS,OHSAS etc.

- III. Maintenance of history card, manuals, men idle and Machine idle.
- IV. Maintenance of various records and files regarding all activities related to shop.
- V. Attendance records and Incentive hour records for the section staff.
- VI. Claiming of wages and ensuring distribution.
- VII. DAR enquiries, court witness.
- VIII. Conducting elections for organised labour unions etc.
- IX. Conducting awareness programmes under Swatch Bharath Mission.

2.4 C & W Open line:

Work areas: As an Incharge of the Depot, IOH/ROH, sheds, sickline, M&P, stores, breakdown, MIS and rake maintenance, receipt and despatch.

2.5 Technical Duties of a supervisor in open line:

- I. Maintenance, repairs and certification of coaches and wagons.
- II. Planning of maintenance activities including placement of rakes in outlines, balancing of rake occupation in pit lines.
- III. Detachment of coaches and wagons for scheduled maintenance activities like POH and IOH/ROH etc.
- IV. Analysis of failures and repairing of failed components.
- V. Maintenance of all records with respect to train service.
- VI. Issue of brake power certificate.
- VII. Maintenance and upkeep of breakdown specials.
- VIII. Monitoring of trial components, Prevention and analysis of enroute failures like train parting, brake binding, hot axle etc.
- IX. Upkeep of machinery and plants.

3. Motivation

3.0 Introduction: Productivity of any organization (or) department (or) work unit depends upon the people who work in that unit. Given the same input, people can produce more if they work more thus increasing the productivity of the organization, department (or) work unit. How to make people work more (or) work better, is an issue that requires an understanding of what motivates people to work better

It may be possible to get people to work more (or) work better in higher proportions with marginal increases in some inputs. This requires an understanding of “motivation”

3.1 Definition of motivation:

Motivation is the means (or) inducements which inspire (or) impel a person to intensify his willingness to use his capabilities and potentialities for achieving goals of the organization in which he works

Motivation is a psychological act which attracts or instigates the workers to do more work.

If the workers are instigated, they will try to do more than the standard work and earn more for themselves which increases their living standards.

3.2 Motivation is a general inspiration process which gets the members of the team

- To do their task effectively
- To give their loyalty to the group
- To carry out properly the tasks they have accepted
- In general to play an effective part in the job that the group has undertaken

There is a basic difference between the “capability to work” and “desire to work” in which **motivation** is an inherent factor.

3.3 Types of Motives:

- Primary Motives
- General Motives
- Secondary Motives

3.3.1 Primary Motives

- Hunger
- Thirst
- Clothing

- Sleep
- Shelter

3.3.2 General Motives

- Motives which cannot be termed primary or secondary
- Primary needs try to reduce the tension or stimulation whereas the general need induces the individual to enhance the amount of stimulation.
- Also called stimulus motives-Love , concern and affection

3.3.2 Secondary Motives

Learned drives become secondary motives that includes

- Curiosity
- Manipulation

3.4 Achievement drive

The desire of an individual to perform in terms of a particular standard of excellence, or the desire to be successful in competitive situations.

Specific characteristics of a high achiever

- Takes moderate risks.
- Prefers immediate feedback
- Derives satisfaction on the successful accomplishment of a task
- Has total concentration or preoccupation with the assigned task

3.5 Theories of Motivation

Some important theories:

- Maslow's Hierarchy of Needs Theory
- Macclelland's Achievement Motivation Theory
- Herzberg's Motivation-Hygiene theory

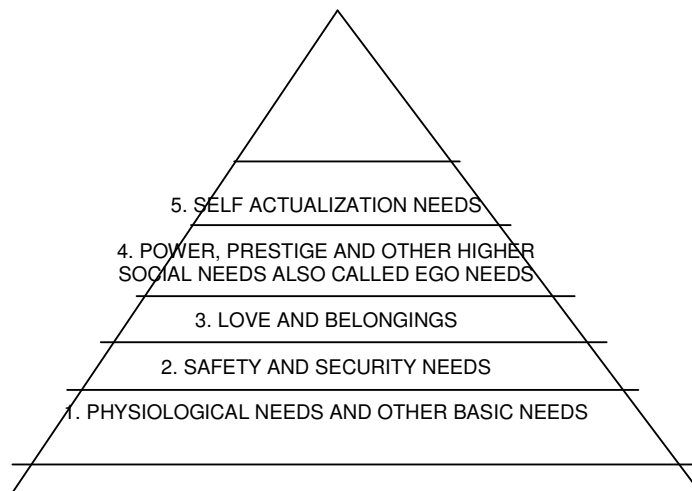
3.5.1 Maslow's Hierarchy of Needs Theory

- Works on the assumption that the behaviour of individuals at a particular moment is usually determined by their strongest need.
- Based on hypothesis that within every human being there exists a hierarchy of five needs.

Five needs:

1. **Physiological:** Basic needs of hunger, thirst, shelter, sex and other body needs.
2. **Safety:** security and protection from physical and emotional harm
3. **Social:** affection, belongingness, acceptance and friendship
4. **Esteem:** Need for both self esteem(self respect, autonomy and achievement) and external esteem (status, recognition and attention)
5. **Self-actualization:** the drive to become what one is capable of becoming: includes growth, achieving one's potential, self fulfillment.

Human motives can be organised in the form of a pyramid, as per maslow's hierarchy of human needs



3.5.2 Macclelland's Achievement Motivation Theory

Based on recognition of three needs in work-place situations:

- Need for achievement
- Need for affiliation
- Need for power

3.5.3 Herzberg's Motivation-Hygiene theory

Based on the conclusion that people have two different categories of needs:

- Hygiene factors
- Motivating factors

3.6 Motivation programmes for employees

- Monetary Incentives(Not so relevant for Government employees)
- Non Financial Motivation Programmes

3.6.1 Non Financial Motivation Programmes

- Employee recognition programmes
- Employee involvement programmes
- Employee participation
- Job enrichment and job excitement
- Delegation

3.7 Strategies for Motivating subordinates

- Reward risk taking instead of risk avoiding

How to convert risk avoiders into risk takers?

- ✓ Teach people that intelligent errors are part of the cost of progress.
- ✓ Use yourself as an example.
- ✓ Celebrate both successes and setbacks.
- ✓ Encourage smart risks, not foolish chances

- Reward creativity instead of mindless conformity

How to create a climate to encourage new ideas?

- Tolerate failure
- Create a relaxed informal work environment
- Encourage competition

- Reward decisive action instead of paralysis by analysis

Helpful tips for taking effective decisions

- Write down the decision you have to make as clearly and simply as you can and set a deadline for making it
- If you need to further analyse alternatives, use the balance-sheet approach
- Obtain the best information you can within the time-limits.
- Take action, or reward those who do

- Reward smart work instead of busy work

How to convert actors into producers?

- Make sure to have the right person for the job
- Define each job's limits.
- Beware of proceduritis
- If people have finished their work, let them go home

- Reward simplification instead of needless complication
- Reward quietly effective behavior instead of squeaking joints

How to encourage effective behavior

- Seek quiet employees and resolve to spend time encouraging and rewarding them.
 - Keep alert for squeaking joints and do not oil them
- Reward working together instead of working against

How to build good teams?

Create self managed work teams and ensure that:

- ✓ Each team is assigned a significant piece of work
- ✓ Work environment is arranged to foster plenty of communication and interaction between members of the team
- ✓ Jobs should be made interdependent

3.8 Qualities of dependable employees

- They are rarely, if ever, absent.
- They work well under pressure
- They consistently turn out high-quality work on time
- They do not constantly pester others for advice and guidance.
- They are so quiet and unassuming that one hardly knows they are there except for their good work.
- They produce many more answers than problems.

3.9 Factors leading primarily towards motivation

- Achievement : a concern for excellence, and problem solving.
- Affiliation : a concern to establishing and affectionate relations with others
- Power : a desire to influence others.
- Extension : a desire to be helpful to others.
- Aggression : a need to dominate others and to demonstrate one's own strength.
- Independence : a desire to do things individually.
- Security : a need to be secure about one's own living.
- Activity : a desire to be constantly doing things.
- Recognition : a need to be recognised for one's accomplishment.

and there are many more like, advancement, growth, authority and work itself etc.

3.10 Motivational techniques

- ✓ Praise the workers and give them credit for all good work done by them.
- ✓ Take a sincere interest in sub-ordinates as individual persons.
- ✓ Promote healthy competition among individual employees.
- ✓ Delegate a substantial amount of responsibility to the sub-ordinates.
- ✓ Fix fair wages, monetary incentives and group incentives.
- ✓ Formulate a suitable suggestion system.
- ✓ If possible permit the employee's participation in management matters.
- ✓ Provide opportunities for growth and promotion.
- ✓ Promote good and satisfying inter personal relationships at work and outside.
- ✓ Job rotation.
- ✓ Promote good working conditions like illumination, ventilation, air conditioning, noise free, pollution free etc.
- ✓ Formulate fair, clear, firm and consistent management policies.

The proper proportioning of these motivational techniques is the "mark" of skillful engineer.

Remember

- Six important words are "I admit I made a mistake"
- Five important words are " You did a good job"
- Four important words are "What is your opinion?"
- Three important words are "Let's work together."
- Two most important words are " Thank you"
- Single most important word is "WE".

4. Communication

COMMUNIS –Latin word-Common-Sharing of ideas in common

4.0 Introduction:

SERVICE IS IMPOSSIBLE without communication.

Customers ask questions-information or express doubts.

Staff answers their questions & clear their doubts.

The world is full of communication.

Good communication → Good interpersonal relations → Good Public relations. → Good Result → Achievement of Goals → Good profits

Poor Communications → Poor Relations → Mistrust → ill will
→ Poor performance → Poor results → Non-achievement → Poor profit

- Building of organization, societies & their survival, better living depends on better communication.
- Success depends on the way things are communicated to employees, & the process of communication.
- Good public relations – to communicate properly about our achievements, & constraints people co-operation in implementation, our actions are in the interest of providing efficient service

4.1 Importance of communication

- a) In organization, communication ties people under structure together
- b) Communication is a bridge meaning between two or more people
- c) Communication involves understanding and acceptance of the ideas to act on it
- d) Half-way communication gets half- way result
- e) Effective communication in assistance of good management

Communication is the process by which a manager takes action, it is not a substitute for good management. It helps in

1. Smooth and unrestricted running of the enterprise
2. Quick decision and implementation.
3. It is the basis of direction and leadership, It lubricates the entire organization and keep the personal working in accordance with the desires of the top management
4. Proper planning and co-ordination. Sharing of knowledge and information, good morals and mutual understanding.
5. Maximum productivity with the minimum cost.
6. Morale-Building and democratic management. Most of the conflicts in business are not basic but are caused misunderstood motives and ignorance of facts.

4.2 What is Communication:

The transfer of information from the sender to the receiver, with the information being understood by both the sender and the receiver.

Communication may be formally defined as any process whereby decisional premises are transmitted from one member of an organization to another.

Communication is the broad field of human interchange of facts and opinions not the technologies of telephone, Telegraph, Radio etc.

Communication is the sum of all the things one person does when he wants to create understanding in the mind of another. It is bridge of meaning. It involves a systematic and continuous process of telling, listening and understanding.

4.3 What a proper communication does:

It involves transference and understanding of the meaning. Perfect communication exists when a transmitted thought or idea perceived by the receiver exactly the same as that envisioned by the sender.

4.4 Need for communication:

- To establish and inform the goals of an enterprise
- To develop plan for their achievement
- To organize plan a material
- To select, develop and appraise member of the organization
- To lead, direct motivate and create a work climate
- To control performance.

4.5 The process of communication:

Basic elements of communication

1. The communicator
2. Encoding
3. The message
4. Medium
5. Decoding
6. The receiver and
7. The feed back

4.5.1 Communicator: can be a Manager, a Non-Manager, Departments, or the Outside public.

4.5.2 Encoding: The communicator's message must be translated into a common language which reflects the idea. This is to say, the message must be encoded. Encoding involves selection of specific language to the purpose of communicator's message.

4.5.3 The message: The output of encoding process in the message sent by communicator. The message is what the manager is communicating and the form of message-verbal or non-verbal- depends upon the purpose of communication

The message must be clear and precise

4.5.4 The medium: It is the carrier of the message sent by the communicator. Face to face, telephone, group meetings, computers, memorandums, policy statements, production schedules sales forecasts. Also by silence, flaccid expression, tone of voice and other body movements.

4.5.5 Decoding: Decoding element refers to the process by which the receiver translates the message into the terms that are meaningful to him. Decoding is very important for understanding the message.

4.5.6 The receiver: Communication requires at least two people-the communicator and the receiver. The communicator should take into account the receiver, is decoding abilities, his understanding capacity of the message being transmitted. Effective communication is always receiver-oriented.

4.5.7 Feedback: To be effective, communication process should involve the element of FEED BACK also. It is essential as it decreases the potential and probability of distortion between the intended and the received message. Two-way communication involves feedback. It may be direct or indirect. Direct feedback- face to face verbal exchanges. Indirect feedback- in terms of actual results- increase or decrease in productivity, absenteeism, the turn over, lack of co-ordination between different work units etc. Feedback provides a kind of check to see how successful message is transferred and interpreted by the receiver.

4.6 Barriers to communication

- ✓ Filtering
- ✓ Selective perception
- ✓ Emotions
- ✓ Language
- ✓ Personality
- ✓ Culture
- ✓ Society,
- ✓ Incomprehensive, vague, undigestable.
- ✓ Information overload
- ✓ Non-verbal clues
- ✓ Time pressures

4.7 Over coming barriers:

- 1) Regulate the flow of information - By Exception- priority wise
- 2) Seek feed back
- 3) Simplifying language
- 4) Listen carefully
- 5) Constrains emotions
- 6) Clarify Non-verbal clues

Build walls through communication, do not build walls of barrier.

5. Time Management

5.0 Introduction: There is no doubt that to be truly succeed in life you need to learn how to properly manage your time. One thing is certain: the most effective and successful people are experts in time management and they have the same number of hours in the days as you do. So time management has nothing to do with magically expanding time to suit your needs, but of using it effectively. It is a question of self-management rather than time management.

5.1 Here are some tips on utilizing your time effectively:

- Identify what is really important in your life and build your activities and goals around these big rocks. Having clear Core Values will avoid decision paralysis.
- **Identify what are your time wasters:** How much time do you spend watching TV? How many activities do you do that can be delegated to others? Do you live in a cluttered environment that drains your energy? Which activities can you eliminate without any particularly important repercussions? How much time do you spend worrying over things that are not within your circle of influence?
- **Eliminate Procrastination:** Just stop it plain and simple. Identify why you are procrastinating and challenge your assumptions. Are you a perfectionist? Learn how to manage it. Do you create a huge TO DO list that's impossible to go through? Cut out on the list. Do you feel overwhelmed with some large tasks? Chunk them down in smaller activities and just DO it.
- **Use a planning system:** such as a To Do list every day. Having a To Do list will help you to focus on the big rocks of life especially if you prioritize well.
- Plan the hardest task and DO IT the first thing so that you get over the hardest task early on when you have high energy levels – in other words, as they say: eat your frog.
- **Learn to time activities correctly:** I find that people who are not outstanding achievers generally lack the ability to time activities effectively. If you do not time activities effectively you will find yourself sliding off your schedule and missing out on important activities.
- **Focus on the task at hand:** Do not start doing many things at the same time. Chunk big jobs into smaller ones, focus on the particular tasks, get it done and then move on. And please – do not give me the multi-tasking excuse. Yes you can multi-task but you have to be focused on the task at hand.

- **Do not handle an activity twice:** When you can finish it in one sequence. Unless you are sure you can take the time to answer an email or a letter right away, do not open it.
- **Give a strict time frame to meetings or activities.** Make sure you come out with clear actions from the meeting as otherwise it is just a waste of time.
- Drop tasks that you do not need to do or those which are of no benefit. Learn to delegate effectively. Make sure that you delegate to people who have the knowledge and skills and delegate a task completely. Offer help if required but don't breath down people's necks.
- Avoid being distracted by requests or telephones during activities which you need to focus on intensively. Give clear instructions that you are not to be disturbed unless the office is on fire.

Never leave the scene of a situation that requires a decision without taking a specification. Taking an action right away will ensure you save time in the future. If you keep procrastinating on an action you need to take it will come back to you with a vengeance and you will waste more time trying to solve the repercussions.

6. Stress Management

6.0 Introduction: Stress is a feeling of emotional or physical tension. It can come from any event or thought that makes you feel frustrated, angry, or nervous.

Stress is body's reaction to a challenge or demand. In short bursts, stress can be positive, such as when it helps to avoid danger or meet a deadline. But when stress lasts for a long time, it may harm person's health.

Stress Management: Managing stress is all about taking charge:

✓ **Taking charge of your :**

- Thoughts
- Your emotions,
- Your schedule
- Your environment
- The way you deal with problems.

✓ **The ultimate goal is:**

- A balanced life
- With time for work
- Relationship
- Relaxation
- Fun
- Resilience to hold up under pressure
- Meet challenges head on

6.1 In this Article we learn:

- Identify source of stress
- Look at how you cope with stress
- Avoid unnecessary stress
- Alter the situation
- Adapt to the stressor
- Accept the things you can't change
- Make time for fun and relaxation

- Adopt a healthy lifestyle

6.2 Identify the sources of stress in your life:

- Look closely at your habits, attitude and excuses
- Do you explain away stress as temporary
- Do you define stress as an integral part of you work or home life
- Do you blame your stress on other people or outside events

Start a stress journal:

- What caused your stress (make a guess if you're unsure)
- How you felt, both physically and emotionally
- How you acted in response
- What you did to make yourself feel better

6.3 Look at how you currently cope with stress

Unhealthy ways of coping with stress: These coping strategies may temporarily reduce stress, but they cause more damage in the long run

- Smoking
- Drinking too much
- Overeating or under eating
- Zoning out for hours in front of the TV or computer
- Withdrawing from friends, family and activities
- Using pills or drugs to relax
- Sleeping too much
- Procrastinating
- Filling up every minute of the day to avoid facing problems

Taking out your stress on others (lashing out, angry outbursts, physical violence)

6.4 Stress Management Strategies:

Avoid unnecessary stress: Not all stress can be avoided, and it's not healthy to avoid a situation that needs to be addressed. You may be surprised, however, by the number of stressors in your life that you can eliminate by following stress management strategies.

6.4.1 Learn how to say “no” – Know your limits and stick to them. Whether in your personal or professional life, refuse to accept added responsibilities when you’re close to reaching them. Taking on more than you can handle is a surefire recipe for stress.

6.4.2 Avoid people who stress you out: If someone consistently causes stress in your life and you can’t turn the relationship around, limit the amount of time you spend with that person or end the relationship entirely.

6.4.3 Take control of your environment: If the evening news makes you anxious, turn the TV off. If traffic’s got you tense, take a longer but less-traveled route. If going to the market is an unpleasant chore, do your grocery shopping online.

6.4.4 Avoid hot-button topics: If you get upset over religion or politics, cross them off your conversation list. If you repeatedly argue about the same subject with the same people, stop bringing it up or excuse yourself when it’s the topic of discussion.

6.4.5 Pare down your to-do list: Analyze your schedule, responsibilities, and daily tasks. If you’ve got too much on your plate, distinguish between the “should” and the “musts.” Drop tasks that aren’t truly necessary to the bottom of the list or eliminate them entirely.

6.5 Alter the situation:

If you can’t avoid a stressful situation, try to alter it. Figure out what you can do to change things so the problem doesn’t present itself in the future. Often, this involves changing the way you communicate and operate in your daily life.

6.5.1 Express your feelings instead of bottling them up: If something or someone is bothering you, communicate your concerns in an open and respectful way. If you don’t voice your feelings, resentment will build and the situation will likely remain the same.

6.5.2 Be willing to compromise: When you ask someone to change their behavior, be willing to do the same. If you both are willing to bend at least a little, you’ll have a good chance of finding a happy middle ground.

6.5.3 Be more assertive: Don’t take a backseat in your own life. Deal with problems head on, doing your best to anticipate and prevent them. If you’ve got an exam to study for and your chatty roommate just got home, say up front that you only have five minutes to talk.

6.5.4 Manage your time better: Poor time management can cause a lot of stress. When you’re stretched too thin and running behind, it’s hard to stay calm and focused. But if you plan ahead and make sure you don’t overextend yourself, you can alter the amount of stress you’re under.

6.6 Adapt to the stressor

If you can’t change the stressor, change yourself. You can adapt to stressful situations and regain your sense of control by changing your expectations and attitude.

6.6.1 Reframe problems: Try to view stressful situations from a more positive perspective. Rather than fuming about a traffic jam, look at it as an opportunity to pause and regroup, listen to your favorite radio station, or enjoy some alone time.

6.6.2 Look at the big picture: Take perspective of the stressful situation. Ask yourself how important it will be in the long run. Will it matter in a month? A year? Is it really worth getting upset over? If the answer is no, focus your time and energy elsewhere.

6.6.3 Adjust your standards: Perfectionism is a major source of avoidable stress. Stop setting yourself up for failure by demanding perfection. Set reasonable standards for yourself and others, and learn to be okay with “good enough.”

6.6.4 Focus on the positive: When stress is getting you down, take a moment to reflect on all the things you appreciate in your life, including your own positive qualities and gifts. This simple strategy can help you keep things in perspective.

6.7 Accept the things you can't change

Some sources of stress are unavoidable. You can't prevent or change stressors such as the death of a loved one, a serious illness, or a national recession. In such cases, the best way to cope with stress is to accept things as they are. Acceptance may be difficult, but in the long run, it's easier than railing against a situation you can't change.

6.7.1 Don't try to control the uncontrollable: Many things in life are beyond our control— particularly the behavior of other people. Rather than stressing out over them, focus on the things you can control such as the way you choose to react to problems.

6.7.2 Look for the upside: As the saying goes, “What doesn't kill us makes us stronger.” When facing major challenges, try to look at them as opportunities for personal growth. If your own poor choices contributed to a stressful situation, reflect on them and learn from your mistakes.

6.7.3 Share your feelings Talk to a trusted friend or make an appointment with a therapist. Expressing what you're going through can be very cathartic, even if there's nothing you can do to alter the stressful situation.

6.7.4 Learn to forgive: Accept the fact that we live in an imperfect world and that people make mistakes. Let go of anger and resentments. Free yourself from negative energy by forgiving and moving on.

6.8 Make time for fun and relaxation

Beyond a take-charge approach and a positive attitude, you can reduce stress in your life by nurturing yourself. If you regularly make time for fun and relaxation, you'll be in a better place to handle life's stressors when they inevitably come.

6.8.1 Set aside relaxation time: Include rest and relaxation in your daily schedule. Don't allow other obligations to encroach. This is your time to take a break from all responsibilities and recharge your batteries.

6.8.2 Connect with others: Spend time with positive people who enhance your life. A strong support system will buffer you from the negative effects of stress.

6.8.3 Do something you enjoy every day: Make time for leisure activities that bring you joy, whether it be stargazing, playing the piano, or working on your bike.

6.8.4 Keep your sense of humour: This includes the ability to laugh at yourself. The act of laughing helps your body fight stress in a number of ways.

6.9 Healthy ways to relax and recharge:

- Go for a walk.
- Savour a cup of coffee or tea
- Light scented candles.
- Spend time in nature
- Play with a pet
- Take a long bath.
- Call a good friend.
- Work in your garden.
- Listen to music.
- Have a good workout.
- Curl up with a good book.
- Watch a comedy.
- Write in your journal.
- Get a massage.

6.10 Adopt a healthy lifestyle

You can increase your resistance to stress by strengthening your physical health.

6.10.1 Exercise regularly: Physical activity plays a key role in reducing and preventing the effects of stress. Make time for at least 30 minutes of exercise, three times per week. Nothing beats aerobic exercise for releasing pent-up stress and tension.

6.10.2 Eat a healthy diet: Well-nourished bodies are better prepared to cope with stress, so be mindful of what you eat. Start your day right with breakfast, and keep your energy up and your mind clear with balanced, nutritious meals throughout the day.

6.10.3 Reduce caffeine and sugar: The temporary "highs" caffeine and sugar provide often end in with a crash in mood and energy. By reducing the amount of coffee, soft drinks, chocolate, and sugar snacks in your diet, you'll feel more relaxed and you'll sleep better.

6.10.4 Avoid alcohol, cigarettes, and drugs: Self-medicating with alcohol or drugs may provide an easy escape from stress, but the relief is only temporary. Don't avoid or mask the issue at hand; deal with problems head on and with a clear mind.

6.10.5 Get enough sleep: Adequate sleep fuels your mind, as well as your body. Feeling tired will increase your stress because it may cause you to think irrationally.

7. Interpersonal Skills

7.0 Interpersonal Skills

Interpersonal skills are the tools people use to interact to communicate with individual in an organization environment.

7.1 Necessity:

- Necessary for relating and working with others
- Effective communication skills – Listening and expressing
- Ability to give and receive feedback
- Being to work well in teams or groups.

7.2 Benefits: With the use of these tools improvements can be made in

- Personal relationships
- Professional relationships
- Employment related skills
- Team or Group work in organization
- Learn about perspectives
- Share work load
- Overall Personality development – complete man

7.3 The seven IP skills

- Verbal communication skills
- Non-verbal communication skills
- Listening skills
- Negotiation skills
- Problem-solving skills
- Decision-making skills
- Assertiveness

7.3.1 Verbal Communication skills

Verbal communication:

- Verbal refers to what we say with words.
- How and what words are used to communicate with individuals.
- Ability to communicate through words with the correct tone and manner

7.3.2 Non-Verbal Communication skills

- Non verbal communication – Body language
 - Gesturing
 - Facial expressions
 - Eye contact
 - Postures
- Gestures and movements
 - Head – Nodding, Shaking, Tilted
 - Arms – Closed, Open
 - Hands – in pocket or covering mouth
 - Fingers – Laced, Playing with hair, Tapping
 - Legs & Feet – Crossed, Tapping
- Facial Expressions
 - Whole face – Smiling, frowning, surprise
 - Eye contact(Very important)
 - Eye brows – raised, upturned
 - Mouth – Lips pursed, down-turned
- Positioning & Orientation
 - Where sitting or standing relative to others physical contact Posture/ Stance
 - Feedback sounds – Agreement, impatience, surprise, grunts

7.3.3 Listening Skills

- Paying attention to the total content of someone's verbal communication, without thinking of what you are going to say next, what you need to do that afternoon, etc.
 - The ability to hear attentively
 - And process information correctly
- Hearing and Listening
 - Hearing is purely physical.
 - Listening involves not only hearing sounds but also responding i.e. higher level and interpersonal.
- Active Listening

In active listening the key is **our intension**

- To understand someone
- To learn something,
- To give help or comfort

When preparing to listen, the first step is to avoid distractions which may be external or in our heads. Things that can get in the way of active listening

- Distractions- Noise/other things going on around us
- What to say next
- Time constraint
- Place constraint
- Forming judgment/Conclusion

7.3.4 Negotiation Skills

- Negotiation is the important skill for effective business communication.
- Good negotiators have the ability to discuss and reach an agreement in a professional manner.

Some of the tools are

- Bargaining
- Compromising
- Mutual understanding
- Mutual agreement
- Pressurizing
- Politics
- Lobbying etc.

7.3.5 Problem-Solving Skills

Problems are common

- In every organization
- In every family
- In every place

Solving problems is an important skill

7.3.6 Decision-Making Skills

Decision-making is the

- Ability to analyze situations
- Develop a professional solution within an organizational environment.

7.3.7 Assertiveness

Assertiveness is the ability of individuals

- Being self-assured
- Confident in their actions.
- Assertiveness is invaluable interpersonal skill

7.4 SUMMARY

- The ability to communicate within an organization depends heavily upon people's interpersonal skills.
- Interpersonal skills are the tools people use to interact and communicate with individuals in an organizational environment.

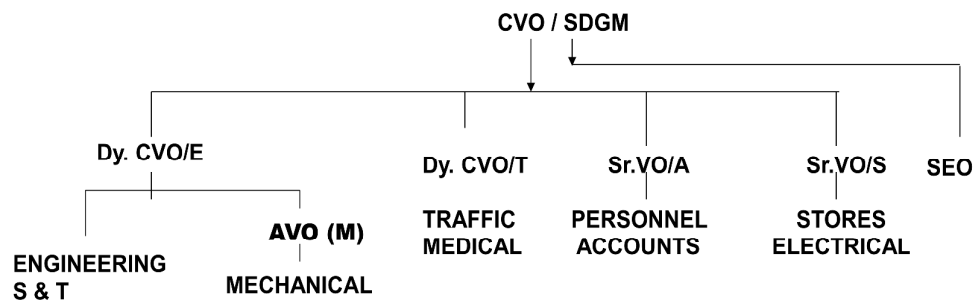
8. Role of Vigilance

8.0 History of Vigilance Organization

- It was the Second World War that became the watershed in the history of corruption on Indian railways. War time controls and scarcities led to avenues for corruption to flourish. In the rail sector, the bulk of resources got mobilized for the movement of military forces and materials, which led to ever shrinking facilities for movement of other commodities.
- Goods movements, the wagons were placed for higher in carrying capacity and were encashed by unscrupulous functionaries. Scarcity of coaches led to overcrowding, which resulted in passengers paying extra money to secure their accommodation.
- In order to recognize the gravity of problem, the government established an agency called the Special Police Establishment (SPE), in terms of the Delhi SPE act 1946. The prevention of corruption act 1947 was passed as an endeavor in this direction. In the year 1947 Indian railway enquiry committee was also appointed to undertake a general survey of railway working. This committee recognized the evil of corruption and stressed the need to tackle it.
- The first organizational response in this direction came in the shape of Railway Boards decision in April 1948 to establish an independent **Anti-corruption Department on each zonal railway** for the prevention, detection and departmental investigation of cases of corruption.
- In order to avoid conflict with working of SPE, since cases involving departmental/ procedural irregularities which resulted in preferential treatment to traders, travelers, contractors was to be handed over to SPE if there was any probability of illegal gratification.
- The next milestone of anti corruption efforts was the appointment of the '**Railway corruption enquiry committee**' by the ministry of railways on 09th September 1953. This was a parliamentary committee with Acharya J.P.Kirpalani as its chairman.
- The committee submitted its report, consisting of 152 recommendations on 9th July 1955. The ministry of railways accepted 143 recommendations.
- In December 1957 the railway board transferred administrative control of the vigilance organization from the chief security officer to the Senior Deputy General Manager (SDGM) at the level of each zonal railway.

- The “committee on prevention of corruption” under the chairmanship of Sri. K. Santhanam, honorable MP made several recommendations, the foremost of which was the establishment of the Central Vigilance Commission (CVC). The CVC came in February 1964 as an apex agency to advice and guide central government agencies in the field of vigilance.
- The structure of vigilance on Indian railways has been moulded over the years by recommendation of various committees as mentioned above.
- At present the vigilance organization on Indian railways is headed by **Additional Member (vigilance)**, railway board who is the chief vigilance officer, ministry of railways and reports to member staff, railway board. He is in the rank of additional secretary, Government of India. He is a link between the ministry of railway and CVC. He is assisted by a team of officers and staff in the vigilance directorate of railway board.

8.1 Vigilance Organization at Zonal level:



8.2 What is vigilance angle: Vigilance angle is obvious in the following acts.

- Demanding and or accepting gratification other than legal remuneration in respect of an official act or for using his influence with other official.
- Obtaining valuable things without consideration or with inadequate consideration from a person with whom he has or likely to have official dealings or his subordinates have official dealings or he can exert influence.
- obtaining for himself or for any other persons any valuable thing or pecuniary advantage by corrupt or illegal means or by abusing his position as a public servant
- Possession of assets disproportionate to his known source of income.
- Cases of misappropriation, forgery or cheating or similar criminal offences.

- Gross or willful negligence.
- Recklessness in decision making.
- blantant violation of systems and procedures.
- Exercise of discretion in excess.

However, other irregularities were circumstances, will have to be weighed carefully to take a view weather a officer integrity is doubt.

8.3 Objective of Vigilance Organization

- To eliminate corruption
- To promote integrity
- To promote vigilance consciousness among railwaymen.
- To suggest effective systemic improvement.

8.4 Source of complaint:

1. By individuals
2. Through CVC, including under PIDR
3. CBI, when they do not intended to investigate
4. Other railway adminstrative authority
5. Minister /department of central/state government
6. President and PMOs
7. MLA's and MP's
8. Proceedings of parliament.
9. Parliament committee report
10. Audit reports and departmental inspection reports
11. Information of media
12. Scrutiny of immovable and movable property returns
13. Verifiable facts anonymous / pseudonymous complaints
14. Complaints received through e -mail
15. From other source.

- Having no vigilance angle forwarded for necessary action to the concern department.
- For gazetted officials cases with views and recommendations of the railway should be forwarded to board for a decision.
- Any complaint from a person known to make silly complaint (unreliable) may be failed
- No action to be taken on anonymous / pseudonymous.

8.5 Verification of Genuineness:

- Sending a letter with acknowledgement due asking him to confirm on the complaint.
- In case of letters received from MLA's and MP's etc, request for verification of genuineness the railways recommended that the complaint need not be investigated since the genuineness could not be verified. This is not correct, the genuineness must be verified by deputing an authorised official to contact MP/MLA concerned.
- The complaint received from VIP has been forwarded to railways with a positive endorsement by, or on behalf of minister asking for a report, the investigations may be undertaken without verification of genuineness.
- The complaint received and forwarded by CVC for investigation under public interest disclosure scheme, the verification of genuineness is not required.

8.6 Stages in contract management

- Pre - tender stage
- Tender finalisation stage
- Execution stage

8.6.1 Tender and contracts

- Transparency
- Fairness
- Value for money
- Quality
- Time to be realistic

8.6.2 Pre tender stage:

- Justification/scope of work – to be realistic
- Drawing/specification
- Detail estimate and sanction
- Tender condition
- Rate/cost of work (net cost)
- Eligibility criteria
- Role of TAA

8.6.3 Execution on vigilance angle

- Improper testing / passing of material
- Bill passed without MB recordings
- Requisite test checks not certified, but bill paid
- Time extension – hindrance register not maintained

9. ENERGY CONSERVATION

9.0 Introduction

Energy conservation refers to reducing energy consumption through using less of an energy service. Energy conservation differs from efficient energy use, which refers to using less energy for a constant service. Driving less is an example of energy conservation. Driving the same amount with a higher mileage vehicle is an example of energy efficiency. Energy conservation and efficiency are both energy reduction techniques. Energy conservation is sometimes known as sufficiency.

Energy conservation is a very important part of energy planning and its management. It not only saves energy resources for future, avoids wasteful utilisation of energy, provides solution to energy crisis and ensures higher per capita availability/ consumption but controls environmental degradation and pollution.

New strategy emphasises greater reliance on non-exhaustible and non-conventional sources of energy so as to conserve exhaustible conventional resources like coal, petroleum, natural gas etc. That is why efforts are being made to promote the development and use of non-conventional sources of energy. Another aspect of energy conservation is related to the reduction in consumption of energy.

This can be achieved by change in the individual habits, utilising latest technology, reduce the subsidy and increase the price of the energy. For example, a lot of electricity can be saved by using energy efficient lamps. The Superglue gives 20 per cent more light and saves up to 10 per cent energy.

9.1 Importance of Energy conservation

The earth provides enough to satisfy every man's needs but not every man's greed said Gandhiji. Hard facts on why energy conservation is a must are outlined below.

- We use energy faster than it can be produced - Coal, oil and natural gas - the most utilised sources take thousands of years for formation.
- Energy resources are limited - India has approximately 1% of world's energy resources but it has 16% of world population.
- Most of the energy sources we use cannot be reused and renewed - Non renewable energy sources constitute 80% of the fuel use. It is said that our energy resources may last only for another 40 years or so.

- We save the country a lot of money when we save energy - About 75 per cent of our crude oil needs are met from imports which would cost about Rs.1, 50,000 crore a year
- We save our money when we save energy - Imagine your savings if your LPG cylinder comes for an extra week or there is a cut in your electricity bills
- We save our energy when we save energy - When we use fuel wood efficiently, our fuel wood requirements are lower and so is our drudgery for its collection
- Energy saved is energy generated - When we save one unit of energy, it is equivalent to 2 units of energy produced
- Save energy to reduce pollution - Energy production and use account to large proportion of air pollution and more than 83 percent of greenhouse gas emissions

An old Indian saying describes it this way - The earth, water and the air are not a gift to us from our parents but a loan from our children. Hence we need to make energy conservation a habit.

9.2 Energy conservation practices

There are three types of energy conservation practices. The first is curtailment; doing without. For instance, cutting back on travel to reduce the amount of gasoline burned. The second is overhaul; changing the way people live and the way goods and services are produced. For example, slowing further urbanization of society by using less energy-intensive materials in production processes and decreasing the amount of energy consumed by certain products such as cars. The third type is the more efficient use of energy; adjusting to higher energy costs. An example is investing in cars that go farther per gallon or insulating houses. Societies most commonly adopt this option because it requires less drastic changes in lifestyle.

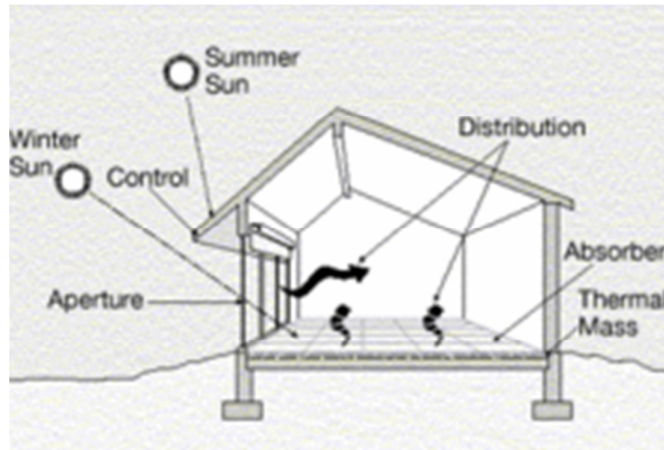
9.3 Some areas for implementation of energy conservation:

9.3.1 Building Design

One of the primary ways to improve energy conservation in buildings is to use an energy audit. An energy audit is an inspection and analysis of energy use and flows for energy conservation in a building, process or system to reduce the amount of energy input into the system without negatively affecting the output(s). This is normally accomplished by trained professionals and can be part of some of the national programs discussed above. In addition, recent development of

smartphone apps enable homeowners to complete relatively sophisticated energy audits themselves.

Building technologies and smart meters can allow energy users, business and residential, to see graphically the impact their energy use can have in their workplace or homes. Advanced real-time energy metering is able to help people save energy by their actions.



Elements of passive solar design, shown in a direct gain application

In passive solar building design, windows, walls, and floors are made to collect, store, and distribute solar energy in the form of heat in the winter and reject solar heat in the summer. This is called passive solar design or climatic design because, unlike active solar heating systems, it doesn't involve the use of mechanical and electrical devices.

The key to designing a passive solar building is to best take advantage of the local climate. Elements to be considered include window placement and glazing type, thermal insulation, thermal mass, and shading. Passive solar design techniques can be applied most easily to new buildings, but existing buildings can be retrofitted.

9.3.2 Transportation

Suburban infrastructure evolved during an age of relatively easy access to fossil fuels, which has led to transportation-dependent systems of living. Zoning reforms that allow greater urban density as well as designs for walking and bicycling can greatly reduce energy consumed for transportation. The use of telecommuting by major corporations is a significant opportunity to conserve energy, as many people now work in service jobs that enable them to work from home instead of commuting to work each day.

9.3.3 Consumer Products

9.3.3.1 LED Bulbs: Consumers are often poorly informed of the savings of energy efficient products. A prominent example of this is the energy savings that can be made by replacing an incandescent light bulb with a more modern alternative. When purchasing light bulbs, many consumers opt for cheap incandescent bulbs, failing to take into account their higher energy costs and lower life spans when compared to modern compact fluorescent and LED bulbs. Although these energy-efficient alternatives have a higher upfront cost, their long lifespan and low energy use can save consumers a considerable amount of money. The price of LEDs has also been steadily decreasing in the past five years, due to improvement of the semiconductor technology. Many LED bulbs on the market qualify for utility rebates that further reduce the price of purchase to the consumer.



LED lamps use at least 75% less energy, and last 25 times longer, than traditional incandescent light bulbs.

9.3.3.2 Air conditioners: In warm climates where air conditioning is used, any household device that gives off heat will result in a larger load on the cooling system. Items such as a stove, dish washer, clothes dryer, hot water and incandescent lighting all add heat to the home. Low power or insulated versions of these devices give off less heat for the air conditioning to remove. The air conditioning system can also improve in efficiency by using a heat sink that is cooler than the standard air heat exchanger such as geothermal or water.

9.3.3.2 Heat pumps: In cold climates heating air and water is a major demand on household energy use. By investing in newer technologies in the home, significant energy reductions are possible. Heat pumps are a more efficient alternative to using electrical resistance heaters for warming air or water. A variety of efficient clothes dryers are available, and the classic clothes line requires no energy, only time. Natural gas condensing boilers and hot air furnaces increase efficiency over standard hot flue models. New construction implementing heat exchangers can capture heat from waste water or exhaust air in bathrooms, laundry and kitchens.

9.3.3.3 Other measures: In power plants, conventional boilers could be replaced by gasifiers and a gas turbine stage could be added to the steam turbines to give a combined cycle operation producing 25 to 30 per cent more power from the same amount of coal. Increasing the plant load factor (PLF) of existing thermal plants is another area which offers good scope for energy planning. It is estimated that one per cent increase in PLF yields additional 4 billion units of electricity costing rupees 2,500 crores.

Another significant measure would be to bring down the wastage of energy. In India about 23 per cent of electrical energy is lost during transmission and distribution. This can be curtailed by adopting appropriate measures. Penalty may be levied and legal actions initiated against power pilferage. Privatisation is another suggestion which can obtain desired results and improve the generation, transmission and distribution in the power sector. Energy is key to the modern development.

9.4 Conclusion: Even though energy conservation reduces energy services, it can result in increased environmental quality, national security, personal financial security and higher savings. It is at the top of the sustainable energy hierarchy. It also lowers energy costs by preventing future resource depletion.

Hence, there is a need for serious thinking to improve this sector by inducting new technology, attracting more investment, developing non-conventional sources and inculcating habits for saving and conservation.